BEFORE THE GUJARAT ELECTRICITY REGULATORY COMMISSION

PETITION NO. OF 2022

IN THE MATTER OF:

Regulations 4, 5 and 9.1 of Gujarat Electricity Regulatory Commission (Procurement of Energy from Renewable Sources) Regulations, 2010

And

Gujarat Electricity Regulatory Commission (Procurement of Energy from Renewable Sources) (First Amendment) Regulations, 2014.

And

Gujarat Electricity Regulatory Commission (Procurement of Energy from Renewable Sources) (Second Amendment) Regulations, 2018.

And

Gujarat Electricity Regulatory Commission (Procurement of Energy from Renewable Sources) (Third Amendment) Regulations, 2021.

NOTARY KANAKSINH K. VAGHELA DIST. AHMEDABAD GUJARAT STATE REG. NO.6643/11 EXP. DT. 3-10-26 GOVT. OF INDIA

IN THE MATTER OF:

Reliance Industries Limited
Having its office at
"Vraj"
Off. Sindhu Bhavan Road,
Opp. Kadamb Villa Bungalow,
Besides Orion Ceremonial Lawns,
Bodakdev,
Ahmedabad-380054 ...**PETITIONER**

MOST RESPECTFULLY SHEWETH:

Abstract of the Present Petition:



PREAMBLE

1. The Petitioner is filing present petition seeking appropriate directions under Regulations 4, 5, as well as Proviso 5 and 6 of the Regulation 9.1 along with Regulation 12 of the Gujarat Electricity Regulatory Commission (Procurement of Energy from Renewable Sources) Regulations, 2010 (hereinafter "**GERC RPO Regulations, 2010**") to carry forward the compliance requirement of RPO for the FY 2021-22, on account of difficulty in complying with the Renewable Purchase Obligation ("**RPO**") for its plants located in the State of Gujarat, due to certain exigencies beyond the control of the Petitioner.

2. The present Petition is being filed by Reliance Industries Limited (hereinafter "Petitioner/ RIL"), which is a Company incorporated under the provisions of the Companies Act, 1956 and is engaged in the business of producing Petroleum and Petrochemicals products and have Captive Power Plants located in the State of Gujarat for the purpose of fulfilling the energy requirements of their industries through captively produced power.

3. It is further submitted that the Electricity Act 2003 ("**EA 2003**"), under section 86(1)(e) mandates the State Commissions to promote generation of electricity from renewable sources of energy. The said provision directs the State Commissions to specify a percentage of the total consumption of electricity in the area of a distribution licensee, to be consumed from renewable energy sources.

4. Accordingly, keeping the aforesaid in view, this Hon'ble Commission on 17.04.2010 issued notification no 3 of 2010 containing the Regulations called as "GERC RPO Regulations, 2010", wherein Regulation 4.1 provides the


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following norms to be fulfilled by obligated entities, such as distribution licensees, open access consumers and captive users:



> *"4. **Quantum of Renewable Purchase Obligation (RPO)***
>
> *4.1 Each distribution licensee shall purchase electricity (in kWh) from renewable energy sources, at a defined minimum percentage of the total consumption of its consumers including T&D losses during a year. Similarly, Captive and Open Access user(s) / consumer(s) shall purchase electricity (in kwh) from renewable energy sources, at a defined minimum percentage of his/her total consumption during a year.*
>
> *The defined minimum percentages are given below in the Table l.*

Year	*Minimum Quantum of purchase (in Vo) from renewable energy sources (in terms of energy in kWh)*			
(1)	*Total (2)*	*Wind (3)*	*Solar (4)*	*Biomass, Bagasse and Others (5)*
2010-11	*5%*	*4.5%*	*0.25%*	*0.25%*
2011-12	*6%*	*5.0%*	*0.5%*	*0.5%*
2012-13	*7%*	*5.5%*	*1.0%*	*0.5%*

> ..."

A copy of the GERC RPO Regulations, 2010 is annexed herewith and marked as **Annexure "A"**.

5. Thereafter, this Hon'ble Commission, on 03.03.2014 notified the "*Gujarat Electricity Regulatory Commission (Procurement of Energy from Renewable Sources) (First Amendment) Regulations, 2014*", wherein the Table-I as provided in the principal regulation was substituted with the following:

> *"4) Substitution of Table 1 of Regulation 4.1 The table 1 provided in Principal Regulation 4.1 shall be substituted by following table 1*

Year	*Minimum Quantum of purchase (in %) from renewable energy sources (in terms of energy in kWh)*			
	Total	*Wind*	*Solar*	*Others (Biomass, Bagasse, MSW, etc.)*
2010-11	*5.0*	*4.5*	*0.25*	*0.25*



2011-12	6.0	5.0	0.5	0.5
2012-13	7.0	5.5	1.0	0.5
2013-14	7.0	5.5	1.0	0.5
2014-15	8.0	6.25	1.25	0.5
2015-16	9.0	7.0	1.5	0.5
2016-17	10.0	7.75	1.75	0.5

..."

A copy of the Gujarat Electricity Regulatory Commission (Procurement of Energy from Renewable Sources) (First Amendment) Regulations, 2014 is annexed herewith and marked as **Annexure "B"**.

6. On 01.07.2015 The Hon'ble Commission issued notification no 2 of 2015 wherein the RPO was made applicable on Captive Users w.e.f. 01.07.2015, a copy of which is annexed hereto and marked as **Annexure "C".**

7. Further, this Hon'ble Commission on 20.04.2018 once again notified the "*Gujarat Electricity Regulatory Commission (Procurement of Energy from Renewable Sources) (Second Amendment) Regulations, 2018*", wherein Table-I of the First Amendment was substituted by the following:

"*3) Substitution of Table I of Regulation 4.1:*

Table I provided in the Gujarat Electricity Regulatory Commission (Procurement of Energy from Renewable Sources) (First Amendment) Regulations, 2014 is substituted by following Table - I and II:

TABLE – I

Year	*Minimum Quantum of purchase (in %) from renewable energy sources (in terms of energy in KWh).*			
	Wind (%)	*Solar (%)*	*Others (Biomass, Bagasse, Hydro and MSW) (%)*	*Total (%)*
(1)	*(2)*	*(3)*	*(4)*	*(5)*
2010 – 11	*4.5*	*0.25*	*0.25*	*5.0*
2011 – 12	*5.0*	*0.5*	*0.5*	*6.0*
2012 – 13	*5.5*	*1.0*	*0.5.*	*7.0*
2013 – 14	*5.5*	*1.0*	*0.5*	*7.0*
2014 - 15	*6.25*	*1.25*	*0.5*	*8.0*



2015 – 16	7.0	1.5	0.5	9.0
2016 – 17	7.75	1.75	0.5.	10.0

TABLE – II

Year	Minimum Quantum of purchase (in %) from renewable energy sources (in terms of energy in KWh).			
	Wind (%)	Solar (%)	Others (Biomass, Bagasse, MSW and Hydro) (%)	Total (%)
(1)	(2)	(3)	(4)	(5)
2017 – 18	7.75	1.75	0.5	10.00
2018 – 19	7.95	4.25	0.5	12.70
2019 – 20	8.05	5.5	0.75	14.30
2020 – 21	8.15	6.75	0.75	15.65
2021 – 22	8.25	8.0	0.75	17.00

4) Substitution of para 2 of Principal Regulation 4.1:

If the abovementioned minimum quantum of power purchase either from Solar or Wind or Others (including Biomass, Bagasse, Hydro and MSW) is not available in a particular year of FY 2017-18 to 2021-22, then in such cases, additional renewable energy available either from Solar or Wind or Others shall be utilised for fulfilment of RPO in accordance with Column 5.

... ..."

A copy of the Gujarat Electricity Regulatory Commission (Procurement of Energy from Renewable Sources) (Second Amendment) Regulations, 2018 is annexed herewith and marked as **Annexure "D"**.

8. In aide to the foregoing, this Hon'ble Commission recently on 08.04.2022 notified the "*Gujarat Electricity Regulatory Commission (Procurement of Energy from Renewable Sources) (Third Amendment) Regulations, 2022*", wherein Table-II of the Second Amendment was substituted as follows:

"*3) Substitution of Table II of Regulation 4.1:*

Table II provided in the Gujarat Electricity Regulatory Commission (Procurement of Energy from Renewable Sources) (Second Amendment) Regulations, 2018 shall be substituted by following Table - II:



Table – II: Minimum percentage for Renewable Power Purchase Obligation

	Minimum Quantum of purchase (in %) from renewable energy sources (in terms of energy in kWh)				
Year	*Wind (%)*	*Solar (%)*	*Hydro Power Purchase Obligation (HPO) (%)*	*Others (Biomass, Bagasse & Bio-fuel based cogeneration, MSW and Small/Mini/Micro Hydro) (%)*	*Total (%)*
(1)	*(2)*	*(3)*	*(4)*	*(5)*	*(6)*
2017-18	*7.75*	*1.75*		*0.50*	*10.00*
2018-19	*7.95*	*4.25*		*0.50*	*12.70*
2019-20	*8.05*	*5.50*		*0.75*	*14.30*
2020-21	*8.15*	*6.75*		*0.75*	*15.65*
2021-22	*8.25*	*8.00*		*0.75*	*17.00*
2022-23	*8.25*	*8.00*		*0.75*	*17.00*
2023-24	*8.40*	*9.50*	*0.05*	*0.75*	*18.70*
2024-25	*8.55*	*11.25*	*0.10*	*0.80*	*20.70*

... ..."

A copy of the Gujarat Electricity Regulatory Commission (Procurement of Energy from Renewable Sources) (Third Amendment) Regulations, 2022 is annexed herewith and marked as **Annexure "E"**.

9. Accordingly, the Petitioner was required to fulfil its RPO in terms of the percentages provided hereinabove.

10. It is submitted that Sections 61(h) and 86(1)(e) of the EA, 2003 mandate that this Hon'ble Commission is required to take steps for promotion of renewable sources of energy. The said provisions mandate the above promotion irrespective of the source of renewable generation. The EA, 2003, along with promotion of renewable energy, also stipulates promotion of captive industry,



as well as introducing competition for the end consumers in order to enable them availing electricity at competitive rates.

11. In light of the aforesaid, this Hon'ble Commission notified the aforementioned Regulations. Through the present Petition, the Petitioner is seeking permission of this Hon'ble Commission to carry forward its RPO compliance of FY 2021-22 on account of various difficulties being faced by the Petitioner which are detailed hereinafter.

12. The brief facts leading to the filing of the present Petition are stated hereinunder:

BRIEF FACTS:-

a) The Petitioner/ RIL is in the business, inter alia, of producing Petroleum and Petrochemicals and have Captive Power Plants at all major sites of their industries in the state fulfilling the energy requirements of their industries through Captively produced power . These Captive Power plants , which are liquid fuel or gas based, heat is co-generated as a biproducts or industrial waste and is harnessed for further power, stamp generation and other industrial use. The petitioner has installed Heat Recovery Steam Generators which recovers heat from the exhaust of Gas Turbine and same heat is used for industrial purpose and running Steam Turbines which are in turn generating power. Further the petitioner has also installed Coal based Captive Power Plants set-up in terms of Section 2(8) of the Electricity Act, 2003 (hereinafter "**EA 2003**") situated in the State of Gujarat, *viz.* Hazira having an installed capacity of 360 MW and Dahej with an installed capacity of 270 MW alongwith CFBC Boilers to meet its power and steam requirement.



b) It is submitted that the EA 2003 was passed by the legislature with the objective to introduce competitive environment in the electricity sector and to take measures conducive to development of electricity industry and also for promotion of environmentally benign policies.

In addition to the Electricity Act, the Central Government had undertaken various other exercises and initiatives towards promotion of renewable energy, which are discussed in detail herein below.

c) It is submitted that the EA 2003, under section 86(1)(e) mandates the State Commissions to promote generation of electricity from renewable sources of energy. The said provision directs the State Commissions to specify a percentage of the total consumption of electricity in the area of a distribution licensee, to be consumed from renewable energy sources.

d) Thereafter, in compliance with Section 3 of the Electricity Act, 2003, the Ministry of Power notified the National Electricity Policy on 12.02.2005, for development of power system based on optimal utilisation of resources such as coal, natural gas, nuclear substances or materials, hydro and renewable sources of energy. The said policy provided that the purchase obligations with respect to renewable consumption (as envisaged in section 86(1)(e) of the Electricity Act 2003) should be made applicable to the tariff determined by the various State Electricity Regulatory Commissions (SERCs) at the earliest and progressively such purchase obligations would be increased with increasing obligation for share of electricity from non-conventional sources.

A copy of the National Electricity Policy, 2005 is annexed herewith as **Annexure "F"**.



e) It is further submitted that the Ministry of Power on 05.01.2006 notified the National Tariff Policy, in order to further the intent of the Electricity Act, 2003.

A copy of the National Tariff Policy, 2006 is annexed hereto and marked as **Annexure "G"**.

f) It is pertinent to mention herein that, due to uneven distribution of renewable energy sources across the country, which created hindrance for the Commissions to specify higher RPOs, the regime for Renewable Energy Certificates ("**REC**") began with the aforementioned policy framework laid down by the Central Government.

g) It is further stated that in lieu of the above policies and plan of the Central Government, the Hon'ble Central Electricity Regulatory Commission ("**Ld. CERC**") on 14.01.2010, notified the Central Electricity Regulatory Commission (Terms and Conditions for Recognition and Issuance of Renewable Energy Certificate for Renewable Energy Generation), Regulation, 2010 (hereinafter "**CERC REC Regulations, 2010**"), wherein the said Commission came out with a mechanism of sale and purchase of RECs.

h) The said REC regime was adopted by the State Commissions by way of either amending their existing regulations or issuing fresh regulations to include the renewable energy certificate mechanism as a means for achieving/ meeting renewable purchase obligation by the distribution licensees and other obligated entities.

A copy of the CERC REC Regulations, 2010 is annexed herewith and marked as **Annexure "H"**.


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i) Accordingly, GERC RPO Regulations, 2010 provided for RPO obligations to be fulfilled by obligated entities in the area of a distribution licensee, as part of their total power procurement. In this regard, the relevant provisions are at 4, 5, 9 and 12 of Regulations.

j) It is submitted that during the year 2011, the Petitioner preferred a Special Civil Application being SCA No. 791 of 2011, challenging the GERC RPO Regulations, 2010, *inter alia* on the basis that inclusion of all captive users of electricity including those producing electricity through 'cogeneration' within the "obligated entity" is against Section 86(1)(e) of the EA 2003, as also interpreted by various judgements of Hon'ble APTEL, dated 01.10.2014 passed in Appeal Nos. 112 of 2014 & Batch titled as India Glycols Limited v. UERC & Ors., 26.04.2010 passed in Appeal No. 57 of 2009 titled as Century Rayon v. MERC & Ors. and 02.12.2013 passed in Appeal No. 53 of 2012 titled as Lloyds Metal & Energy Ltd. v. MERC & Ors. It is the case of the Petitioner that the aforesaid has resulted in a situation whereby far from putting the co-generators on par with renewable sources of energy, the GERC RPO Regulations actually put them at a significant disadvantage, by putting an additional burden on cogeneration power plants to also fulfil RPO at a higher cost and without there being any requirement for such power. However, the Hon'ble High Court of Gujarat, vide an order dated 12.03.2015, dismissed the said Special Civil Application filed by the Petitioner.

A copy of the order dated 12.03.2015 passed by the Hon'ble High Court of Gujarat in SCA No. 791 of 2011 is annexed herewith and marked as **Annexure "I"**.


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k) Thereafter, being aggrieved by the aforesaid order passed by the Hon'ble High Court, the Petitioner filed a Letters Patent Appeal being LPA No. 847 of 2015. Vide the said appeal, the Petitioner also preferred a Stay Application, thereby seeking stay of the order dated 12.03.2015 passed in SCA No. 791 of 2011. However, on 05.05.2015, the Hon'ble High Court disposed of the said Stay Application, thereby holding as follows:

> *"1. .....*
>
> *8. Therefore, instead of granting stay of the impugned Judgment and Order it shall be in the interest of justice to observe that the said Regulations shall though come in to force they shall be* ***subject to the final decision given in the Appeals****. Applications are disposed of accordingly. Rule is discharged accordingly."*

A copy of the order dated 05.05.2015 passed by the Hon'ble High Court of Gujarat is annexed herewith and marked as **Annexure "J"**.

l) In the meanwhile, while GERC RPO Regulations are in force, the MOP vide notification dated 22nd July 2016 and 14th June 2018 issued Long Term Growth Trajectory of Renewable Purchase Obligation for Solar and Non Solar for the period 2016 to 2019 and 2019 to 2022 respectively. MoP vide clarification dated 01.02.2019 providing that the RPO for captive users consuming powers from their CGPs, be capped at the RPO levels existing at the time of commissioning of the said CGPs. The relevant extract of the said notification is reproduced hereinbelow:

> *"The request of various stakeholders regarding capping of RPO for Captive Power Plants (CPP) has been examined in consultation with Ministry of Renewable Energy and it is clarified that RPO of the CPP may be pegged at the RPO level applicable in the year in which the CPP was commissioned. As and when the company adds to the capacity of the CPP, it will have to provide the additional RPO as obligated in the year in which new capacity is commissioned. There should not be an increase in RPO without any additional fossil fuel capacity being added."*



m) The need for issuance of the above notification was the fact that increasing RPO trajectory on a year-to-year basis is adversely burdening the industries with costs thereby making their functioning onerous leading to the said industries becoming less competitive in their respective goods markets, manufacturing, when the purpose of CGPs was to lower the cost of production of industrial goods.

A copy of the notifications dated 22.07.2016, 14.06.2018 and clarification dated 01.02.2019 issued by the Ministry of Power, Government of India, is annexed hereto and marked as **Annexure "K" Collectively**.

n) Further, MNRE on 26.04.2019, issued a notification whereby, MNRE expressed support to the notification issued by the MOP on 01.02.2019. The relevant extract of the said Notification, is set out hereinbelow:

> *"3. It may further be mentioned that CPPs have been importing/ exporting electricity from/ to the grid, as per the requirement and cost- comparative considerations. Under the RPO, the CPPs will have to either buy or generate renewable power according to the RPO for particular year. Increasing RPO trajectory will necessitate either increasing power export to the grid, cutting down import from grid. As such, under the prevailing renewables costs and trends thereof, increasing RPO trajectory may not put CPPs in financially disadvantageous position across the CPP landscape. However, increasing RPO may be disadvantageous to certain categories of CPPs (say CPPs in Aluminium industry) on technical grounds.*
>
> *In view of the above, it is suggested that the Ministry of Power may consider issuing clarification order in supersession to the order referred to in Paragraph 1.0 above of the 1 February 2019. The clarification order may propose that while considering RPOs for CPPs, the SERCs may permit deviation from the RFC trajectory as notified by the Ministry Power only in the cases where: i) Achieving RPO trajectory will put the industry deploying CPP in a financially disadvantageous position; or ii) increasing renewable power consumption is not technically feasible for operations of the industry deploying CPPs. The*



above may act as guiding principle for SERCs in determining applicability of RPOs for CPPs."

A copy of the Notification dated 26.04.2019 issued by MNRE is annexed herewith and marked as **Annexure "L"**.

o) Subsequently, the MOP issued another notification dated 01.10.2019, whereby the earlier notification dated 01.02.2019 was further clarified by setting as follows:

"... ... ...

i) For CPPs that have commissioned before 01.04.2016, RPO should be at the level as mandated by the appropriate Commission for the year 2015-16. For CPPs commissioned from 1.04.2016 onwards, the RPO level as mandated by the Appropriate Commission or Ministry of Power, whichever is higher, for the year of commissioning of the CPP shall be applicable."

A copy of the notification dated 01.10.2019 issued by the Ministry of power is annexed hereto and marked as **Annexure "M"**.

p) In light of the aforesaid notifications issued by the MOP, this Hon'ble Commission on 17.07.2020 issued the Draft Gujarat Electricity Regulatory Commission (Procurement of Energy from Renewable Sources) (Third Amendment) Regulations, 2020. Vide the said draft amendment, this Hon'ble Commission proposed to give effect to the aforementioned Notification dated 01.10.2019 issued by MOP. The relevant portion of the draft amendment is set-out hereinbelow:

"***Amendment in Regulation 4.1 of the Principal Regulations to be read with First and Second Amendments:***

Para 1 and 2 of Principal Regulation 4.1 read with First and Second Amendments shall be substituted as under:

Para: 1



Each distribution licensee shall purchase electricity (in kWh) from renewable energy sources, at a defined minimum percentage of the total consumption of its consumers including T&D losses, excluding consumption met from hydro sources of power other than mini hydel sources of power during the year. Similarly, Captive and Open Access user(s) / consumer(s) shall purchase electricity (in kWh) from renewable energy sources, at a defined minimum percentage of his/her total consumption, excluding consumption met from hydro sources of power other than mini hydel sources of power during the year.

Provided that in case of Captive User of a Captive Generating Plant commissioned before 1st April, 2016, the composite RPO target with respect to the energy procured from such Captive Generating Plant shall be as decided by the Commission for the Year 2015-16;

Provided further that in case of Captive Generating Plant commissioned on or after 1st April, 2016, the composite RPO target shall be equal to the target applicable for the year in which project is commissioned;

Provided further that in case of any augmentation of the Captive Generating Plant, the RPO target for augmented capacity shall be equal to the RPO target applicable for the year in which such augmented capacity has been commissioned;"

A copy of the draft amendment dated 17.07.2020 is annexed herewith and marked as **Annexure "N"**.

q) It is pertinent to state that the aforesaid draft amendments issued by this Hon'ble Commission were never notified. In this regard, certain petitions filed before this Hon'ble Commission are also pending adjudication, which seek implementation of the aforesaid MOP Notifications with respect to amendment of GERC RPO Regulations.

r) The petitioner submits that Hon'ble GERC, vide Procurement of Energy From Renewable Sources Regulation 2010 defined "Renewable energy sources " . Biomass if one of the renewable energy sources defined by Hon'ble Commission in the said regulation. The ministry of New and Renewable Energy (MNRE) vide notification dated 26.09.2019 clarified that power generated from co-firing



of Biomass in the thermal power plants as a renewable energy and is eligible for meeting non solar renewable purchase obligation. A copy of the aforesaid Notification dated 26.09.2019 of MNRE is annexed hereto and marked as **Annexure "O"**.

s) The MNRE further requested the Hon'ble Central Electricity Regulatory Commission (CERC) to formulate and notify the procedures for methodology to quantify the energy produced from Biomass in Biomass co-fired themal power plant. Accordingly , the Hon'ble Commission, vide its order dated 18.02.2020 proposed methodology for estimation of electricity generated from Biomass in Biomass co-fired thermal power plants. A copy of the aforesaid Order dated 18.02.2022 of the Hon'ble Commission is annexed hereto and marked as **Annexure "P"**.

t) The petitioner has Coal Based Captive Power Plant at Dahej and Hazira manufacturing plants and decided to use co-firing of Biomass towards compliance of renewable power purchase obligation. The petitioner started co-firing of Biomass since February -2021 and also filed petition in Hon'ble GERC petition No 2012/2021.

u) It is further submitted that due to the criticality of the operations of the Petitioner's Plants, supply of reliable and continuous power and steam is very essential and hence the requirement of power and steam is met by captive generation. On account of the same, there is limited possibility to consume the renewable energy which is infirm in nature. Accordingly, the Petitioner's Plants mainly meet the RPO obligations by purchasing RECs from the power exchanges. It is further important to note herein that the Petitioner has filed similar Petitions being Petition No. 1781 of 2019 for FY 2017-18; Petition No. 1792 of 2019 for FY 2018-19; Petition No. 1892 for FY 2019-20 and petition no



2007 of 2021 for FY 2020-21 before this Hon'ble Commission seeking appropriate directions for carry forward of RPO compliance for the FY 2017-18 and FY 2018-19 and FY 2019-20 and FY 2020-21. The said Petitions are pending adjudication before this Hon'ble Commission.

v) In view of the aforesaid, the Petitioner seeks invocation of Provisos 5 and 6 of the Regulation 9.1 of the GERC RPO Regulation, 2010, which provides as follows:

> "*9. Consequences of default*
>
> ... ...
>
> *Provided that in case of any genuine difficulty in complying with the renewable purchase obligation because of non-availability of power from renewable energy sources or the RECs, the obligated entity can approach the Commission to carry forward the compliance requirement to the next year:*
>
> *Provided further that where the Commission has consented to carry forward of compliance requirement, the provision regarding payment of regulatory charges as specified above shall not be applicable.*"

w) In addition to the aforesaid, the Petitioner also seeks invocation of Regulation 12 of the GERC RPO Regulations, 2010, which provides as follows:

> "*12. Power to remove difficulties*
>
> *12.1 The Commission shall suo motu or on an application from any person generating electricity from renewable energy sources or a distribution licensee or captive user or open access consumer may review, add, amend or alter these Regulations and pass appropriate orders to remove any difficulty in exercising the provisions of these Regulations.*"

x) The above regulations contain the power to carry forward of RPO targets to the next FY, including the power to remove difficulties, in the event the obligated entity is facing genuine difficulty to comply with the RPO targets. In the present



case, the Petitioner has faced unavoidable difficulties in complying with the RPO target required under the applicable RPO regulations for the FY 2021-22 and as such, is seeking appropriate directions upon this Hon'ble Commission to carry forward its RPO targets to the next FY.

y) It is submitted that Section 86(1)(e) of the EA 2003 specifies promotion of renewable sources of energy, and that there is no specific mandate to have rigid technology specific RPO norms. The intent of the said provision is to promote renewable sources of energy, irrespective of their nature or source of generation.

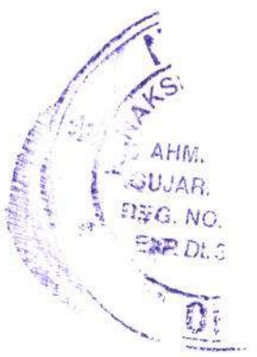
z) Therefore, keeping the aforesaid facts and circumstances at hand, the Petitioner is filing the present Petition seeking carry forward of its RPO compliance for the FY 2021-22.

GROUNDS:

13. The present petition is preferred on the following amongst other grounds, for proper adjudication, and the same are as follows:

I. Regulatory Framework:

A. For that the EA 2003, under section 86(1)(e) mandates the State Commissions to promote generation of electricity from renewable sources of energy. The said provision directs the State Commissions to specify a percentage of the total consumption of electricity in the area of a distribution licensee, to be consumed from renewable energy sources. Accordingly, in order to enforce Section 86(1)(e), this Hon'ble Commission notified GERC RPO Regulations, 2010, which were subsequently modified by first, second and third amendments. The said Regulations under Regulation 4 read with amendments provided the norms for fulfilment of RPOs by various obligated entities,


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including those entities which are meeting power requirements through their captive generating plants.

B. For that, the aforesaid RPO Regulation, 2010 read with amendments under Proviso 5 and 6 of the Regulation 9 contain the power to carry forward of RPO targets to the next FY, including the power to remove difficulties, in the event the obligated entity is facing genuine difficulty to comply with the RPO norms.

C. For that it is pertinent to submit that Section 86(1)(e) of the EA 2003 specifies promotion of renewable sources of energy, and that there is no specific mandate to have rigid technology specific RPO norms. The intent of the said provision is to promote renewable sources of energy, irrespective of their nature or source of generation. As such, Regulation 4.1 and Regulation 5.1 provides for interchangeability of solar and non-solar RECs and physical energy, in the event there is genuine difficulty in procuring either RECs or physical energy in the market, for enabling the obligated entities to comply with their RPO targets.

D. For that in the present case the Petitioner has faced unavoidable difficulties in complying with the RPO targets required under the applicable RPO regulations for the FY 2021-22 (as detailed hereinafter) and as such, is seeking appropriate directions upon this Hon'ble Commission to carry forward its RPO targets.

II. Reasons for Seeking carry forward of RPO:

E. For that, suo-motu proceedings were initiated before the Hon'ble Central Commission, being 05/SM/2020, wherein downward revision of the RECs for solar and non-solar categories were being contemplated. In the said


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proceedings, the Hon'ble Central Commission issued a Draft Notification dated 31.03.2020, wherein the floor and forbearance prices of the solar and non-solar RECs were sought to be reduced based on the reduced discovery of renewable tariff under Section 63 of the Act, and stakeholder comments were invited.

A copy of the Notification dated 31.03.2020 passed by the Ld. Central Commission in 05/SM/2020, is annexed hereto and marked as **Annexure "Q"**.

Thereafter, on 17.06.2020, the Ld. Central Commission issued a final order in the above proceedings, thereby reducing the floor and forbearance prices of solar and non-solar RECs as follows:

> "*71. Summary of Decisions*
>
> *71.1. Floor and Forbearance price for Non-Solar RECs shall be as follows:*

	Non-Solar REC (Rs./ MWh)
Forbearance Price	1,000
Floor Price	0

> *71.2. Floor and Forbearance price for Solar RECs shall be as follows:*

	Solar REC (Rs./ MWh)
Forbearance Price	1,000
Floor Price	0

> … … …"

A copy of the order dated 17.06.2020 passed by the Hon'ble Central Commission in 05/SM/2020, is annexed hereto and marked as **Annexure "R"**.

F. For that, the above order dated 17.06.2020 was challenged by various entities before the Hon'ble APTEL in Appeal No. 113 of 2020 [Batch]. The Hon'ble APTEL, vide an interim order dated 24.07.2020, stayed the trading of RECs


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in Energy Exchanges. The relevant extract of the said order is reproduced hereinbelow:

> "...
>
> *Meanwhile, the trading of RECs scheduled on 29.7.2020 shall be postponed by four weeks.*
>
> ..."

A copy of the order dated 24.07.2020 passed by the Hon'ble APTEL in Appeal No. 113 of 2020 [Batch], is annexed hereto and marked as **Annexure "S".**

G. Subsequently, the Hon'ble APTEL, vide orders dated 11.08.2020, 26.08.2020, 05.09.2020, 08.09.2020, and 10.09.2020, continued the operation of the aforesaid interim order (non-trading of RECs), while the above appeals were pending adjudication.

Copies of the orders dated 11.08.2020, 26.08.2020, 05.09.2020 and 10.09.2020 passed by the Hon'ble APTEL in Appeal No. 113 of 2020 & Batch, are annexed herewith and marked as **Annexure "T" Collectively.**

H. Subsequently, after the conclusion of the hearing in the aforesaid batch appeals on 25.09.2020, the Hon'ble APTEL passed the order, whereby, while reserving the final judgment in the said appeals, it was directed that the interim order qua non-trading of RECs shall continue till the judgment is pronounced. The relevant extract of the aforesaid order dated 25.09.2020, is set out hereunder:

> "**Judgment Reserved**. Interim order, if any shall continue till the judgment is pronounced."


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A copy of the order dated 25.09.2020 passed by the Hon'ble APTEL in Appeal No. 113 of 2020 & Batch, is annexed herewith and marked as **Annexure "U".**

Thereafter, the aforesaid appeals were re-heard, and after a span of more than a year, wherein, the Hon'ble APTEL passed the final judgment dated 09.11.2021 in the aforesaid appeals. Vide the said judgment, the Hon'ble APTEL set aside the aforesaid order dated 17.06.2020 of the Hon'ble CERC whereby the Floor and forbearance price of RECs were revised to Rs. 1000 per MWh and Rs. 0 per MWh respectively. The relevant extract of the above judgment is set-out hereinbelow:

> *"117.Having regard to the findings returned above, holding CERC in gross violation in the matter of compliance with Regulation 9(1) and 9(2) of REC Regulations in proceedings leading to, and the final result in, the impugned order, the deficiencies being not mere irregularities but illegalities that go to the root vitiating the end-product rendering it arbitrary, the appeals must succeed. Thus, we set aside the order dated 17.06.2020 passed in Petition no. 05/SM/2020, by the Central Electricity Regulatory Commission, revising the floor and forbearance price of solar and non-solar RECs at Rs. 0/MWh and Rs. 1000/MWh respectively.*
>
> *118.To obviate any confusion, and for removal of doubts, if any, we direct, more as a consequence, and also for the reason that there cannot be a vacuum, that the order(s) governing the subject immediately prior to the passing of the impugned order would stand revived and continue to prevail to regulate the pricing and trading of the RECs so long as a fresh order on the subject is not issued, in accordance with law.*
>
> *119.We are conscious that as a result of the impugned order being passed, retrospectively tinkering with the pricing of RECs issued on or after 31.03.2017, trading in their respect would have been unfairly and unjustly adversely affected. In order to do complete justice, we also direct that the RECs which were still valid for trading at the power exchange under REC Regulations as on the date (17.06.2020) the impugned order was passed, and have remained unsold till date, shall continue to be valid and be*


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good for sale or purchase for the then remainder period of their validity, computed with reference to the date of the impugned order, and that the purchase thereof, during the period of such extended validity, by the Obligated entities shall be treated as good compliance with RPO targets. The Central Commission shall issue formal orders to this effect and give the same due publicity for information of all stakeholders within two weeks hereof.

120.The appeals and pending applications are disposed of in above terms."

From the above, it can be seen that the Hon'ble APTEL set aside the order of the Hon'ble CERC, and directed the said Commission to pass consequential order qua the pricing and validity of RECs.

A copy of the order dated 09.11.2021 passed by the Hon'ble APTEL in Appeal No. 113 of 2020 [Batch], is annexed hereto and marked as **Annexure "V"**.

I. For that REC is nothing but an alternate source to the extent of fulfilment of RPO by purchase of renewable energy. In this regard, reference is made to the judgment dated 16.04.2015 passed by the Hon'ble APTEL in Appeal No. 258 of 2013 & Batch, titled as *Indian Wind Power Association v. Gujarat Electricity Regulatory Commission*, wherein the following was held:

"29. Learned Counsel for GUVNL and the distribution licensees has argued that Section 86 (1) (e) of the Electricity Act, 2003 imposes obligation to procure renewable energy in physical form only and not REC and REC is not renewable energy but only a mitigating mechanism available to the obligated entities as per their own choice. We do not agree that REC is only a mitigating mechanism and is not to be considered as renewable source of energy for fulfilling the RPO obligation specified under Section 86 (1)(e) of the Act. The RE Regulations, 2010 recognize REC as valid instrument to meet the RPO obligation specified under Section 86(1)(e) of the Electricity Act, 2003. As set out in the statement of objects and reasons, purchase of REC is to be deemed as purchase of renewable energy for RPO compliance and accordingly the State Commissions have been mandated to


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recognize REC as a valid instrument for RPO compliance. The Tariff Policy also envisages introduction of REC for meeting the RPO. We agree with Learned Counsel for the State Commission that by introducing the deeming provision as reiterated in the Gujarat Commission's RE Regulations, a legal fiction has been created by virtue of which purchase of REC is to be construed as fulfillment of RPO by purchase of renewable energy

...

*32. **REC is issued only to RE generators for generation of renewable energy and is an alternative mode provided to the RE generators for recovery of their costs**. One REC is issued for 1 MWh of energy from renewable energy sources injected into the grid or consumed by a captive consumer. REC can be purchased by the obligated entities to meet their RPO under Section 86(1)(e) of the Electricity Act and purchase of REC would be deemed as purchase of renewable energy for RPO compliance. **REC is an alternative to physical procurement of renewable energy**. The distribution licensees as well as other persons consuming electricity generated from conventional Captive Generating Plant or procuring electricity from conventional generating stations through open access and third party sale are obligated entities who have to meet their RPO. These obligated entities have option to meet their RPO mandated under Section 86 (1) (e) of the Act and the Regulations either by directly procuring energy from renewable sources of energy in physical form or purchasing REC, as deemed procurement of renewable energy. Both have to be considered for fulfilling the RPO specified under Section 86(1)(e). An obligated entity has option to fulfill its RPO either by fully procuring renewable energy in physical form or fully by purchasing REC or partly in physical form and partly REC. However, the option has to be exercised based on sound economic principles. In case of distribution licensees, the State Commission while approving compliance of RPO has to consider that the distribution licensee has exercised its option prudently."*

(Emphasis and Underline Supplied)

Therefore, from a perusal of the above judgment, it can be clearly ascertained that RECs are the form of alternate source to physical renewable energy, and that, the trading in which, as already demonstrated, was stayed for more than a year in terms of the orders passed by the Hon'ble APTEL in the


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aforementioned batch of appeals. As such, the situation was beyond control of the Petitioner and therefore could not have fulfilled its RPO liability.

J. For that, post the passage of the Order dated 09.11.2021 by the Hon'ble APTEL in Appeal No. 113 of 2020 & and other appeals, after which trading in RECs was resumed, and during the period commencing thereupon, i.e., November, 2021 to **March, 2022**, the Petitioner purchased 213561 number of Non-Solar RECs. At the same time, due to exorbitantly high demands and abysmally low availability of Solar RECs in the market, the Petitioner could not procure Solar RECs, despite bidding for the RECs in each month.

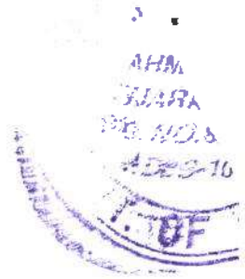
A copy of the REC Inventory from the month of November, 2021 till March, 2022 is annexed herewith and marked as **Annexure "W"**.

K. For that, there is low availability of Solar, as well as Non-Solar RECs in the market and the same is also evident from the REC data as provided hereinbelow:

Non-Solar RECs

Sr. No.	Description	2017 - 18	2018-19	2019-20	2020-21	2021-22
1.	Opening balance REC	12,926,303	1,494,184	1,872,826	5,588,215	5,129,613
2.	Addition in REC	4,992,891	6,219,258	10,608,262	4,267,663	5,153,342
3.	REC Sold	15,975,749	5,414,293	6,613,076	768,953	7,097,874
4.	REC Retained by Generator	449,261	426,323	279,797	343,419	296,832
5.	REC Revoked				3,613,894	
6.	Closing balance REC (available)	1,494,184	1,872,826	5,588,215	5,129,613	2,888,249

Solar RECs



Sr. No.	Description	2017- 18	2018-19	2019-20	2020-21	2021-22
1.	Opening balance REC	4,908,376	5,998,101	335,157	144,744	733,822
2.	Addition in REC	1,333,925	1,558,083	2,131,292	754,436	973,289
3.	REC Sold	208,402	7,194,502	2,314,774	151,809	1,362,529
4.	REC Retained by Generator	35,798	26,525	6,931	3,548	7,681
5	REC Revoked				10,001	
5.	Closing balance REC	5,998,101	335,157	144,744	733,822	336,901

Therefore, from the above table it is evidently clear that there is shortage of RECs which are being traded in the market. Furthermore, the higher quantum of buy bids in comparison to sell bids indicates that if all the sell bids are cleared, there will be shortage of RECs and many of the obligated entities will not be able to fulfil their RPO.

L. For that, there are not sufficient quantity of solar and non-solar RECs available in the market, as is also evident from the table provided hereinabove. Further, it is important to highlight herein that, as per clause 5.1 of the GERC RPO Regulations, 2010, in the event of the obligated entity fulfilling the renewable purchase obligation by purchase of certificates, the obligation to purchase electricity from generation based on renewable energy other than solar can be fulfilled by purchase of non-solar certificates and the obligation to purchase electricity from generation based on solar as renewable energy source can be fulfilled by purchase of solar certificates only. If solar certificates are not available in a particular year, then in such cases, additional non-solar certificates shall be purchased for fulfilment of the RPO norms. The relevant portion of the aforesaid regulations is reproduced hereinbelow for the convenience of this Hon'ble Commission:



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"5. Certificates under the Regulations of the Central Commission

5.1 Subject to the terms and conditions contained in these Regulations, the Certificates issued under the Central Electricity Regulatory Commission's (Terms and Conditions for recognition and issuance of Renewable Energy Certificate for Renewable Energy Generation) Regulations, 2010 shall be the valid instruments for the discharge of the mandatory obligations set out in these Regulations for the obligated entities to purchase electricity from renewable energy sources.

Provided that in the event of the obligated entity fulfilling the renewable purchase obligation by purchase of certificates, the obligation to purchase electricity from generation based on renewable energy other than solar can be fulfilled by purchase of non-solar certificates and the obligation to purchase electricity from generation based on solar as renewable energy source can be fulfilled by purchase of solar certificates only. If solar certificates are not available in a particular year, then in such cases, additional non-solar certificates shall be purchased for fulfillment of the RPO in accordance with Table 1."

From the aforementioned data, it is clearly evident that Solar REC were not readily available and there was a deficit of Solar certificates in the market. As such, in light of the provisions of RPO Regulation 5.1, the Petitioner ought to be permitted to comply with its RPO norms by setting off the solar certificates with either of the other RE certificates, in other words the regulation provides for interchangeability of Solar and Non-Solar renewable power/ RECs for the purpose of fulfilment of RPO norms.

M. For that, this Hon'ble Commission ought to take into account the fact that the RPO regime needs to be relaxed in terms of the fact that section 86(1)(e) does not envisage rigid technology specific RPO norms which are onerous and act as a hindrance for the captive and open access industry. As such, while it is necessary to promote renewable energy, however, at the same time, it should not pose hindrance for the captive consumption. In the present context, the Petitioner further seeks reliance upon the RPO Regulations framed by other



Commissions which permit interchangeability between solar and non-solar renewable power/ RECs for the purpose of fulfilment of RPO norms.

The details of regulations of other State Commissions which permit interchangeability of RPO norms are provided hereinbelow:

Maharashtra Electricity Regulatory Commission (Renewable Purchase Obligation, its Compliance and Implementation of Renewable Energy Certificate Framework) Regulations, 2019:

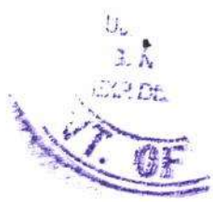
> *"7.3 Obligated Entity can use surplus Solar energy upto 15% of total RPO target to meet short fall in non-Solar RPO target and vice-versa;*
>
> *Provided that Obligated Entity by providing detailed justification may seek prior approval of the Commission for adjusting more than 15% surplus energy from one category against short fall in other RPO category."*

Gujarat Electricity Regulatory Commission (Procurement of Energy from Renewable Sources) (Second Amendment) Regulations, 2018:

> *"4) Substitution of para 2 of Principal Regulation 4.1:*
>
> *If the abovementioned minimum quantum of power purchase either from Solar or Wind or Others (including Biomass, Bagasse, Hydro and MSW) is not available in a particular year of FY 2017'18 to 2021-22, then in such cases, additional renewable energy available either from Solar or Wind or Others shall be utilised for fulfilment of RPO in accordance with Column 5."*

Uttarakhand Electricity Regulatory Commission (Tariff and other terms for supply of Electricity from Renewable Energy Sources and non-fossil fuel based Co-generating Stations) Regulations, 2018

> *"Clause 9*
> *1 (b) on achieving 85% compliance, remaining shortfall can be met with excess non-solar energy purchased beyond specified Solar RPO for that particular Year."*



Uttar Pradesh Electricity Regulatory Commission (Promotion of Green Energy through Renewable Purchase Obligation) (First Amendment), 2019

> *"4. on achieving 85% compliance, remaining shortfall can be met with excess non-solar energy purchased beyond specified Solar RPO for that particular Year."*

Bihar Electricity Regulatory Commission (Renewable Purchase ***Obligation, its compliance and REC Framework Implementation) (3rd Amendment), Regulations, 2018***

> *"4. Provided that on achievement of solar RPO compliance to the extent of 85% and above in any year, remaining shortfall, if any, may be met by purchase of excess of non-solar energy beyond the percentage specified non-solar RPO for that particular Year."*

A copy of the all the above regulations is annexed hereto and marked as **"X".**

N. For that, Articles 5.2.24 and 5.2.25 of National Electricity Policy (NEP) [*which has been formulated under Section 3(1) of the Electricity Act 2003*] provide for the establishment of CGP's as a means of securing reliable, quality and cost-effective power. Relevant portion of the National Electricity Policy, 2005 is being reproduced herein for ready reference of this Hon'ble Commission:

> *"Captive Generation*
>
> *5.2.24 The liberal provision in the Electricity Act, 2003 with respect to setting up of captive power plant has been made with a view to not only securing reliable, quality and cost-effective power but also to facilitate creation of employment opportunities through speedy and efficient growth of industry.*
>
> *5.2.25 The provision relating to captive power plants to be set up by group of consumers is primarily aimed at enabling small and medium industries or other consumers that may not individually be in a position to set up plant of optimal size in a cost-effective*



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manner. It needs to be noted that efficient expansion of small and medium industries across the country would lead to creation of enormous employment opportunities."

O. For that, the provision of the National Tariff Policy, 2016, provides as follows:

"6.4 Renewable sources of energy generation including Co-generation from renewable energy sources:

Pursuant to the provisions of Section 86(1)(e) of the Act, the Appropriate Commission shall fix a minimum percentage of the total consumption of electricity in the area of distribution licensee for purchase of energy from renewable energy sources, taking into account availability of such resources and its impact on retail tariff... ... ...

... ...

(iii) It is desirable that purchase of energy from renewable sources of energy takes place more or less in the same proportion in different States. To achieve this objective in the current scenario of large availability of such resources only in certain parts of the country, an appropriate mechanism such as Renewable Energy Certificate (REC) would need to be promoted.

... ...

(Underline Supplied)

From the aforesaid reading of Clause 6.4 (1), it is clear that the Hon'ble Commission while fixing the renewable purchase obligation under Section 86(1)(e) of the EA 2003, has to take in to account the following:

(a) availability of such resources and;

(b) its impact on consumer tariff.

As such, the impact of fulfilment of RPO on the landed cost of electricity upon obligated entities including captive users, is required to be considered so that the same is not onerous.

A copy of the National Tariff Policy, 2016 is annexed herewith and marked as **Annexure "Y"**

P. For that, it is relevant to mention herein that this Hon'ble Commission in the past has held that utilities should always explore contracting physical RE power on long term/ medium term basis as the purchase of RECs would lead to additional burden upon the consumers. In this regard, the Petitioner places on record an order dated 30.03.2020 passed by the Ld. MERC in Case No. 324 of 2019, wherein, while carrying out the True Up of Aggregate Revenue Requirement (ARR) of BEST Authority for FY 2017-18 & FY 2018-19, Provisional Truing up of ARR for FY 2019-20 and ARR & Tariff for the 4th Control Period from FY 2020-21 to FY 2024-25, on the issue of purchase of REC, it was held as under:

> *"4.4.3.8* ***REC Purchase:*** *BEST has also submitted the documentary evidence regarding the number of RECs purchased and their cost. The Commission has verified the actual cost from the documentary evidence and considered the same as submitted by BEST. Further, the Commission notes that BEST has purchased RECs to meet the RPO obligation along with additional bilateral power which impacts the overall average power purchase cost. Further, as submitted by BEST, the Solar RECs were not available in FY 2017-18 and accordingly, entire requirement of RECs for meeting the RPO shortfall for FY 2017-18 and FY 2018-19 cumulatively was purchased in FY 2018-19. This has led to an increase in the average power purchase cost from RE sources to Rs. 16.03/kWh in FY 2018-19 from Rs. 9.35/kWh in FY 2017-18. Considering that the cost of RE power has shown a decreasing trend in the recent years, BEST should explore contracting RE power on medium / long term basis rather than purchasing RECs along with additional bilateral power which may lead to financial burden on the consumers. The Power procurement cannot be planned based on the certainty of REC procurement and the process should end with RE Power procurement and only in case of shortfall, REC purchase should be resorted to. The intent of the RPO is to encourage consumption of RE power and hence BEST should initiate timely steps to contract such RE Power for future consumption and seek necessary approvals from the Commission."*



A copy of the relevant extracts of the order dated 30.03.2020 passed by this Hon'ble Commission in Case No. 324 of 2019, is annexed herewith and marked as **Annexure "Z".**

Q. In addition to the above, reference is also made the judgment dated 16.04.2015 passed by the Hon'ble APTEL in Appeal Nos. 258 of 2013 & Batch, titled as *Indian Wind Power Association v. Gujarat Electricity Regulatory Commission & Ors. (Supra), wherein it was held as under:*

> *"32. REC is issued only to RE generators for generation of renewable energy and is an alternative mode provided to the RE generators for recovery of their costs. One REC is issued for 1 MWh of energy from renewable energy sources injected into the grid or consumed by a captive consumer. REC can be purchased by the obligated entities to meet their RPO under Section 86(1)(e) of the Electricity Act and purchase of REC would be deemed as purchase of renewable energy for RPO compliance. REC is an alternative to physical procurement of renewable energy. The distribution licensees as well as other persons consuming electricity generated from conventional Captive Generating Plant or procuring electricity from conventional generating stations through open access and third party sale are obligated entities who have to meet their RPO. These obligated entities have option to meet their RPO mandated under Section 86(1)(e) of the Act and the Regulations either by directly procuring energy from renewable sources of energy in physical form or purchasing REC, as deemed procurement of renewable energy. Both have to be considered for fulfilling the RPO specified under Section 86(1)(e). An obligated entity has option to fulfill its RPO either by fully procuring renewable energy in physical form or fully by purchasing REC or partly in physical form and partly REC. However, the option has to be exercised based on sound economic principles. In case of distribution licensees, the State Commission while approving compliance of RPO has to consider that the distribution licensee has exercised its option prudently.*
>
> ... ...
>
> *42. Thus, in term of Regulation 5.1, the REC is a valid instrument for discharge of mandatory RPO as specified in the Regulations and is not just a mitigating mechanism. It is an alternative mechanism to physical procurement of renewable energy. As already discussed earlier, REC is issued in terms of energy*



('MWh') injected by a renewable energy source into the grid. REC procured by the obligated entity will have to be treated as deemed energy purchase from such RE source and added to physical renewable energy procured directly from the renewable energy source by the obligated entity to find the total percentage of renewable energy procured in a year vis-à-vis that specified in the Regulations. Thus, for verifying the compliance of RPO, the REC has to be treated as deemed energy from renewable source of energy. When a renewable energy generator which opts for REC scheme generates renewable energy only then the REC is issued to it. Only a renewable energy generator is entitled to trade its REC. Under REC mechanism, the renewable energy is physically drawn either by the local distribution licensee at its average power purchase cost (and not at preferential tariff) or the energy is used for captive consumption or sold to any other licensee or to an open access consumer at mutually negotiated tariff or through power exchange and the green attributes of the same energy is sold as REC as deemed purchase of renewable energy. An obligated entity can fulfill its RPO obligation specified under Regulation 4.1 by purchase of REC. In case of an obligated entity procuring part of the RPO obligation through REC, the deemed energy procurement will have to be added to the energy drawn physically by directly procuring energy from a RE generator for compliance of the RPO specified under Regulation 4.1. Therefore, purchase of REC for the purpose of compliance of Regulation 4.1 has to be considered as deemed procurement of energy from renewable energy source. However, in a resource surplus State, the obligated entities have to make their own choice for fulfilling the RPO but such choice has to be made on sound commercial principles or based on convenience to avoid hassles of open access, cross subsidy surcharge, banking, etc., involved in physical procurement of renewable energy or if RPO quantum is too small.

... ...

49. The State Commission may also revise the targets after the completion of financial year under Regulation 4.2 due to supply constraints or factors beyond the control of the licensee which may be due to reasons such as:

i) Actual renewable energy generation is below normative generation from tied up renewable energy sources due to reasons beyond the control of the distribution licensee.

ii) Force majeure such as natural calamity resulting in supply constraints.

iii) Inadequate capacity addition in the State and RECs could not be purchased due to non-availability of REC despite efforts made



by the distribution licensee. In a resource rich State where the State Commission had set up RPO targets keeping in view the anticipated capacity addition in the State, the State Commission may also revise the targets due to inadequate renewable capacity addition in the State.

iv) Minimum energy purchase obligation for renewable sources of energy was fixed on estimated energy consumption of the licensee in the ARR based on estimated growth but the actual consumption has been much lower due to slow growth or negative growth or due to forced majeure. Thus, percentage RPO on actual energy consumption was met but minimum energy purchase target fixed in the ARR based on anticipated energy consumption could not be met.

v) A distribution licensee has proposed to meet a part or full RPO by purchase of REC but REC could not be purchased, despite efforts made by the licensee, due to non-availability of REC.

.....

51. We want to add that non-availability of REC may not always be a pre-condition for exercise of power to revise under Regulation 4.2. For Example, if the distribution licensees had tied up adequate capacity at preferential tariff but due to actual generation being lower than the normative generation due to reasons beyond the control of the distribution licensee or there is natural calamity in the State and energy consumption in the State has gone down or renewable energy generation in the State has been affected due to natural calamity then shortage of REC may not be a pre-condition to revise RPO targets set up under Regulation 4.1. Further, if in a resource rich State the State Commission has set up RPO targets keeping in view anticipation of capacity addition in the State, the State Commission may also revise the targets due to inadequate capacity addition in the State due to reasons beyond the control of the distribution licensee.

... ...

61. Renewable energy generators not coming forward to enter into PPA at preferential tariff cannot be a reason for revising the RPO target. The obligation to meet the RPO is of the obligated entities. However, if the Commission has fixed the targets in the year 2010 for the next three years based on the anticipated development of renewable energy sources in the State and the Commission feels that these targets are required to be revised in view of drastic reduction in capacity addition in a year due to reasons beyond the control of the distribution licensees then the State commission can revise the RPO targets by exercising its power under Regulation 4.2. It is an accepted fact that the capacity addition in the State was inadequate due to withdrawal



of fiscal incentives by the Government. However, such revision in RPO due to shortfall in capacity addition has to be uniform for all the distribution licensees. Thus, if the State Commission concludes that due to low wind energy capacity addition in the State during the year RPO for wind energy has to be reduced by 1%, such reduction has to be uniform for all distribution licensees. It cannot be different for different licensees.

... ...

71. Summary of our findings:

... ...

(ii) An obligated entity has option to fulfill its RPO either by procuring renewable energy in physical form or by REC or partly by REC and partly by physical renewable energy. However, a distribution licensee has to exercise the option based on economic principles. An obligated entity other than the distribution licensee may also opt for purchase of REC for fulfilling its RPO obligation to avoid the issues involved in banking, open access, sale of surplus power, etc., or if the RPO requirement is too small.

... ..."

(Emphasis and Underline Supplied)

As seen from the above judgment, the Hon'ble APTEL has taken a categorical view that the obligated entities/ Distribution Licensees should exercise the option of purchase of RECs prudently i.e., only when the same is commercially viable and does not unnecessarily burden the end consumers of electricity. Further, the Hon'ble APTEL has also held that the State Commission should allow relaxation of RPO in case a Distribution Licensee has opted for purchase of physical RE power, however, the same could not be procured due to reasons beyond its control.

R. For that, it is clearly evident from the data provided hereinbefore that there has been no significant capacity addition in renewable power, which has seriously affected the availability of physical energy in the market. In this regard, reference can be made to para 51 of the aforesaid decision of the Hon'ble APTEL in Appeal No. 258 of 2013.


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S. For that, from a reading of the above para, it is clear that the Hon'ble APTEL recognised the principle that RPO targets should be rationalised if there is non-adequate capacity addition of renewable energy in a state. The present case stands on a higher footing as the Petitioner is merely seeking carry forward of the RPO targets.

T. For that, this Hon'ble Commission ought to ensure the survival of the Industry(ies) having Captive Power Plant, as this ever-growing liability of REC compliance is eroding the profits of such industry(ies) and if the same are not done away, then such industry(ies) would not be in a position to survive, which will not only affect the overall revenue of the State, but also would result in a huge number of people becoming unemployed.

U. For that, the pool of RECs is fast depleting on the Energy Exchange, and therefore after sometime the captive users will not be in a position to procure any more REC and hence will fail in fulfilling its RPO obligations.

V. For that, it is reiterated that after June 2020, there were regulatory developments relating to the interim order passed by Hon'ble APTEL on 24.07.2020 whereby trading of RECs was stayed/ suspended, which interim order was vacated only on 09.11.2021, as detailed hereinbefore. Accordingly, the Petitioner participated in the trading sessions held post the passage of the aforesaid order and the data pertaining to purchase of Solar and Non-solar RECs made by the Petitioner during the said trading sessions and Biomass cofiring in petitioner's Coal Based CPP's at Dahej and Hazira is provided hereinbelow:


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Bid/Clear Quantum for Hazira and Dahej FY 21-22					
Particulars	Bid Quantum		Cleared Quantum		RPO fulfilled by Biomass Cofiring (Units)
Month	**Solar**	**Non-Solar**	**Solar**	**Non-Solar**	
Apr-21	-	-	-	-	36,18,928
May-21	-	-	-	-	42,00,586
Jun-21	-	-	-	-	30,77,078
Jul-21	-	-	-	-	89,20,689
Aug-21	-	-	-	-	69,38,037
Sep-21	-	-	-	-	28,71,037
Oct-21	-	-	-	-	16,16,445
Nov-21	14500	34000	0	32004	42,61,559
Dec-21	67599	147579	0	147579	1,32,94,906
Jan-22	75571	0	0	0	1,60,93,500
Feb-22	83748	0	0	0	1,28,37,101
Mar-22	99268	33,978	0	33978	2,12,73,061

From the aforesaid data, it is evidently clear that the Petitioner made efforts to purchase the Solar, as well as Non-Solar RECs.

W. For that, it is the case of the Petitioner that the co-generation power plants ought not be fastened with the RPO liability, to the extent of electricity generated through co-generation, in light of Section 86(1)(e) of the EA 2003 as both co-generation and renewable generation are to be treated at par and both have to be promoted. In this regard, the Petitioner reiterates its stand that since the matter relating to RPO on co-generation captive plants is pending adjudication before the Hon'ble Gujarat High Court, the Petitioner in the meantime has been meeting its RPO Compliance for its coal based thermal power plants at its Hazira and Dahej Plants by procuring RECs from the exchange.

X. For that, supplementing the above, the Hon'ble APTEL in judgment dated 02.01.2019 passed in *Appeal Nos. 278 of 2015 & Batch*, titled as *M/s. JSW Steel Limited v. TANGEDCO & Ors.*, wherein the Hon'ble Tribunal held that co-generating plants cannot be fastened with the liability of RPO compliance,


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as the mandate of the EA 2003 is to promote renewable energy. As such, the relevant extract of the said judgment is reproduced hereinbelow:

> *"40. It is manifest on the face of the judgment, as stated supra, the Captive consumers having cogenerating plants cannot be fastened with the obligation to procure electricity from renewable energy sources, as that would defeat the object of section 86(1)(e) of the Electricity Act, 2003 and cogenerating plants have to be treated at par with renewable energy generating plants for the purpose of RPO obligations. ... ..."*

It is submitted that in view of the order dated 12.03.2015 passed by the Ld. Single bench of the Hon'ble Gujarat High Court in SCA No. 791 of 2011, the Petitioner is unable to take benefit of the aforesaid view taken by Hon'ble APTEL which is reiterated in its various other judgements.

A copy of the judgment dated 02.10.2019 passed by the Hon'ble APTEL in Appeal No. 278 of 2015 & Batch is annexed herewith and marked as **Annexure "AA"**.

Y. For that, in the present circumstances, taking aide of the above Clauses of the various National Policies, this Hon'ble Commission shall contribute into creating an enabling and conducive environment if the relief as sought for are granted in favour of the Petitioner. It shall also preserve and add to the legislative harmony envisioned between promotion of renewable sources of energy and creating an enabling environment which promotes harnessing of Captive Generation of power.

Z. For that, the pool of RECs is fast depleting on the Energy Exchange, whereof, in due course the captive users will not be in a position to procure any more RECs and hence will fail in fulfilling its RPO obligations.



AA. For that, in view of the aforementioned facts and circumstances, this Hon'ble Commission may be pleased to allow carry forward of RPO for FY 2021-22 within one year from the date of this Hon'ble Commission's order and also be pleased to pass appropriate orders in Petition No. 1781 of 2019 for FY 2017-18; Petition No. 1792 of 2019 for FY 2018-19 Petition No. 1892 for FY 2019-20 and Petition No. ~~2027~~ 2007 for FY 2020-21 which are pending adjudication before this Hon'ble Commission.

BB. For that, if the prayer(s) as prayed for is not granted by this Hon'ble Commission then the same shall cause the Petitioner irreparable loss, injury and travesty of justice.

CC. That, the present Petition is made *bona fide* and in the interest of justice.

DD. The Petitioner craves leave of this Hon'ble Commission to raise any other further points/ grounds at the time of hearing of the Petition or at any time thereafter with its permission.

PRAYER

14. In view of the detailed facts and submissions made hereinabove, the Petitioner most humbly prays that this Hon'ble Commission may graciously be pleased to:

a) The Hon'ble Commission be pleased to relax or waive the provision of GERC RPO regulation 2010 to give effect to and implement the Govt. of India, Ministry of Power circular dated 01.02.2019 and 01.10.2019 so as to ensure capping of the RPO for Captive Power Plants as per the Ministry of Power's clarification orders.



b) Pass appropriate orders/ directions under Provisos 5 and 6 of Regulation 9.1 of the Gujarat Electricity Regulatory Commission (Procurement of Energy from Renewable Sources) Regulations, 2010, amended from time to time, thereby permitting the Petitioner to carry forward its RPO liability for FY 2021-22; *within one year from the date which Hon. Commission decide.*

c) That this Hon'ble Commission be pleased to revise the RPO targets for the FY 2021-2022;

d) Pass appropriate directions/ orders under Regulations 4.1, 5.1 and 12 of the GERC RPO Regulations, 2010, thereby removing difficulties in permitting the Petitioner to fulfil its RPO liability through interchangeability, i.e., by allowing fulfilment of solar RPO through purchase of non-solar renewable energy/ RECs, and vice-versa; and

e) Pass any other and further order or orders as this Hon'ble Commission may most graciously deem fit and proper under the peculiar facts and circumstances of the present case and in the interest of justice.

For, Reliance Industries Ltd.

Date: 17.12.2022

Ashish B Shah
Authorised Signatory
DEPONENT

DECLARATION

The subject matter of the Petition has not been raised by the Petitioner before any other competent forum, and that no other competent forum is currently seized of the matter or has passed any orders in relation thereto.

Nisarg Desai

Place: Ahmedabad
Date: 17.12.2022

For Gandhi Law Associates
Advocates for Petitioner


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GOVT. OF INDIA
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BEFORE THE GUJARAT ELECTRICITY REGULATORY COMMISSION, GANDHINAGAR

PETITION NO. OF 2022

IN THE MATTER OF:

Reliance Industries Limited
Having its Office at
Ketan Contruction Limited
Sindhu Bhawan Marg,
Near Orion Ceremonial Lawns,
Bodakdev,
Ahmedabad - 380054 ... Petitioner

AFFIDAVIT VERIFYING THE PETITION

1. I, Ashish Shah, S/o Balchandra Shah, Adult, residing at Ahmedabad, do solemnly affirm and say as follows:

2. I am a Sr. General Manager of Reliance Industries Ltd., the Petitioner company herein and I have read the petition pertaining to the above case and I am competent and duly authorized by the Petitioner company to make this Affidavit.

Solemnly affirmed at Ahmedabad on 17th day of December, 2022, that the contents of the above affidavit are true to my knowledge, no part of it is false and nothing material has been concealed therefrom.

For, Reliance Industries Ltd.
Ashish B Shah
Authorised Signatory

Place: Ahmedabad

Date: 17.12.2022

SR. No. — 23748 /2022
SOLEMNLY AFFIRMED
BEFORE ME
KANAKSINH K. VAGHELA, NOTARY
DATE : 17/12/2022

DEPONENT

IDENTIFIED BY ME
ADVOCATE

Extra No. 273

REGISTERED No. G/GNR/2

©



The Gujarat Government Gazette

EXTRAORDINARY

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Separate paging is given to this Part in order that it may be filed as a Separate Compilation.

PART IV-C

Statutory Rules and Orders (Other than those published in Parts I, I-A and I-L) made by Statutory Authorities other than the Government of Gujarat including those made by the Government of India, the High Courts, the Director of Municipalities, the Commissioner of Police, the Director of Prohibition and Excise, the District Magistrates and the Election Commission, Election Tribunals, Returning Officers and other authorities under the Election Commission.

GUJARAT ELECTRICITY REGULATORY COMMISSION (GERC)

Procurement of Energy from Renewable Sources

Notification No. 3 of 2010

In exercise of the powers conferred under sections 61, 66, 86 (1)(e) and 181 of the Electricity Act 2003 (36 of 2003) and all powers enabling it in that behalf, Gujarat Electricity Regulatory Commission hereby makes the following Regulations for promoting the sale of power from renewable energy sources to any person and for procurement of energy from renewable sources by distribution licensee within the State of Gujarat.

1. Short Title, Extent and Commencement

i. These Regulations shall be called the Gujarat Electricity Regulatory Commission (Procurement of Energy from Renewable Sources) Regulations, 2010.

ii. These Regulations extend to the whole of the State of Gujarat.

iii. These Regulations, excluding clause 8 shall come into force on the date of their publication in the Gazette.

iv. Clause 8 of these Regulations shall come into force from a date to be notified by the Commission separately.

2. Definitions and Interpretation

2.1 In these Regulations, unless the context otherwise requires –

(a) 'Act' means the Electricity Act, 2003 (Act 36 of 2003);

(b) 'Area of Supply' means the area within which a distribution licensee is authorized to supply electricity;

(c) 'Central Agency' means the agency operating the National Load Dispatch Centre or such other agency as the Central Commission may designate from time to time;

(d) 'Central Commission' means the Central Electricity Regulatory Commission referred to in sub-section (1) of section 76 of the Act;

(e) 'Certificate' means the renewable energy certificate issued by the Central Agency in accordance with the procedures laid down by it and under the provisions specified in the Central Electricity Regulatory Commission (Terms and Conditions for recognition and issuance of Renewable Energy Certificate for Renewable Energy Generation) Regulations, 2010;

(f) 'Commission' means Gujarat Electricity Regulatory Commission;

(g) 'Distribution Licensee' means a licensee authorized to operate and maintain a distribution system for supplying electricity to the consumers in his area of supply;

(h) 'Floor price' means the minimum price as determined by the Central Electricity Regulatory Commission in accordance with its (Terms and Conditions for recognition and issuance of Renewable Energy Certificate for Renewable Energy Generation) Regulations, 2010 at and above which the certificate can be dealt in the power exchange;

(i) 'Forbearance price' means the ceiling price as determined by the Central Electricity Regulatory Commission in accordance with it's (Terms and Conditions for recognition and issuance of Renewable Energy Certificate for Renewable Energy Generation) Regulations,2010 within which only the certificates can be dealt in the power exchange;

(j) 'MNRE' means the Ministry of New and Renewable Energy;

(k) 'Obligated entity' means the entity mandated under clause (e) of subsection (1) of section 86 of the Act to fulfil the renewable purchase obligation and identified under clause 3 of these Regulations;

(l) 'Person' shall include any company or body corporate or association or body of individuals, whether incorporated or not, or artificial juridical person;

(m) 'Power Exchange' means any exchange operating as the power exchange for electricity in terms of the orders issued by the Central Commission;

(n) 'Preferential tariff' means the tariff fixed by the Commission for sale of energy from a generating station based on renewable energy sources to a distribution licensee;

(o) 'Quantum of purchase' means percentage share of total purchase of electricity from renewable energy sources as specified in these Regulations. The quantum would be the sum of all direct purchases from generating stations based on renewable energy sources and purchase from any other licensee, which would arise from renewable energy sources;

(p) 'Renewable energy sources' in this context means nonconventional, renewable electricity generating sources such as mini/ micro hydel, wind, solar, biomass and bagasse based cogeneration, urban/municipal waste, or such other sources, (which are generally inexhaustible and can be replenished in a short period of time) as approved by the Ministry of New and Renewable Energy, Government of India or by the State of Gujarat;

(q) 'State' means the state of Gujarat;

(r) 'State agency' means the agency in the State of Gujarat to be designated by the Commission to act as the agency for accreditation and recommending the renewable energy projects for registration and to undertake functions under these Regulations;

(s) 'Supply', in relation to electricity, means the sale of electricity to a licensee or consumer;

(t) 'Year' means a financial year.

Words and expressions used and not defined in these Regulations but defined in the Act shall have the meanings assigned to them in the Act. Expressions used herein but not specifically defined in these Regulations or in the Act but defined under any law passed by a competent legislature and applicable to the electricity industry in the state shall have the meaning assigned to them by such law. Expressions used herein but not specifically defined in the Regulations or in the Acts or any law passed by a competent legislature shall have the meaning as is generally assigned in the electricity industry.

2.2 Interpretation

For the interpretation of these Regulations, unless the context otherwise requires:

a. words in the singular or plural term, as the case may be, shall also be deemed to include the plural or the singular term, respectively;

b. the terms "include" or "including" shall be deemed to be followed by "without limitation" or "but not limited to" regardless of whether such terms are followed by such phrases or words of like import;

c. references herein to the "Regulations" shall be construed as a reference to these Regulations as amended or modified by the Commission from time to time in accordance with the applicable laws in force;

d. the headings are inserted for convenience and may not be taken into account for the purpose of interpretation of these Regulations;

e. references to the statutes, Regulations or guidelines shall be construed as including all statutory provisions consolidating, amending or replacing such statutes, Regulations or guidelines, as the case may be, referred to.

3. Applicability of Renewable Purchase Obligation

These Regulations shall apply to:

(1) Distribution licensee

(2) Any other person consuming electricity (i) generated from conventional Captive Generating Plant having capacity of 5 MW and above for his own use and / or (ii) procured from conventional generation through open access and third party sale.

4. Quantum of Renewable Purchase Obligation (RPO)

4.1 Each distribution licensee shall purchase electricity (in kWh) from renewable energy sources, at a defined minimum percentage of the total consumption of its consumers including T&D losses during a year.Similarly, Captive and Open Access user(s) / consumer(s) shall purchase electricity (in kWh) from renewable energy sources, at a defined minimum percentage of his/her total consumption during a year.

The defined minimum percentages are given below in the Table 1.

Table 1

Year	Minimum Quantum of purchase (in %) from renewable energy sources (in terms of energy in kWh)			
	Total	Wind	Solar	Biomass, bagasse and others
(1)	(2)	(3)	(4)	(5)
2010-11	5%	4.5%	0.25%	0.25%
2011-12	6%	5.0%	0.5%	0.5%
2012-13	7%	5.5%	1.0%	0.5%

If the above mentioned minimum quantum of power purchase from solar and other renewable energy sources is not available in a particular year, then in such cases, additional wind or other energy, over and above that shown in column 3 and 5, shall be utilized for fulfillment of the RPO in accordance with column 2.

Provided further that such obligation to purchase renewable energy shall be inclusive of the purchases, if any, from renewable energy sources already being made by the obligated entity concerned:

Provided also that the power purchases under the power purchase agreements for the purchase of renewable energy sources already entered into by the distribution licensees shall continue to be made till their present validity, even if the total purchases under such agreements exceed the percentage as specified hereinabove.

4.2 The Commission may, *suo-motu* or at the request of a licensee, revise the percentage targets for a year as per clause 4.1 of these Regulations keeping in view supply constraints or other factors beyond the control of the licensee.

4.3 For the FY 2009-10, the RPO specified for the years 2008-09, vide Commission's Notification No.15 of 2005 shall be applicable.

4.4 The RPO specified for the Financial Year 2012-13 shall be continued beyond 2012-13 till any revision is effected by the Commission in this regard.

5. Certificates under the Regulations of the Central Commission

5.1 Subject to the terms and conditions contained in these Regulations, the Certificates issued under the Central Electricity Regulatory Commission's (Terms and Conditions for recognition and issuance of Renewable Energy Certificate for Renewable Energy Generation) Regulations, 2010 shall be the valid instruments for the discharge of the mandatory obligations set out in these Regulations for the obligated entities to purchase electricity from renewable energy sources.

Provided that in the event of the obligated entity fulfilling the renewable purchase obligation by purchase of certificates, the obligation to purchase electricity from generation based on renewable energy other than solar can be fulfilled by purchase of non-solar certificates and the obligation to purchase electricity from generation based on solar as renewable energy source can be fulfilled by purchase of solar certificates only. If solar certificates are not available in a particular year, then in such cases, additional non-solar certificates shall be purchased for fulfillment of the RPO in accordance with Table 1.

5.2 Subject to such direction as the Commission may give from time to time, the obligated entity shall act consistent with the Central Electricity Regulatory Commission's (Terms and Conditions for recognition and issuance of Renewable Energy Certificate for Renewable Energy Generation) Regulations, 2010 notified by the Central Electricity Regulatory Commission with regards to the procurement of the certificates for fulfillment of the Renewable Purchase Obligation under these Regulations.

5.3 The Certificates purchased by the obligated entities from the power exchange in terms of the regulation of the Central Commission mentioned in clause 5.1 of these Regulations shall be deposited by the obligated entities with the Commission within 15 days of the purchase.

6. State Agency

a) The Commission shall designate an agency as the State Agency for accreditation and recommending the renewable energy projects for registration and to undertake functions under these Regulations.

b) The State Agency shall function in accordance with the directions issued by the Commission and shall act in accordance with the provisions of the Central Electricity Regulatory Commission (Terms and Conditions for recognition and issuance of Renewable Energy Certificate for Renewable Energy Generation) Regulations, 2010.

c) The State Agency shall submit quarterly status to the Commission in respect of compliance of renewable purchase obligation by the obligated entities in the format as stipulated by the Commission and may suggest appropriate action to the Commission, if required, for compliance of the renewable purchase obligation.

d) The Commission may from time to time fix the remuneration and charges payable to the State Agency for discharge of its functions under these Regulations.

7. Distribution Licensee

7.1 Each distribution licensee shall indicate, along with sufficient proof thereof, the estimated quantum of purchase from renewable energy sources for the ensuing year in tariff/ annual performance review petition in accordance with Regulations notified by the Commission. The estimated quantum of purchase shall be in accordance with clause 4.1 of these Regulations of the approved power purchase quantity for the ensuing year(s). In the event of the actual consumption in the license area being different from that approved by the Commission, the RPO shall be deemed to have been modified in

accordance with clause 4.1. If the distribution licensee is unable to fulfil the obligation, the shortfall of the specified quantum of that year would be added to the specified quantum for the next year. However, credit for excess purchase from renewable energy sources would not be adjusted in the ensuing year.

7.2 Despite availability of renewable energy sources, if the distribution licensee fails to fulfil the minimum quantum of purchase from renewable energy sources, it shall be liable to pay compensation as per clause 9 of these Regulations.

8. Captive and Open Access User(s)/ Consumer(s)

8.1 The quantum of RPO mentioned in clause 4.1 shall be applicable to captive and open access user(s)/ consumer(s) from the date as would be notified in the Official Gazette.

8.2 Every Captive and Open access consumer(s)/ user(s) shall have to submit necessary details regarding total consumption of electricity and purchase of energy from renewable sources for fulfillment of RPO on yearly basis on or before 30th April to the State Agency.

8.3 Captive and Open Access Consumer(s)/ User(s) shall purchase renewable energy as stated in Table 1 of these Regulations. If the Captive user(s) and Open Access consumer(s) are unable to fulfil the criteria, the shortfall of the targeted quantum would attract payment of regulatory charge as per clause 9.

8.4 Captive/ Open Access consumer(s)/ User(s) may fulfil its RPO through the renewable energy certificate as provided in clause 5 above.

9. Consequences of default

9.1 If an obligated entity does not fulfil the renewable purchase obligation as provided in these Regulations during any year and also does not purchase the certificates, the Commission may direct the obligated entity to deposit into a separate fund, to be created and maintained by such obligated entity, such amount as the Commission may determine on the basis of the shortfall in units of RPO and the forbearance price decided by the Central Commission:

Provided that the fund so created shall be utilised, as may be directed by the Commission, partly for purchase of the certificates and partly for development of transmission infrastructure for evacuation of power from generating stations based on renewable energy sources.

Provided that the obligated entities shall not be authorized to use the fund created in pursuance of the above, without prior approval of the Commission:

Provided further that the Commission may empower an officer of the State Agency to procure from the Power Exchange the required number of certificates to the extent of the shortfall in the fulfillment of the obligations, out of the amount in the fund:

Provided also that the distribution licensee shall be in breach of its license condition if it fails to deposit the amount directed by the Commission within 15 days of the communication of the direction.

Provided that in case of any genuine difficulty in complying with the renewable purchase obligation because of non-availability of power from renewable energy sources or the RECs, the obligated entity can approach the Commission to carry forward the compliance requirement to the next year:

Provided further that where the Commission has consented to carry forward of compliance requirement, the provision regarding payment of regulatory charges as specified above shall not be applicable.

10. Grid Connectivity

10.1 Any person generating electricity from renewable energy sources, irrespective of installed capacity, shall have open access to any Licensee's transmission system and/or distribution system or grid as the case may be. On an application from such person, the transmission licensee or distribution licensee shall provide appropriate interconnection facilities, as far as feasible, before Commercial Operation Date of the renewable energy project. Such interconnection shall follow the grid connectivity Standards as specified in the Indian Standard Grid Code, State Grid Code and/or the manner prescribed by the Central Electricity Authority.

The STU/SLDC/Licensee shall make best efforts to strengthen the system to provide timely open access to transmit power from renewable energy sources.

11. Cross-Subsidy

Third Party Sale from renewable energy sources shall be exempted from the cross-subsidy surcharge determined by the Commission from time to time. However, no banking facility shall be provided for supply (third party sale) from renewable energy sources through open access. Further, ABT compatible interface metering system capable of energy accounting for each block of 15 minutes shall be provided at both supply as well and drawal point.

For third party sale, energy generation from renewable energy sources in each 15 minute time block shall be set off against the captive/ open access user(s) consumption in the same 15 minute time block.

12. Power to remove difficulties

12.1 The Commission shall *suo motu* or on an application from any person generating electricity from renewable energy sources or a distribution licensee or captive user or open access consumer may review, add, amend or alter these Regulations and pass appropriate orders to remove any difficulty in exercising the provisions of these Regulations.

13. Repeal

13.1 The previous Regulation No.15 of 2005 dt. 29th October, 2005 is hereby repealed.

Sd/-
SANJAY NANDAN AGRAWAL
SECRETARY
Gujarat Electricity Regulatory Commission.

Place : Ahmedabad
Date : 17 April, 2010.

ગુજરાત વિદ્યુત નિયંત્રક આયોગ

નવીનીકરણપાત્ર સાધનોમાંથી વીજળીની પ્રાપ્તિ ૨૦૧૦ના જાહેરનામા નં. ૩/૨૦૧૦

૨૦૦૩ ના વીજળી અધિનિયમ ૨૦૦૩નો અધિનિયમ ૩૬) ની કલમ ૬૧, ૬૬, ૮૬, (૧) (ઈ) અને ૧૮૧ અન્વયે મળેલી સત્તાઓ અને તે અંગે તેને શકિતમાન બતાવતી તમામ સત્તાઓની રૂએ ગુજરાત વિદ્યુત નિયંત્રક આયોગ, નવીનકરણપાત્ર વીજળી સાધનોમાંથી પ્રાપ્ત વીજળીનું કોઈપણ વ્યકિત વેચાણ કરવા પ્રોત્સાહન આપવા અને ગુજરાત રાજ્યની અંદર વિતરણ પરવાનેદાર દ્વારા નવીનકરણપાત્ર સાધનોમાંથી વીજળી પ્રાપ્ત કરવા અંગેના નીચેના વિનિયમો અહીં કરે છે.

૧. ટૂંકું શીર્ષક, વ્યાપ અને પ્રારંભ :

(૧) આ વિનિયમો ગુજરાત વિદ્યુત નિયંત્રક આયોગ (નવીનકરણપાત્ર) સાધનોમાંથી વીજળી પ્રાપ્તિ), વિનિયમો ૨૦૧૦ કહેવાશે.

(૨) આ વિનિયમો સમગ્ર ગુજરાત રાજ્ય સુધી વ્યાપ્ત છે.

(૩) આ વિનિયમો ખંડ ૩ ને બાદ કરતાં રાજપત્રમાં તેથી પ્રસિધ્ધ થાય તે તારીખથી અમલમાં આવશે.

(૪) આ વિનિયમોનો ખંડ-૮ આયોગ અલગ રીતે જાહેર કરે તે તારીખથી અમલમાં આવશે.

૨. વ્યાખ્યા અને અર્થઘટન :

૨.૧ આ વિનિયમોમાં સંદર્ભથી અન્યથા જરૂરી હોય તે સિવાય : -

(ક) "અધિનિયમ" એટલે ૨૦૦૩ નો વીજળી અધિનિયમ (૨૦૦૩ નો ૩૬ મો અધિનિયમ)

(ખ) "પુરવઠા વિસ્તાર" એટલે વિતરણ પરવાનેદાર જ્યાં વીજળી પૂરી પાડવા અધિકૃત હોય તે વિસ્તાર

(ગ) "કેન્દ્રીય સંસ્થા" એટલે રાષ્ટ્રીય વીજભાર રવાનગી કેન્દ્રનું સંચાલન કરતી સંસ્થા અથવા કેન્દ્રીય આયોગ વખતોવખત નિર્દિષ્ટ કરે તેવી અન્ય સંસ્થા.

(ધ) ''કેન્દ્રિય આયોગ'' એટલે અધિનિયમની કલમ-૭૬ની પેટા કલમ (૧) માં ઉલ્લેખ કરેલ કેન્દ્રીય વીજળી નિયંત્રણ આયોગ

(ચ) ''પ્રમાણપત્ર'' એટલે કેન્દ્રીય સંસ્થા દ્વારા ઠરાવેલ કાર્યપધ્ધતિ અનુસાર અને કેન્દ્રીય વીજળી નિયંત્રણ આયોગ (નવીકરણપાત્ર વીજળી ઉત્પાદન માટે નવીકરણપાત્ર વીજળી પ્રમાણપત્ર માન્ય કરીને આપવા અંગેની શરતો) વિનિયમો, ૨૦૧૦ માં નિર્દિષ્ટ જોગવાઈઓ અન્વયે સંસ્થાએ આપેલ નવીકરણપાત્ર વીજળી પ્રમાણ પત્ર

(છ) ''આયોગ'' એટલે ગુજરાત વિદ્યુત નિયંત્રક આયોગ

(જ) ''વિતરણ પરવાનેદાર'' એટલે તેના પુરવઠાના વિસ્તારમાં ગ્રાહકોને વીજળી પૂરી પાડવાની વિતરણ વ્યવસ્થાના સંચાલન અને જાળવણી કરવા અધિકૃત પરવાનેદાર

(ઝ) ''તળિયાના ભાવ'' એટલે કેન્દ્રીય વીજળી નિયંત્રણ આયોગ દ્વારા તેના (નવીકરણપાત્ર વીજળી ઉત્પાદન માટે નવીકરણપાત્ર વીજળી પ્રમાણપત્ર વીજળી ઉત્પાદન માટે નવીકરણપાત્ર વીજળી પ્રમાણપત્રની માન્યતાને તે આપવા અંગેની શરતો) ૨૦૧૦ના વિનિયમો અનુસાર નક્કી કરાવેલ ન્યૂનતમ ભાવ, જે અન્વયે પ્રમાણપત્ર વીજળી વિનિયમોમાં હાથ ધરી શકાશે.

(છ) ''ફોરબેરન્સ પ્રાઇઝ'' એટલે કેન્દ્રીય વીજળી નિયંત્રણ આયોગ, તેના ૨૦૧૦ના વિનિયમો અનુસાર (નવીકરણપાત્ર વીજળી ઉત્પાદન માટે નવીકરણપાત્ર વીજળી પ્રમાણપત્રથી માન્યતા અને તે આપવા અંગેની શરતો) જે અન્વયે વીજળી વિનિયમો અનુસાર નક્કી કરવામાં આવે તે ટોચના ભાવ. જે અંતર્ગત માત્ર પ્રમાણપત્રો વીજળી વિનિયમ અંગે હાથ ધરી શકાશે.

(ઠ) MNRE એટલે નવીન અને નવીકરણપાત્ર ઉર્જા મંત્રાલય

(ડ) ''જવાબદાર હસ્તિ'' એટલે અધિનિયમની કલમ-૮૬ની પેટા કલમ(૧) ના ખંડ (ઇ) અન્વયે નવીકરણપાત્ર વીજળી ખરીદીની જવાબદારી પરિપૂર્ણ કરવા આદેશ અપાયેલ અને આ વિનિયમોના ખંડ-૩ અન્વયે મુકરર કરેલ હસ્તિ

(ઢ) ''વ્યકિત'' માં સંસ્થાપિત હોય ન હોય, તેવી કોઇપણ કંપની, કોર્પોરેટ સંસ્થા કે એસોસીએશન કે વ્યકિતઓની સંસ્થા અથવા કૃત્રિમ અદાવતી વ્યકિત

(ણ) ''વીજળી વિનિયમ'' એટલે કેન્દ્રીય આયોગે ઇશ્યૂ કરેલા આદેશોના સંદર્ભમાં વીજળી માટે વીજળી વિનિયમ તરીકે સંચાલિત કોઇપણ વિનિયમ (એક્સચેન્જ),

(ત) ''અગ્રાધિકાર પ્રશુલ્ક'' એટલે નવીકરણપાત્ર વીજળી પર આધારિત વીજ મથકમાંથી વીજળીનું વિતરણ પરવાનેદારો વેચાણ કરવા આયોગે નક્કી કરેલ પ્રશુલ્ક.

(થ) ''ખરીદીનો જથ્થો'' એટલે આ વિનિયમોમાં નિર્દિષ્ટ કર્યા પ્રમાણે નવીકરણપાત્ર વીજળી સાધનોમાંથી વીજળીની કુલ ખરીદીનો ટકાવારી હિસ્સો જથ્થો એટલે નવીકરણપાત્ર વીજળી સાધનો પર આધારિત વીજ-મથકોમાંથી તમામ સીધી ખરીદી અને નવીકરણપાત્ર વીજળી સાધનોમાંથી ઉત્પન્ન અન્ય કોઇપણ પરવાનેદાર પાસેથી કરેલી ખરીદીનો સરવાળો થશે.

(દ) આ સંદર્ભમાં '' નવીકરણપાત્ર વીજળી સાધનો'' એટલે બિનપરંપરાગત, નવીકરણપાત્ર વીજળી ઉત્પાદન સાધનો, જેમકે મીની માઇક્રો હાઇડલ, પવન, સૌર્ય, બાયોમાસ અને બાયોગેસ આધારિત સહ-ઉત્પાદન, શહેરી/મ્યુનિસિપલ કચરો અથવા આ બીજાં સાધનો (જે સામાન્ય રીતે) જે વપરાઇ જતાં નથી અને ટૂંકા સમયમાં ફરીથી ભરાઇ જાય છે તેવાં નવીન અને નવીકરણપાત્ર ઉર્જા મંત્રાલય, ભારત સરકાર અથવા ગુજરાત રાજ્ય દ્વારા મંજૂર કર્યા મુજબનાં સાધનો :

(ધ) ''રાજ્ય'' એટલે ગુજરાત રાજ્ય

(ન) ''રાજ્ય સંસ્થા'' એટલે નવીકરણપાત્ર વીજળી પરિયોજનાઓમાંથી નોંધણી માટે માન્યતા આપવા અને ભલામણ કરવા અને વિનિયમો હેઠળ કાર્યો હાથ ધરવાં સંસ્થા તરીકે કામ કરવા આયોગ દ્વારા નામ નિર્દિષ્ટ ગુજરાત રાજ્યની સંસ્થા,

(પ) વીજળીના સંબંધમાં ''પુરવઠા'' એટલે પરવાનેદાર કે ગ્રાહકને વીજળીનું વેચાણ

(ફ) ''વર્ષ'' એટલે નાણાંકીય વર્ષ.

આ વિનિયમોમાં વપરાયેલ અને વ્યાખ્યા ન અપાયેલ, પરંતુ અધિનિયમમાં વ્યાખ્યા અપાયેલ શબ્દો અને શબ્દપ્રયોગોને અર્થ અધિનિયમોમાં તેને માટે નિર્દિષ્ટ કરાયેલ અર્થ રહેશે. અહીં વપરાયેલ પરંતુ વિનિયમો કે અધિનિયમોમાં વ્યાખ્યાની ન અપાયેલ પરંતુ સક્ષમ વિધાનસત્તા દ્વારા પસાર કરાયેલ કોઇપણ કાયદા હેઠળ વ્યાખ્યા કરાયેલ અને રાજ્યમાં વીજળી ઉદ્યોગને લાગુ પડતા શબ્દપ્રયોગોનો અર્થ આવા કાયદામાં નિર્દિષ્ટ કરાયા મુજબનો અર્થ રહેશે. અહીં વપરાયેલ પરંતુ

વિનિયમો કે અધિનિયમો કે સક્ષમ વિધાનસભાએ પસાર કરેલ કાયદામાં ખાસ વ્યાખ્યા ન અપાઇ હોય તેવા શબ્દપ્રયોગોનો અર્થ, વીજળી ઉદ્યોગના સામાન્ય તથા નિર્દિષ્ટ હોય તે મુજબનો રહેશે.

૨.૨ **અર્થઘટન :**

સંદર્ભથી અન્યથા જરૂરી હોય તે સિવાય આ વિનિયમોનું અર્થઘટન નીચે પ્રમાણે થશે.

ક યથાપ્રસંગ એકવચન કે બહુવચન શબ્દોમાં, અનુક્રમે બહુવચન કે એકવચન શબ્દોનો સમાવેશ થતો હોવાનું ગણવામાં આવશે.

ખ ''સમાવિષ્ટ'' અથવા ''સહિત'' શબ્દો, આવા શબ્દો પછી આયાત જેવા શબ્દો કે વાક્યાંશો આવે કે કેમ તે લક્ષમાં લીધા વિના ''મર્યાદા રહિત'' અથવા ''તેટલા પૂરતું મર્યાદિત નથી'' એમ આવતા હોવાનું ગણવામાં આવશે.

ગ ''વિનિયમો'' ને લગતા અહીં આપેલા સંદર્ભોના અર્થ, અમલમાં હોય તે કાયદા અનુસાર આયોગ દ્વારા વખતોવખત ફેરફાર કે સુધારો કરાય તે પ્રમાણે આ વિનિયમોને લગતા સંદર્ભ તરીકે કરવામાં આવશે.

ઘ શીર્ષકો અનુકૂળતા માટે આપ્યા છે અને તેને આ વિનિયમોના અર્થઘટનના હેતુ માટે વિચારણામાં લઇ શકાશે નહીં.

ચ કાનૂનો, વિનિયમો કે માર્ગદર્શક સૂચનાઓને લગતા સંદર્ભો, યથાપ્રસંગ આવા કાનૂનો, વિનિયમો કે માર્ગદર્શક સૂચનાઓને એકત્રિત કરતી, સુધારણા કરતી કે ફેરબદલી કરવી વૈધાનિક જોગવાઇઓનો સમાવેશ કરતા હોવાનું ગણાશે.

૩. **નવીકરણપાત્ર ખરીદી જવાબદારીની પ્રયોજ્યતા :**

આ વિનિયમો લાગુ પડશે.

(૧) વિતરણ પરવાનેદાર

(૨) (૧) ૫ મે.વો. અને તેથી વધુ ક્ષમતા ધરાવતા પરંપરાગત કેપ્ટિવ વીજ ઉત્પાદન પ્લાન્ટમાંથી તેના પોતાના ઉપયોગ માટે ઉત્પાદિત અને/અથવા (૨) ખુલ્લા પ્રવેશથી અને ત્રીજા પક્ષકારના વેચાણ મારફત પરંપરાગત વીજ ઉત્પાદનમાંથી મેળવેલ વીજળીનો વપરાશ કરનાર બીજી કોઇપણ વ્યકિત

૪. **નવીકરણપાત્ર વીજળી ખરીદીના જથ્થાની જવાબદારી :**

૪.૧ દરેક વિતરણ પરવાનેદાર, વર્ષ દરમ્યાન પ્રવાહન અને વિતરણ ઘટ સહિત તેના વપરાશકારોના કુલ વપરાશથી નિયત ન્યૂનતમ ટકાવારીએ, નવીકરણપાત્ર ઉર્જા સાધનોમાંથી વીજળી (કિ. વો. કલાકમાં) ની ખરીદી કરશે.

તે જ પ્રમાણે, કેપ્ટિવ અને ખુલ્લા પ્રવેશના વપરાશકર્તા(ઓ)/ગ્રાહકો વર્ષ દરમ્યાન તેની/તેણીની નિયત ન્યૂનતમ ટકાવારીએ નવીકરણપાત્ર ઉર્જા સાધનોમાંથી વીજળીની (કિ. વો. કલાકમાં) ખરીદી કરશે.

નિયત ન્યૂનતમ ટકાવારી કોઠા -૧ માં નીચે દર્શાવી છે.

કોઠો-૧

વર્ષ	નવીકરણપાત્ર ઉર્જા સાધનોમાંથી ખરીદીને (૦ % માં) ન્યૂનતમ જથ્થો (કિ. વો. કલાકમાં) વીજળીના સંદર્ભમાં			
	કુલ	પવન	સૌર્ય	બાયોમાસ, બાયોગેસ અને અન્ય
૧.	૨.	૩.	૪.	૫.
૨૦૧૦-૧૧	૫ %	૪.૫ %	૦.૨૫ %	૦.૨૫ %
૨૦૧૧-૧૨	૬ %	૫.૦ %	૦.૫ %	૦.૫ %
૨૦૧૨-૧૩	૭ %	૫.૫ %	૧.૦ %	૦.૫ %

ચોક્કસ વર્ષમાં સૌર્ય અને અન્ય નવીકરણપાત્ર ઉર્જા સાધનોમાંથી ખરીદીનો ઉપર્યુકત ન્યૂનતમ જથ્થો ન મળી શકે તો પછી આવા કેસોમાં ખાના ૩ અને ૫ માં દર્શાવ્યા ઉપરાંત વધારાની પવન કે અન્ય ઉર્જાનો ખાના-૨ અનુસાર નવીકરણપાત્ર ખરીદીની જવાબદારી પરિપૂર્ણ કરવા ઉપયોગમાં લેવાશે.

પરંતુ આવી નવીકરણપાત્ર વીજળી ખરીદવાની જવાબદારીમાં સંબંધિત જવાબદારીવાળી હસ્તિ દ્વારા નવીકરણપાત્ર વીજળી સાધનોમાંથી કોઇ ખરીદી કરાય તો તેનો સમાવેશ થશે.

પરંતુ, વિતરણ પરવાનેદારોએ, નવીનીકરણપાત્ર વીજળી સાધનોથી ખરીદી માટે કરેલ વીજ ખરીદી સમજૂતિઓ અન્વયે વીજળીની ખરીદી, તેની વર્તમાન કાયદેસરતા રહે ત્યાં સુધી, આવી સમજૂતિઓ હેઠળની કુલ ખરીદી અહીં ઉપર નિર્દિષ્ટ કર્યા મુજબની ટકાવારી કરતાં વધી જાય તો પણ ચાલુ રહેશે.

૪.૨ આયોગ પરવાનેદારની વિનંતીથી આયોગ, સ્વયં, પુરવઠા અવરોધો તથા પરવાનેદારના કાબૂ બહારના અન્ય પરિબળો ધ્યાનમાં રાખીને આ વિનિયમોના ખંડ ૪.૧ અનુસાર વર્ષ માટે ટકાવારીના લક્ષ્યાંકમાં ફેરફાર કરી શકશે.

૪.૩ ૨૦૦૯-૧૦ ના નાણાકીય વર્ષ માટે આયોગના ૨૦૦૫ના જાહેરનામા નં. ૧૫ અન્વયે ૨૦૦૮-૦૯ ના વર્ષ માટે નિર્દિષ્ટ RPO લાગુ પડશે.

૪.૪ ૨૦૧૨-૧૩ના નાણાકીય વર્ષ માટે નિર્દિષ્ટ નવીકરણપાત્ર વીજ-ખરીદી જવાબદારી, આ અંગે આયોગ દ્વારા કોઇ ફેરફાર અમલમાં ન મૂકાય ત્યાં સુધી ૨૦૧૨-૧૩ પછી પણ ચાલુ રહેશે.

૫. કેન્દ્રીય આયોગ વિનિયમો અન્વયે પ્રમાણપત્ર :

૫.૧ આ વિનિયમોમાં સમાવિષ્ટ શરતોને અધીન રહીને, કેન્દ્રીય વીજળી નિયંત્રણ આયોગના (નવીકરણપાત્ર વીજળી ઉત્પાદન માટે નવીકરણપાત્ર વીજળી પ્રમાણપત્રની માન્યતા અને તે આપવા અંગેની શરતો) વિનિયમો ૨૦૧૦, નવીકરણપાત્ર વીજળી સાધનોમાંથી વીજળી ખરીદવાની જવાબદાર હસ્તિઓ માટે આ વિનિયમોમાં ઠરાવેલ આદેશાત્મક જવાબદારીઓ બજાવતા, કાયદેસર દસ્તાવેજ તરીકે ગણાશે.

પરંતુ જવાબદારી ધરાવનાર હસ્તિઓ પ્રમાણપત્રોથી ખરીદી દ્વારા નવીકરણપાત્ર ખરીદીની જવાબદારી પરિપૂર્ણ કરે તેવા કેસમાં, સૌર સિવાય અન્ય નવીકરણપાત્ર વીજળી પર આધારિત ઉત્પાદનમાંથી વીજળી ખરીદવાની જવાબદારી, બિન-સૌર, પ્રમાણપત્રમાંથી ખરીદી દ્વારા પરિપૂર્ણ કરી શકાશે અને નવીકરણપાત્ર વીજળી સાધન તરીકે સૌર પર આધારિત ઉત્પાદનમાંથી વીજળીની ખરીદી માત્ર સૌર પ્રમાણપત્ર ખરીદીને જ પરિપૂર્ણ કરી શકાશે. ચોક્કસ વર્ષમાં સૌર પ્રમાણપત્રો ઉપલબ્ધ ન હોય તો આવા કેસોમાં, કોઠાના-૧ અનુસાર RPO ની પરિપૂર્ણતા માટે વધારાના બિન-સૌર પ્રમાણપત્રો ખરીદવામાં આવશે.

૫.૨ આયોગ વખતોવખત આપે તેવા આદેશોને અધીન રહીને, જવાબદારીવાળી હસ્તિ, આ વિનિયમો અન્વયે નવીકરણપાત્ર ખરીદી જવાબદારી પરિપૂર્ણ કરવા પ્રમાણપત્રોની પ્રાપ્તિ કેન્દ્રીય વીજળી નિયંત્રણ આયોગ દ્વારા જાહેર કરાયેલ કેન્દ્રીય વીજળી નિયંત્રણ આયોગના (નવીકરણપાત્ર વીજળી ઉત્પાદન માટે નવીકરણપાત્ર વીજળી પ્રમાણપત્રની માન્યતા અને તે આપવા અંગેની શરતો) વિનિયમો, ૨૦૧૦ સાથે સુસંગત રહીને કામ કરશે.

૫.૩ આ વિનિયમોના ખંડ ૫.૧ માં દર્શાવેલ કેન્દ્રિય આયોગના વિનિયમના સંદર્ભમાં જવાબદારીવાળી હસ્તિઓએ પાવર એક્ષ્ચેન્જમાંથી ખરીદેલ પ્રમાણપત્રો, જવાબદારીવાળી હસ્તિઓ ખરીદીના ૧૫ દિવસની અંદર આયોગ પાસે અનામત મૂકશે.

૬. રાજ્ય સંસ્થા :

(ક) નવીકરણપાત્ર વીજળી પરિયોજનાઓની માન્યતા અને તેની ભલામણ કરવા અને આ વિનિયમો હેઠળ કાર્યો હાથ ધરવાં આયોગ રાજ્ય સંસ્થા તરીકે એક સંસ્થા નામ નિર્દિષ્ટ કરશે.

(ખ) રાજ્ય સંસ્થા, આયોગે આપેલા આદેશો અનુસાર કામ કરશે અને કેન્દ્રીય વીજળી નિયંત્રણ આયોગ (નવીકરણપાત્ર વીજળી ઉત્પાદન માટે નવીકરણપાત્ર વીજળી પ્રમાણપત્રની માન્યતાઓ તે આપવા અંગેની શરતો) વિનિયમો, ૨૦૧૦ ની જોગવાઇઓ અનુસાર કામ કરશે.

(ગ) રાજ્ય સંસ્થા, આયોગને, તેણે નિયત કરેલા ઢાંચામાં જવાબદારીવાળી હસ્તિ દ્વારા નવીકરણપાત્ર ખરીદી જવાબદારીના પાલન અંગેની સ્થિતિ દર ત્રણ મહિને રજૂ કરશે તથા નવીકરણપાત્ર ખરીદી જવાબદારીના પાલન માટે જરૂરી જણાય તો આયોગને યોગ્ય પગલાં સૂચવશે.

(૬) આયોગ, આ વિનિયમો અન્વયે રાજ્ય સંસ્થાએ બજાવવાનાં કાર્યો માટે તેને ચૂકવવાપાત્ર વળતર અને ચાર્જ વખતો-વખત નક્કી કરશે.

૭. વિતરણ પરવાનેદાર : -

૭.૧ દરેક વિતરણ પરવાનેદાર, આયોગ જાહેર કરેલ વિનિયમો અનુસાર આગામી વર્ષ માટે, પ્રશુલ્ક/વાર્ષિક કામગીરી સમીક્ષા પીટિશનમાં નવીકરણપાત્ર વીજળી સાધનોમાંથી ખરીદીનો અંદાજ જથ્થો, તેની પૂરતી સાબિતી સાથે દર્શાવશે. ખરીદીનો અંદાજીત જથ્થો, આગામી વર્ષ (વર્ષો) માટે મંજૂર કરેલ વીજળી ખરીદી જથ્થાના આ વિનિયમોના ખંડ ૪.૧ અનુસાર રહેશે. લાઇસન્સના વિસ્તારમાં ખરેખરો વપરાશ, આયોગે મંજૂર કર્યો હોય તે કરતાં જુદો હોય તેવા પ્રસંગે, ખંડ ૪.૧ અનુસાર નવીકરણપાત્ર ખરીદી જવાબદારીમાં ફેરફાર કર્યો હોવાનું ગણવામાં આવશે. વિતરણ પરવાનેદાર જવાબદારી પરિપૂર્ણ કરી શકે તેમ ન હોય તો, તે વર્ષના નિર્દિષ્ટ જથ્થાની ઘટ, આગામી વર્ષના નિર્દિષ્ટ જથ્થામાં ઉમેરવામાં આવશે. આમ છતાં નવીકરણપાત્ર વીજળી સાધનોમાંથી અતિશય ખરીદીની જમા-નોંધ આગામી વર્ષમાં સમાયોજિત કરાશે નહીં.

૭.૨ નવીકરણપાત્ર વીજળી સાધનોની પ્રાપ્યતા છતાં, વિતરણ પરવાનેદાર નવીકરણપાત્ર વીજળી સાધનોમાંથી ન્યૂનતમ જથ્થાની ખરીદી પરિપૂર્ણ કરવામાં નિષ્ફળ જાય તો તે આ વિનિયમોના ખંડ-૧ અનુસાર વળતર ચૂકવવા જવાબદાર બનશે.

૮. કેપ્ટિવ અને ખુલ્લા પ્રવેશના વપરાશકર્તા(ઓ)/ ગ્રાહક (ગ્રાહકો) : -

૮.૧ ખંડ ૪.૧ માં દર્શાવેલ RPO નો જથ્થો, સરકારી રાજ્યપત્રમાં જાહેર કરાય તે તારીખથી કેપ્ટિવ અને ખુલ્લા પ્રવેશના વપરાશકર્તા(ઓ)/ગ્રાહકો(કો) ને લાગુ પડશે.

૮.૨ દરેક કેપ્ટિવ અને ખુલ્લા પ્રવેશના ગ્રાહક(કો)/ વપરાશકર્તા(ઓ) અને, રાજ્ય સંસ્થાને ૩૦મી એપ્રિલ કે તે પહેલાં વાર્ષિક ધોરણે, RPO ની પરિપૂર્ણતા માટે નવીકરણપાત્ર સાધનોમાંથી વીજળીની ખરીદી અને વીજળીના કુલ વપરાશની કુલ વપરાશની જરૂરી વિગતો રજૂ કરવાની રહેશે.

૮.૩ કેપ્ટિવ અને ખુલ્લા પ્રવેશના વપરાશકર્તા(ઓ)/ગ્રાહક(ઓ), આ વિનિયમોના કોઠા-૧માં દર્શાવ્યા પ્રમાણે નવીકરણપાત્ર વીજળીની ખરીદી કરશે. કેપ્ટિવ વપરાશકર્તા(ઓ) અને ખુલ્લા પ્રવેશના ગ્રાહક(કો) માપદંડ પરિપૂર્ણ ન કરી શકે તો, લક્ષ્યાંકિત જથ્થાની ઘટ માટે ખંડ-૧ અનુસાર નિયંત્રક ચાર્જની ચુકવણી કરવાની રહેશે.

૮.૪ કેપ્ટિવ / ખુલ્લા પ્રવેશના વપરાશકર્તા(ઓ)/ગ્રાહક(કો) ઉપરના ખંડ-૬ માં જોગવાઈ કર્યા પ્રમાણે નવીકરણપાત્ર વીજળી પ્રમાણપત્ર મારફત તેના RPO પરિપૂર્ણ કરી શકશે.

૯. કસૂરનાં પરિણામો :-

૯.૧ જવાબદાર હસ્તિ કોઈપણ વર્ષ દરમ્યાન જોગવાઈ કર્યા પ્રમાણે નવીકરણપાત્ર ખરીદી જવાબદારી પરિપૂર્ણ ન કરે અને પ્રમાણપત્રો ન ખરીદે તો આયોગ જવાબદાર હસ્તિને ફરમાવી શકે કે તેણે ઉભા કરવાના જાળવવાના અલગ ફંડમાં, આયોગ RPO ના એકમોનાં ઘટને આધારે નક્કી કરે તેટલી રકમ અને કેન્દ્રીય આયોગ દ્વારા નક્કી કરાયેલ ફોરબેરેન્સ રકમ અનામત મૂકે.

પરંતુ આ રીતે ઉભા કરેલ ફંડનો ઉપયોગ, આંશિક પ્રમાણપત્રો ખરીદવા અને આંશિક નવીકરણપાત્ર વીજળી સાધનો પર આધારિત વીજ ઉત્પાદન મથકોમાંથી વીજળી ખાલી કરવા પ્રવાહન પૂર્વજરૂરી માળખું વિકસાવવા આયોગ ફરમાશે જે મુજબ કરશે.

પરંતુ જવાબદાર હસ્તિ, આયોગની પૂર્વમંજૂરી વિના ઉપરના અનુસંધાનમાં ઉભા કરેલ ફંડનો ઉપયોગ કરવાની સત્તા રહેશે નહીં.

પરંતુ આયોગ, ફંડની રકમમાંથી જવાબદારીને પરિપૂર્ણ કરવામાં પડેલી ઘટના પ્રમાણમાં પાવર એક્ષચેન્જમાંથી જોઈતી સંખ્યાનાં પ્રમાણપત્રો મેળવતા રાજ્ય સંસ્થાના અધિકારીને સત્તા આપી શકે.

પરંતુ વિતરણ પરવાનેદાર, આદેશ આપ્યાના ૧૫ દિવસની અંદર આયોગ ફરમાવેલ રકમ અનામત મૂકવામાં નિષ્ફળ જાય તો તે લાઈસન્સની શરતનો ભંગ ગણાશે.

પરંતુ નવીકરણપાત્ર વીજળી સાધનો કે REC પાસેથી વીજળી ન મળવાને કારણે નવીકરણપાત્ર ખરીદી જવાબદારીનું પાલન કરવાના કોઈ સાચી મુશ્કેલી હોય તો, જવાબદાર હસ્તિ, બીજા વર્ષની પાલન જવાબદારી આગળ ખેંચવા આયોગનો સંપર્ક કરી શકશે.

પંરતુ વધુમાં, આયોગ પાલનની આવશ્યકતા આગળ ખેંચવાની સંમતિ આપી હોય ત્યાં ઉપર નિર્દિષ્ટ કરેલ નિયંત્રક ચાર્જની ચુકવણી અંગેની જવાબદારી લાગુ પડશે નહીં.

૧૦. ગ્રિડ જોડાણ :

૧૦.૧ સ્થાપિત શક્તિને લક્ષમાં લીધા વિના કોઈ વ્યક્તિ નવીકરણપાત્ર વીજળી સાધનોમાંથી વીજળી ઉત્પન્ન કરતી હોય તો તેને, યથાપ્રસંગ કોઈપણ પરવાનેદારની પ્રવાહન સિસ્ટમ અને/અથવા વિતરણ સિસ્ટમ અથવા ગ્રિડમાં ખુલ્લો પ્રવેશ મળી રહેશે. આવી વ્યક્તિ પાસેથી અરજી મળતાં, પ્રવાહન જે વિતરણ પરવાનેદાર, નવીકરણપાત્ર વીજળી પરિયોજનામાંથી વાણિજ્યપત સંચાલનની તારીખ પહેલાં, શક્ય હોય તેટલા પ્રમાણમાં યોગ્ય આંતર-જોડાણ પૂરૂં પાડશે. આવું આંતર-જોડાણ કર્યા બાદ ભારતીય માનક ગ્રિડ સંહિતા, રાજ્ય ગ્રિડ સંહિતા અને / અથવા કેન્દ્રીય વીજળી તંત્ર દ્વારા ઠરાવેલી રીતે પ્રમાણે ગ્રિડ જોડાણ ધોરણો અનુસરવાના રહેશે.

STU/SLDC/ પરવાનેદાર, નવીકરણપાત્ર વીજળી સાધનોમાંથી વીજળીનું વહન કરવા સમયસર ખુલ્લો પ્રવેશ પૂરો પાડવા સિસ્ટમને સંગીન કરવાના ઉત્તમ પ્રયત્નો કરશે.

૧૧. ક્રોસ સબસીડી :-

નવીનકરણપાત્ર વીજળી સાધનોમાંથી ત્રીજા પક્ષકારના વેચાણને, આયોગના વખતોવખત નક્કી કરે કે ક્રોસ સબસીડી સરચાર્જમાંથી મુક્ત રાખશે.

આમછતાં, ખુલ્લા પ્રવેશ મારફત નવીકરણપાત્ર વીજળી સાધનોમાંથી પુરવઠા માટે (ત્રીજા પક્ષકારને વેચાણ) કોઈ બેન્કિંગ સુવિધા અપાશે નહીં. ૧૫ મિનિટમાં દરેક બ્લોક માટે વીજળી હિસાબ કરવા સક્ષમ ABT સુસંગત ઈન્ટરફેઝ મીટરીંગ સિસ્ટમ પુરવઠો તેમજ ઉપાડના એમ બંને સ્થળોએ પૂરી પડાશે.

ત્રીજા પક્ષકારને વેચાણ માટે, ૧૫ મિનિટના દરેક સમય બ્લોકમાં નવીકરણપાત્ર વીજળી સાધનોમાંથી વીજળી ઉત્પાદનો, તે જ ૧૫ મિનિટના સમય બ્લોકમાં કેપ્ટિવ/ખુલ્લા પ્રવેશ વપરાશકર્તાના વપરાશ સામે મજરે આપવામાં આવશે.

૧૨. મુશ્કેલીઓ દૂર કરવાની સત્તા :-

૧૨.૧ આયોગ સ્વયં અથવા નવીકરણપાત્ર વીજળી સાધનોમાંથી વીજળી ઉત્પન્ન કરનાર કોઈ વ્યક્તિ પાસેથી અથવા પરવાનેદાર કે કેપ્ટિવ વપરાશકર્તા કે ખુલ્લા પ્રવેશના ગ્રાહક પાસેથી અરજી મળ્યેથી આ વિનિયમોની સમીક્ષા, ઉમેરો, સુધારો કે ફેરફાર કરશે અને આ વિનિયમોની જોગવાઈઓ અમલી બનાવવામાં પડતી કોઈપણ મુશ્કેલીઓ દૂર કરવા યોગ્ય ઉદેશો પસાર કરશે.

૧૩. રદ કરવું :-

૧૩.૧ તા. ૨૯ ઓકટોબર, ૨૦૦૮ નો અગાઉનો વિનિયમ નં. ૧૫ અહીં રદ કરવામાં આવે છે.

સ્થળ : અમદાવાદ

તારીખ : ૧૭ એપ્રિલ, ૨૦૧૦

સહી/-

સંજય નંદન અગ્રવાલ,

સચિવ

ગુજરાત વિદ્યુત નિયંત્રક આયોગ.

સરકારી મધ્યસ્થ મુદ્રણાલય, ગાંધીનગર.

Annexure B

GUJARAT ELECTRICITY REGULATORY COMMISSION (GERC)

GUJARAT ELECTRICITY REGULATORY COMMISSION (PROCUREMENT OF ENERGY FROM RENEWABLE SOURCES) (FIRST AMENDMENT) REGULATIONS, 2014

Notification: No. 2 of 2014

In exercise of Powers conferred under section 61, 86 and181 of the Electricity Act, 2003 (Act No. 36 of 2003) and all other powers enabling it in this behalf, and after previous publication, the Gujarat Electricity Regulatory Commission hereby makes the following regulations, to amend Gujarat Electricity Regulatory Commission (Procurement of Energy from Renewable Sources) Regulations, 2010 (hereinafter referred to as "The Principal Regulations") namely:

1) **Short Title Extent and Commencement:**

   (i) These regulations shall be called the Gujarat Electricity Regulatory Commission (Procurement of Energy from Renewable Sources) (First Amendment) Regulations, 2014.

   (ii) These Regulations extend to the whole of the State of Gujarat.

2) These regulations shall come into force with effect from the date of their publication in the Official Gazette except Regulation No. 5.4 and 5.5 of this regulations which shall come into effect from 1st April, 2014.

3) Addition in Regulation 2.1 of the Principal Regulations:

A new Regulation 2.1 (aa) shall be added after the Regulation 2.1 (a) of the Principal Regulations as under:-

2.1 (aa) **'Average Power Purchase Cost'** means the weighted average pooled price at which the distribution licensee has purchased the electricity including cost of self generation, if any, in the previous year from all the energy suppliers long-term and short-term, but excluding those based on renewable energy sources, as the case may be.

4) Substitution of Table 1 of Regulation 4.1

The table 1 provided in Principal Regulation 4.1 shall be substituted by following table 1

	Minimum Quantum of purchase (in %) from renewable energy sources (in terms of energy in kWh)			
Year	TOTAL	Wind	Solar	Others (Biomass, Bagasse, MSW, etc.)
2010-11	5.0	4.5	0.25	0.25
2011-12	6.0	5.0	0.5	0.5
2012-13	7.0	5.5	1.0	0.5
2013-14	7.0	5.5	1.0	0.5
2014-15	8.0	6.25	1.25	0.5
2015-16	9.0	7.0	1.5	0.5
2016-17	10.0	7.75	1.75	0.5

5) Addition of Regulations 5.4 and 5.5 in Principal Regulation

The Regulation 5.4 shall be added after Regulation 5.3 in Principal Regulation as under:

5.4 : The Commission shall determine the **'Average Power Purchase Cost'** of the distribution licensee concerned on annual basis. The Average Power Purchase Cost determined by the commission shall be required to be paid by the distribution licensee when the distribution licensee purchases the electrical component of the renewable energy projects registered under the REC scheme notified by the Central Electricity Regulatory Commission.

The Regulation 5.5 shall be added after proposed Regulation 5.4 in Principal Regulation as under:

In case of renewable energy generator set up under the REC scheme notified by the Central Electricity Regulatory Commission supplying power for captive use or sale to third party, the distribution licensee shall pay to such RE generator the Average Power Purchase Cost for the surplus energy available after giving set off for the consumption by such captive consumer or the third party.

Sd/-

[Dilip Raval]

Secretary

Date: 04 /03 /2014.

Place: Gandhinagar.

Extra No. 344 વાર્ષિક લવાજમનો દર રૂ. ૩૫૦૦/-



सत्यमेव जयते

The Gujarat Government Gazette

EXTRAORDINARY

PUBLISHED BY AUTHORITY

Vol. LVI] WEDNESDAY, JULY 1, 2015/ASADHA 10, 1937

Separate paging is given to this Part in order that it may be filed as a Separate Compilation.

PART IV-C

Statutory Rules and Orders (Other than those published in Parts I, I-A and I-L) made by Statutory Authorities other than the Government of Gujarat including those made by the Government of India, the High Courts, the Director of Municipalities, the Commissioner of Police, the Director of Prohibition and Excise, the District Magistrates and the Election Commission, Election Tribunals, Returning Officers and other authorities under the Election Commission.



GUJARAT ELECTRICITY REGULATORY COMMISSION

Gandhinagar.

NOTIFICATION No. 2 of 2015

In exercise of the powers conferred under sections 61, 86(1)(e) and 181 of the Electricity Act, 2003 read with sub-regulation (iv) of Regulation 1 and Regulation 8 of the Gujarat Electricity Regulatory Commission (Procurement of Energy from Renewable Sources) Regulations, 2010 (Notification No.3 of 2010) (Principal Regulations) and Gujarat Electricity Regulatory Commission (Procurement of Energy from Renewable Sources) (First Amendment) Regulations, 2014 (Notification No. 2 of 2014), and all other powers enabling it in this behalf, the Gujarat Electricity Regulatory Commission hereby notifies the 1st day of July, 2015, as the date on which the sub-regulation (iv) of Regulations 1 and Regulation 8 of Gujarat Electricity Regulatory Commission (Procurement of Energy from Renewable Sources) Regulations, 2010 (Notification No.3 of 2010) and amendments made in it shall come into force and the Renewable Purchase Obligation shall become applicable to Captive and Open Access User(s)/Consumer(s).

Place : Gandhinagar.
Date : 1/07/2015.

S. T. ANADA
I/C Secretary
Gujarat Electricity Regulatory Commission

Government Central Press, Gandhinagar.

Extra No. 347 વાર્ષિક લવાજમનો દર રૂા. ૪૦૦૦/-

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PART IV-C

Statutory Rules and Orders (Other than those published in Parts I, I-A and I-L) made by Statutory Authorities other than the Government of Gujarat including those made by the Government of India, the High Courts, the Director of Municipalities, the Commissioner of Police, the Director of Prohibition and Excise, the District Magistrates and the Election Commission, Election Tribunals, Returning Officers and other authorities under the Election Commission.

GUJARAT ELECTRICITY REGULATORY COMMISSION (GERC)

GUJARAT ELECTRICITY REGULATORY COMMISSION (PROCUREMENT OF ENERGY FROM RENEWABLE SOURCES) (SECOND AMENDMENT) REGULATIONS, 2018

Notification: No. 01 of 2018

In exercise of Powers conferred under Section 61, 86 and 181 of the Electricity Act, 2003 (Act No. 36 of 2003) and all other powers enabling it in this behalf, and after previous publication, the Gujarat Electricity Regulatory Commission hereby makes the following regulations, to amend Gujarat Electricity Regulatory Commission (Procurement of Energy from Renewable Sources) Regulations, 2010 (hereinafter referred to as "The Principal Regulations") namely:

1) Short Title Extent and Commencement:

(i) These regulations shall be called the Gujarat Electricity Regulatory Commission (Procurement of Energy from Renewable Sources) (Second Amendment) Regulations, 2018.

(ii) These Regulations shall extend to the whole of the State of Gujarat.

2) These regulations shall come into force with effect from the date of their publication in the Official Gazette.

3) Substitution of Table 1 of Regulation 4.1:

Table 1 provided in the Gujarat Electricity Regulatory Commission (Procurement of Energy from Renewable Sources) (First Amendment) Regulations, 2014 is substituted by following Table – I and II:

TABLE - I

Year	Minimum Quantum of purchase (in %) from renewable energy sources (in terms of energy in kWh).			
	Wind (%)	Solar (%)	Others (Biomass, Bagasse, Hydro and MSW) (%)	Total (%)
(1)	(2)	(3)	(4)	(5)
2010-11	4.5	0.25	0.25	5.0
2011-12	5.0	0.5	0.5	6.0
2012-13	5.5	1.0	0.5	7.0
2013-14	5.5	1.0	0.5	7.0
2014-15	6.25	1.25	0.5	8.0
2015-16	7.0	1.5	0.5	9.0
2016-17	7.75	1.75	0.5	10.0

TABLE – II

Year	Minimum Quantum of purchase (in %) from renewable energy sources (in terms of energy in kWh).			
	Wind (%)	Solar (%)	Others (Biomass, Bagasse, MSW and Hydro) (%)	Total (%)
(1)	(2)	(3)	(4)	(5)
2017-18	7.75	1.75	0.5	10.00
2018-19	7.95	4.25	0.5	12.70
2019-20	8.05	5.5	0.75	14.30
2020-21	8.15	6.75	0.75	15.65
2021-22	8.25	8.0	0.75	17.00

4) Substitution of para 2 of Principal Regulation 4.1:

If the above mentioned minimum quantum of power purchase either from Solar or Wind or Others (including Biomass, Bagasse, Hydro and MSW) is not available in a particular year of FY 2017-18 to 2021-22, then in such cases, additional renewable energy available either from Solar or Wind or Others shall be utilised for fulfilment of RPO in accordance with Column 5.

5) Addition in Regulation 4.1 of the Principal Regulation:

A new third para is added after second para of Regulation 4.1 of the Principal Regulations as under:

Distribution Licensee(s) shall compulsorily procure 100% power produced from all the Waste-to-Energy Projects in the State of Gujarat, in the ratio of their procurement of power from all sources including their own, at the tariff discovered through a Competitive Bidding Process as envisaged in the Gujarat Waste to Energy Policy, 2016 subject to ceiling of generic tariff as determined by the Commission.

ROOPWANT SINGH, IAS
Secretary
Gujarat Electricity Regulatory Commission
Gandhinagar, Gujarat

Place: Gandhinagar.
Date: 21/04/2018.

Government Central Press, Gandhinagar

Annexure E

GUJARAT ELECTRICITY REGULATORY COMMISSION (GERC)

GUJARAT ELECTRICITY REGULATORY COMMISSION (PROCUREMENT OF ENERGY FROM RENEWABLE SOURCES) (THIRD AMENDMENT) REGULATIONS, 2022

Notification No. 01 of 2022

In exercise of the powers conferred under Sections 61, 86(1)(e) and 181 of the Electricity Act, 2003 (36 of 2003) and all other powers enabling it in this behalf, and after previous publication, the Gujarat Electricity Regulatory Commission hereby makes the following Regulations, to amend the Gujarat Electricity Regulatory Commission (Procurement of Energy from Renewable Sources) Regulations, 2010 (hereinafter referred to as "The Principal Regulations") namely:

1) **Short Title Extent and Commencement:**

(i). These Regulations shall be called the Gujarat Electricity Regulatory Commission (Procurement of Energy from Renewable Sources) (Third Amendment) Regulations, 2022.

(ii). These Regulations extend to the whole of the State of Gujarat.

2) These Regulations shall come into force with effect from the date of their publication in the Official Gazette.

3) Amendment of Regulation 2:

The clause (p) of Regulation (2) of the Principal Regulations shall be substituted with the following, namely:-

"(p) "Renewable energy sources" means non-conventional, renewable electricity generating sources such as mini/micro/small hydro power projects upto and including 25 MW capacity, wind, solar, biomass, bagasse, bio-fuel based cogeneration, urban or municipal waste and Large Hydro Power Plant of capacity above 25 MW and commissioned after 8th March, 2019 as per MoP,

Government of India Notification No. F. No. 15/2/2016-H-I (Pt.) dated 08.03.2019 and such other sources as recognized or approved by the Central Government or by the State of Gujarat. The energy generated from Large Hydro Power Projects (LHPs) with an installed capacity above 25 MW which come into commercial operation after 8th March, 2019 shall be eligible for fulfilling the Hydro Power Purchase Obligation (HPO)"

3) Substitution of Table II of Regulation 4.1:

Table II provided in the Gujarat Electricity Regulatory Commission (Procurement of Energy from Renewable Sources) (Second Amendment) Regulations, 2018 shall be substituted by following Table - II:

Table – II: Minimum percentage for Renewable Power Purchase Obligation

Year	Minimum Quantum of purchase (in %) from renewable energy sources (in terms of energy in kWh)				
	Wind (%)	Solar (%)	Hydro Power Purchase Obligation (HPO) (%)	Others (Biomass, Bagasse & Bio-fuel based cogeneration, MSW and Small/Mini/Micro Hydro) (%)	Total (%)
(1)	(2)	(3)	(4)	(5)	(6)
2017-18	7.75	1.75		0.50	10.00
2018-19	7.95	4.25		0.50	12.70
2019-20	8.05	5.50		0.75	14.30
2020-21	8.15	6.75		0.75	15.65
2021-22	8.25	8.00		0.75	17.00
2022-23	8.25	8.00		0.75	17.00
2023-24	8.40	9.50	0.05	0.75	18.70
2024-25	8.55	11.25	0.10	0.80	20.70

4) Substitution of para 2 of Principal Regulation 4.1

Provided that:

a. Hydro power Purchase Obligation (HPO) shall be met from the power procured from eligible large hydro power projects (LHPs) including pump storage projects having capacity of more than 25 MW commissioned on

and after 08.03.2019 and upto 31.03.2024 in respect of 70% of the total generated capacity for a period of 12 years from the date of commissioning. Free power to be provided as per the agreement with the State Government and that provided for Local Area Development Fund (LADF), shall not be included within this limit of 70% of the total generated capacity.

Provided also that hydro power imported from outside India shall not be considered for meeting HPO.

b. Further to facilitate compliance of HPO, Hydro Energy Certificate mechanism as available to be utilised by obligated entities.

c. HPO liability of the State/Discom could be met out of the free power being provided to the State from LHPs commissioned after 08.03.2019 as per agreement at that point of time excluding the contribution towards Local Area Development Fund (LADF), if consumed, within the State/Discoms. Free power (not that contributed for Local Area Development) only to the extent of HPO liability of the State/Discom shall be eligible for HPO benefit.

d. If the above-mentioned minimum quantum of power purchase either from Solar or Wind or Large Hydro Power Plant of capacity above 25 MW and commissioned after 8th March, 2019 as per MoP, Government of India Notification No. F. No. 15/2/2016-H-I (Pt.) dated 08.03.2019 or Others (including Biomass, Bagasse & Bio-fuel based cogeneration, MSW and Small/Mini/Micro Hydro) is not available in a particular year, then in such cases, additional renewable energy available either from Solar or Wind or Large Hydro Power Plant of capacity above 25 MW and commissioned after 8th March, 2019 as per MoP, Government of India Notification No. F. No. 15/2/2016-H-I (Pt.) dated 08.03.2019 or Others shall be utilised for fulfilment of RPO.

Provided further that the targets specified for Obligated Entities for FY 2024-25 shall be continued beyond for FY 2025-26 and onwards unless specified by the Commission separately.

Sd/-
ROOPWANT SINGH, IAS
Secretary
Gujarat Electricity Regulatory Commission
Gandhinagar, Gujarat

Place: Gandhinagar

Date: 08/04/2022.

GOVERNMENT OF INDIA
MINISTRY OF POWER

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National Electricity Policy

The Gazette of India

EXTRAORDINARY
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New Delhi,
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RESOLUTION

No. 23/40/2004-R&R (Vol.II)

1.0 INTRODUCTION

1.1 In compliance with section 3 of the Electricity Act 2003 the Central Government hereby notifies the National Electricity Policy.

1.2 Electricity is an essential requirement for all facets of our life. It has been recognized as a basic human need. It is a critical infrastructure on which the socio-economic development of the country depends. Supply of electricity at reasonable rate to rural India is essential for its overall development. Equally important is availability of reliable and quality power at competitive rates to Indian industry to make it globally competitive and to enable it to exploit the tremendous potential of employment generation. Services sector has made significant contribution to the growth of our economy. Availability of quality supply of electricity is very crucial to sustained growth of this segment.

1.3 Recognizing that electricity is one of the key drivers for rapid economic growth and poverty alleviation, the nation has set itself the target of providing access to all households in next five years. As per Census 2001, about 44% of the households do not have access to electricity. Hence meeting the target of providing universal access is a daunting task requiring significant addition to generation capacity and expansion of the transmission and distribution network.

1.4 Indian Power sector is witnessing major changes. Growth of Power Sector in India since its Independence has been noteworthy. However, the demand for power has been outstripping the growth of availability. Substantial peak and energy shortages prevail in the country. This is due to inadequacies in generation, transmission & distribution as well as inefficient use of electricity. Very high level of technical and commercial losses and lack of commercial approach in management of

utilities has led to unsustainable financial operations. Cross-subsidies have risen to unsustainable levels. Inadequacies in distribution networks has been one of the major reasons for poor quality of supply.

1.5 Electricity industry is capital-intensive having long gestation period. Resources of power generation are unevenly dispersed across the country. Electricity is a commodity that can not be stored in the grid where demand and supply have to be continuously balanced. The widely distributed and rapidly increasing demand requirements of the country need to be met in an optimum manner.

1.6 Electricity Act, 2003 provides an enabling framework for accelerated and more efficient development of the power sector. The Act seeks to encourage competition with appropriate regulatory intervention. Competition is expected to yield efficiency gains and in turn result in availability of quality supply of electricity to consumers at competitive rates.

1.7 Section 3 (1) of the Electricity Act 2003 requires the Central Government to formulate, inter alia, the National Electricity Policy in consultation with Central Electricity Authority (CEA) and State Governments. The provision is quoted below:

> *"The Central Government shall, from time to time, prepare the National Electricity Policy and tariff policy, in consultation with the State Governments and the Authority for development of the power system based on optimal utilization of resources such as coal, natural gas, nuclear substances or materials, hydro and renewable sources of energy".*

Section 3 (3) of the Act enables the Central Government to review or revise the National Electricity Policy from time to

time.

1.8 The National Electricity Policy aims at laying guidelines for accelerated development of the power sector, providing supply of electricity to all areas and protecting interests of consumers and other stakeholders keeping in view availability of energy resources, technology available to exploit these resources, economics of generation using different resources, and energy security issues.

1.9 The National Electricity Policy has been evolved in consultation with and taking into account views of the State Governments, Central Electricity Authority (CEA), Central Electricity Regulatory Commission (CERC) and other stakeholders.

2.0 AIMS & OBJECTIVES

The National Electricity Policy aims at achieving the following objectives:

- Access to Electricity - Available for all households in next five years
- Availability of Power - Demand to be fully met by 2012. Energy and peaking shortages to be overcome and adequate spinning reserve to be available.
- Supply of Reliable and Quality Power of specified standards in an efficient manner and at reasonable rates.
- Per capita availability of electricity to be increased to over 1000 units by 2012.
- Minimum lifeline consumption of 1 unit/household/day as a merit good by year 2012.
- Financial Turnaround and Commercial Viability of Electricity Sector.
- Protection of consumers' interests.

3. NATIONAL ELECTRICITY PLAN

3.1 Assessment of demand is an important pre-requisite for planning capacity addition. Section 3 (4) of the Act requires the Central Electricity Authority (CEA) to frame a National Electricity Plan once in five years and revise the same from time to time in accordance with the National Electricity Policy. Also, section 73 (a) provides that formulation of short-term and perspective plans for development of the electricity system and coordinating the activities of various planning agencies for the optimal utilization of resources to subserve the interests of the national economy shall be one of the functions of the CEA. The Plan prepared by CEA and approved by the Central Government can be used by prospective generating companies, transmission utilities and transmission/distribution licensees as reference document.

3.2 Accordingly, the CEA shall prepare short-term and perspective plan. The National Electricity Plan would be for a short-term framework of five years while giving a 15 year perspective and would include:

- Short-term and long term demand forecast for different regions;
- Suggested areas/locations for capacity additions in generation and transmission keeping in view the economics of generation and transmission, losses in the system, load centre requirements, grid stability, security of supply, quality of power including voltage profile etc. and environmental considerations including rehabilitation and resettlement;
- Integration of such possible locations with transmission system and development of national grid including type of transmission systems and requirement of redundancies; and
- Different technologies available for efficient generation, transmission and distribution.
- Fuel choices based on economy, energy security and environmental considerations.

3.3 While evolving the National Electricity Plan, CEA will consult all the stakeholders including state governments and the state governments would, at state level, undertake this exercise in coordination with stakeholders including distribution licensees and STUs. While conducting studies periodically to assess short-term and long-term demand, projections made by distribution utilities would be given due weightage. CEA will also interact with institutions and agencies having economic expertise, particularly in the field of demand forecasting. Projected growth rates for different sectors of the economy will also be taken into account in the exercise of demand forecasting.

3.4 The National Electricity Plan for the ongoing 10th Plan period and 11th Plan and perspective Plan for the 10th, 11th & 12th Plan periods would be prepared and notified after reviewing and revising the existing Power Plan prepared by CEA. This will be done within six months.

4.0 ISSUES ADDRESSED

The policy seeks to address the following issues:

- Rural Electrification
- Generation
- Transmission
- Distribution
- Recovery of Cost of services & Targetted Subsidies.
- Technology Development and Research and Development (R&D)
- Competition aimed at Consumer Benefits
- Financing Power Sector Programmes Including Private Sector Participation.
- Energy Conservation
- Environmental Issues
- Training and Human Resource Development
- Cogeneration and Non-Conventional Energy Sources
- Protection of Consumer interests and Quality Standards

5.1 RURAL ELECTRIFICATION

5.1.1 The key development objective of the power sector is supply of electricity to all areas including rural areas as mandated in section 6 of the Electricity Act. Both the central government and state governments would jointly endeavour to achieve this objective at the earliest. Consumers, particularly those who are ready to pay a tariff which reflects efficient costs have the right to get uninterrupted twenty four hours supply of quality power. About 56% of rural households have not yet been electrified even though many of these households are willing to pay for electricity. Determined efforts should be made to ensure that the task of rural electrification for securing electricity access to all households and also ensuring that electricity reaches poor and marginal sections of the society at reasonable rates is completed within the next five years.

5.1.2 Reliable rural electrification system will aim at creating the following:

(a) Rural Electrification Distribution Backbone (REDB) with at least one 33/11 kv (or 66/11 kv) substation in every Block and more if required as per load, networked and connected appropriately to the state transmission system

(b) Emanating from REDB would be supply feeders and one distribution transformer at least in every village settlement.

(c) Household Electrification from distribution transformer to connect every household on demand.

(d) Wherever above is not feasible (it is neither cost effective nor the optimal solution to provide grid connectivity) decentralized distributed generation facilities together with local distribution network would be provided so that every household gets access to electricity. This would be done either through conventional or non-conventional methods of electricity generation whichever is more suitable and economical. Non-conventional sources of energy could be utilized even where grid connectivity exists provided it is found to be cost effective.

(e) Development of infrastructure would also cater for requirement of agriculture & other economic activities including irrigation pump sets, small and medium industries, khadi and village industries, cold chain and social services like health and education.

5.1.3 Particular attention would be given in household electrification to dalit bastis, tribal areas and other weaker sections.

5.1.4 Rural Electrification Corporation of India, a Government of India enterprise will be the nodal agency at Central Government level to implement the programme for achieving the goal set by National Common Minimum Programme of giving access to electricity to all the households in next five years. Its role is being suitably enlarged to ensure timely implementation of rural electrification projects.

5.1.5 Targetted expansion in access to electricity for rural households in the desired timeframe can be achieved if the distribution licensees recover at least the cost of electricity and related O&M expenses from consumers, except for lifeline support to households below the poverty line who would need to be adequately subsidized. Subsidies should be properly targeted at the intended beneficiaries in the most efficient manner. Government recognizes the need for providing necessary capital subsidy and soft long-term debt finances for investment in rural electrification as this would reduce the cost of supply in rural areas. Adequate funds would need to be made available for the same through the Plan process. Also commensurate organizational support would need to be created for timely implementation. The Central Government would assist the State Governments in achieving this.

5.1.6 Necessary institutional framework would need to be put in place not only to ensure creation of rural electrification infrastructure but also to operate and maintain supply system for securing reliable power supply to consumers. Responsibility of operation & maintenance and cost recovery could be discharged by utilities through appropriate arrangements with Panchayats, local authorities, NGOs and other franchisees etc.

5.1.7 The gigantic task of rural electrification requires appropriate cooperation among various agencies of the State Governments, Central Government and participation of the community. Education and awareness programmes would be essential for creating demand for electricity and for achieving the objective of effective community participation.

5.2 GENERATION

5.2.1 Inadequacy of generation has characterized power sector operation in India. To provide availability of over 1000 units of per capita electricity by year 2012 it had been estimated that need based capacity addition of more than 1,00,000 MW would be required during the period 2002-12.

5.2.2 The Government of India has initiated several reform measures to create a favourable environment for addition of new generating capacity in the country. The Electricity Act 2003 has put in place a highly liberal framework for generation. There is no requirement of licensing for generation. The requirement of techno-economic clearance of CEA for thermal generation project is no longer there. For hydroelectric generation also, the limit of capital expenditure, above which concurrence of CEA is required, would be raised suitably from the present level. Captive generation has been freed from all controls.

5.2.3 In order to fully meet both energy and peak demand by 2012, there is a need to create adequate reserve capacity margin. In addition to enhancing the overall availability of installed capacity to 85%, a spinning reserve of at least 5%, at national level, would need to be created to ensure grid security and quality and reliability of power supply.

5.2.4 The progress of implementation of capacity addition plans and growth of demand would need to be constantly monitored and necessary adjustments made from time to time. In creating new generation capacities, appropriate technology may be considered keeping in view the likely widening of the difference between peak demand and the base load.

Hydro Generation

5.2.5 Hydroelectricity is a clean and renewable source of energy. Maximum emphasis would be laid on the full development of the feasible hydro potential in the country. The 50,000 MW hydro initiative has been already launched and is being vigorously pursued with DPRs for projects of 33,000 MW capacity already under preparation.

5.2.6 Harnessing hydro potential speedily will also facilitate economic development of States, particularly North-Eastern States, Sikkim, Uttaranchal, Himachal Pradesh and J&K, since a large proportion of our hydro power potential is located in these States. The States with hydro potential need to focus on the full development of these potentials at the earliest.

5.2.7 Hydel projects call for comparatively larger capital investment. Therefore, debt financing of longer tenure would need to be made available for hydro projects. Central Government is committed to policies that ensure financing of viable hydro projects.

5.2.8 State Governments need to review procedures for land acquisition, and other approvals/clearances for speedy implementation of hydroelectric projects.

5.2.9 The Central Government will support the State Governments for expeditious development of their hydroelectric projects by offering services of Central Public Sector Undertakings like National Hydroelectric Power Corporation (NHPC).

5.2.10 Proper implementation of National Policy on Rehabilitation and Resettlement (R&R) would be essential in this regard so as to ensure that the concerns of project-affected families are addressed adequately.

5.2.11 Adequate safeguards for environmental protection with suitable mechanism for monitoring of implementation of Environmental Action Plan and R&R Schemes will be put in place.

Thermal Generation

5.2.12 Even with full development of the feasible hydro potential in the country, coal would necessarily continue to remain the primary fuel for meeting future electricity demand.

5.2.13 Imported coal based thermal power stations, particularly at coastal locations, would be encouraged based on their economic viability. Use of low ash content coal would also help in reducing the problem of fly ash emissions.

5.2.14 Significant Lignite resources in the country are located in Tamil Nadu, Gujarat and Rajasthan and these should be increasingly utilized for power generation. Lignite mining technology needs to be improved to reduce costs.

5.2.15 Use of gas as a fuel for power generation would depend upon its availability at reasonable prices. Natural gas is being used in Gas Turbine /Combined Cycle Gas Turbine (GT/CCGT) stations, which currently accounts for about 10 % of total capacity. Power sector consumes about 40% of the total gas in the country. New power generation capacity could come up based on indigenous gas findings, which can emerge as a major source of power generation if prices are reasonable. A national gas grid covering various parts of the country could facilitate development of such capacities.

5.2.16 Imported LNG based power plants are also a potential source of electricity and the pace of their development would depend on their commercial viability. The existing power plants using liquid fuels should shift to use of Natural Gas/LNG at the earliest to reduce the cost of generation.

5.2.17 For thermal power, economics of generation and supply of electricity should be the basis for choice of fuel from among the options available. It would be economical for new generating stations to be located either near the fuel sources e.g. pithead locations or load centres.

5.2.18 Generating companies may enter into medium to long-term fuel supply agreements specially with respect to imported fuels for commercial viability and security of supply.

Nuclear Power

5.2.19 Nuclear power is an established source of energy to meet base load demand. Nuclear power plants are being set up at locations away from coalmines. Share of nuclear power in the overall capacity profile will need to be increased significantly. Economics of generation and resultant tariff will be, among others, important considerations. Public sector investments to create nuclear generation capacity will need to be stepped up. Private sector partnership would also be facilitated to see that not only targets are achieved but exceeded.

Non-conventional Energy Sources

5.2.20 Feasible potential of non-conventional energy resources, mainly small hydro, wind and bio-mass would also need to be exploited fully to create additional power generation capacity. With a

view to increase the overall share of non-conventional energy sources in the electricity mix, efforts will be made to encourage private sector participation through suitable promotional measures.

Renovation and Modernization (R&M)

5.2.21 One of the major achievements of the power sector has been a significant increase in availability and plant load factor of thermal power stations specially over the last few years. Renovation and modernization for achieving higher efficiency levels needs to be pursued vigorously and all existing generation capacity should be brought to minimum acceptable standards. The Govt. of India is providing financial support for this purpose.

5.2.22 For projects performing below acceptable standards, R&M should be undertaken as per well-defined plans featuring necessary cost-benefit analysis. If economic operation does not appear feasible through R&M, then there may be no alternative to closure of such plants as the last resort.

5.2.23 In cases of plants with poor O&M record and persisting operational problems, alternative strategies including change of management may need to be considered so as to improve the efficiency to acceptable levels of these power stations.

Captive Generation

5.2.24 The liberal provision in the Electricity Act, 2003 with respect to setting up of captive power plant has been made with a view to not only securing reliable, quality and cost effective power but also to facilitate creation of employment opportunities through speedy and efficient growth of industry.

5.2.25 The provision relating to captive power plants to be set up by group of consumers is primarily aimed at enabling small and medium industries or other consumers that may not individually be in a position to set up plant of optimal size in a cost effective manner. It needs to be noted that efficient expansion of small and medium industries across the country would lead to creation of enormous employment opportunities.

5.2.26 A large number of captive and standby generating stations in India have surplus capacity that could be supplied to the grid continuously or during certain time periods. These plants offer a sizeable and potentially competitive capacity that could be harnessed for meeting demand for power. Under the Act, captive generators have access to licensees and would get access to consumers who are allowed open access. Grid inter-connections for captive generators shall be facilitated as per section 30 of the Act. This should be done on priority basis to enable captive generation to become available as distributed generation along the grid. Towards this end, non-conventional energy sources including co-generation could also play a role. Appropriate commercial arrangements would need to be instituted between licensees and the captive generators for harnessing of spare capacity energy from captive power plants. The appropriate Regulatory Commission shall exercise regulatory oversight on such commercial arrangements between captive generators and licensees and determine tariffs when a licensee is the off-taker of power from captive plant.

5.3 TRANSMISSION

5.3.1 The Transmission System requires adequate and timely investments and also efficient and coordinated action to develop a robust and integrated power system for the country.

5.3.2 Keeping in view the massive increase planned in generation and also for development of power market, there is need for adequately augmenting transmission capacity. While planning new generation capacities, requirement of associated transmission capacity would need to be worked

out simultaneously in order to avoid mismatch between generation capacity and transmission facilities. The policy emphasizes the following to meet the above objective:

- The Central Government would facilitate the continued development of the National Grid for providing adequate infrastructure for inter-state transmission of power and to ensure that underutilized generation capacity is facilitated to generate electricity for its transmission from surplus regions to deficit regions.
- The Central Transmission Utility (CTU) and State Transmission Utility (STU) have the key responsibility of network planning and development based on the National Electricity Plan in coordination with all concerned agencies as provided in the Act. The CTU is responsible for the national and regional transmission system planning and development. The STU is responsible for planning and development of the intra-state transmission system. The CTU would need to coordinate with the STUs for achievement of the shared objective of eliminating transmission constraints in cost effective manner.
- Network expansion should be planned and implemented keeping in view the anticipated transmission needs that would be incident on the system in the open access regime. Prior agreement with the beneficiaries would not be a pre-condition for network expansion. CTU/STU should undertake network expansion after identifying the requirements in consultation with stakeholders and taking up the execution after due regulatory approvals.
- Structured information dissemination and disclosure procedures should be developed by the CTU and STUs to ensure that all stakeholders are aware of the status of generation and transmission projects and plans. These should form a part of the overall planning procedures.
- The State Regulatory Commissions who have not yet notified the grid code under the Electricity Act 2003 should notify the same not later than September 2005.

5.3.3 Open access in transmission has been introduced to promote competition amongst the generating companies who can now sell to different distribution licensees across the country. This should lead to availability of cheaper power. The Act mandates non-discriminatory open access in transmission from the very beginning. When open access to distribution networks is introduced by the respective State Commissions for enabling bulk consumers to buy directly from competing generators, competition in the market would increase the availability of cheaper and reliable power supply. The Regulatory Commissions need to provide facilitative framework for non-discriminatory open access. This requires load dispatch facilities with state-of-the art communication and data acquisition capability on a real time basis. While this is the case currently at the regional load dispatch centers, appropriate State Commissions must ensure that matching facilities with technology upgrades are provided at the State level, where necessary and realized not later than June 2006.

5.3.4 The Act prohibits the State transmission utilities/transmission licensees from engaging in trading in electricity. Power purchase agreements (PPAs) with the generating companies would need to be suitably assigned to the Distribution Companies, subject to mutual agreement. To the extent necessary, such assignments can be done in a manner to take care of different load profiles of the Distribution Companies. Non-discriminatory open access shall be provided to competing generators supplying power to licensees upon payment of transmission charge to be determined by the appropriate Commission. The appropriate Commissions shall establish such transmission charges no later than June 2005.

5.3.5 To facilitate orderly growth and development of the power sector and also for secure and reliable operation of the grid, adequate margins in transmission system should be created. The transmission capacity would be planned and built to cater to both the redundancy levels and margins keeping in view international standards and practices. A well planned and strong transmission system will ensure not only optimal utilization of transmission capacities but also of generation facilities and would facilitate achieving ultimate objective of cost effective delivery of power. To facilitate cost effective transmission of power across the region, a national transmission

tariff framework needs to be implemented by CERC. The tariff mechanism would be sensitive to distance, direction and related to quantum of flow. As far as possible, consistency needs to be maintained in transmission pricing framework in inter-State and intra-State systems. Further it should be ensured that the present network deficiencies do not result in unreasonable transmission loss compensation requirements.

5.3.6 The necessary regulatory framework for providing non-discriminatory open access in transmission as mandated in the Electricity Act 2003 is essential for signalling efficient choice in locating generation capacity and for encouraging trading in electricity for optimum utilization of generation resources and consequently for reducing the cost of supply.

5.3.7 The spirit of the provisions of the Act is to ensure independent system operation through NLDC, RLDCs and SLDCs. These dispatch centers, as per the provisions of the Act, are to be operated by a Government company or authority as notified by the appropriate Government. However, till such time these agencies/authorities are established the Act mandates that the CTU or STU, as the case may be, shall operate the RLDCs or SLDC. The arrangement of CTU operating the RLDCs would be reviewed by the Central Government based on experience of working with the existing arrangement. A view on this aspect would be taken by the Central Government by December 2005.

5.3.8 The Regional Power Committees as envisaged in section section 2(55) would be constituted by the Government of India within two months with representation from various stakeholders.

5.3.9 The National Load Despatch Centre (NLDC) along with its constitution and functions as envisaged in Section 26 of the Electricity Act 2003 would be notified within three months. RLDCs and NLDC will have complete responsibility and commensurate authority for smooth operation of the grid irrespective of the ownership of the transmission system, be it under CPSUs, State Utility or private sector.

5.3.10 Special mechanisms would be created to encourage private investment in transmission sector so that sufficient investments are made for achieving the objective of demand to be fully met by 2012.

5.4 DISTRIBUTION

5.4.1 Distribution is the most critical segment of the electricity business chain. The real challenge of reforms in the power sector lies in efficient management of the distribution sector.

5.4.2 The Act provides for a robust regulatory framework for distribution licensees to safeguard consumer interests. It also creates a competitive framework for the distribution business, offering options to consumers, through the concepts of open access and multiple licensees in the same area of supply.

5.4.3 For achieving efficiency gains proper restructuring of distribution utilities is essential. Adequate transition financing support would also be necessary for these utilities. Such support should be arranged linked to attainment of predetermined efficiency improvements and reduction in cash losses and putting in place appropriate governance structure for insulating the service providers from extraneous interference while at the same time ensuring transparency and accountability. For ensuring financial viability and sustainability, State Governments would need to restructure the liabilities of the State Electricity Boards to ensure that the successor companies are not burdened with past liabilities. The Central Government would also assist the States, which develop a clear roadmap for turnaround, in arranging transition financing from various sources which shall be linked to predetermined improvements and efficiency gains aimed at attaining financial viability and also putting in place appropriate governance structures.

5.4.4 Conducive business environment in terms of adequate returns and suitable transitional model with predetermined improvements in efficiency parameters in distribution business would be necessary for facilitating funding and attracting investments in distribution. Multi-Year Tariff (MYT) framework is an important structural incentive to minimize risks for utilities and consumers, promote efficiency and rapid reduction of system losses. It would serve public interest through economic efficiency and improved service quality. It would also bring greater predictability to consumer tariffs by restricting tariff adjustments to known indicators such as power purchase prices and inflation indices. Private sector participation in distribution needs to be encouraged for achieving the requisite reduction in transmission and distribution losses and improving the quality of service to the consumers.

5.4.5 The Electricity Act 2003 enables competing generating companies and trading licensees, besides the area distribution licensees, to sell electricity to consumers when open access in distribution is introduced by the State Electricity Regulatory Commissions. As required by the Act, the SERCs shall notify regulations by June 2005 that would enable open access to distribution networks in terms of sub-section 2 of section 42 which stipulates that such open access would be allowed, not later than five years from 27th January 2004 to consumers who require a supply of electricity where the maximum power to be made available at any time exceeds one mega watt. Section 49 of the Act provides that such consumers who have been allowed open access under section 42 may enter into agreement with any person for supply of electricity on such terms and conditions, including tariff, as may be agreed upon by them. While making regulations for open access in distribution, the SERCs will also determine wheeling charges and cross-subsidy surcharge as required under section 42 of the Act.

5.4.6 A time-bound programme should be drawn up by the State Electricity Regulatory Commissions (SERC) for segregation of technical and commercial losses through energy audits. Energy accounting and declaration of its results in each defined unit, as determined by SERCs, should be mandatory not later than March 2007. An action plan for reduction of the losses with adequate investments and suitable improvements in governance should be drawn up. Standards for reliability and quality of supply as well as for loss levels shall also be specified ,from time to time, so as to bring these in line with international practices by year 2012.

5.4.7 One of the key provisions of the Act on competition in distribution is the concept of multiple licensees in the same area of supply through their independent distribution systems. State Governments have full flexibility in carving out distribution zones while restructuring the Government utilities. For grant of second and subsequent distribution licence within the area of an incumbent distribution licensee, a revenue district, a Municipal Council for a smaller urban area or a Municipal Corporation for a larger urban area as defined in the Article 243(Q) of Constitution of India (74th Amendment) may be considered as the minimum area. The Government of India would notify within three months, the requirements for compliance by applicant for second and subsequent distribution licence as envisaged in Section 14 of the Act. With a view to provide benefits of competition to all section of consumers, the second and subsequent licensee for distribution in the same area shall have obligation to supply to all consumers in accordance with provisions of section 43 of the Electricity Act 2003. The SERCs are required to regulate the tariff including connection charges to be recovered by a distribution licensee under the provisions of the Act. This will ensure that second distribution licensee does not resort to cherry picking by demanding unreasonable connection charges from consumers.

5.4.8 The Act mandates supply of electricity through a correct meter within a stipulated period. The Authority should develop regulations as required under Section 55 of the Act within three months.

5.4.9 The Act requires all consumers to be metered within two years. The SERCs may obtain from the Distribution Licensees their metering plans, approve these, and monitor the same. The SERCs should encourage use of pre-paid meters. In the first instance, TOD meters for large consumers

with a minimum load of one MVA are also to be encouraged. The SERCs should also put in place independent third-party meter testing arrangements.

5.4.10 Modern information technology systems may be implemented by the utilities on a priority basis, after considering cost and benefits, to facilitate creation of network information and customer data base which will help in management of load, improvement in quality, detection of theft and tampering, customer information and prompt and correct billing and collection . Special emphasis should be placed on consumer indexing and mapping in a time bound manner. Support is being provided for information technology based systems under the Accelerated Power Development and Reforms Programme (APDRP).

5.4.11 High Voltage Distribution System is an effective method for reduction of technical losses, prevention of theft, improved voltage profile and better consumer service. It should be promoted to reduce LT/HT ratio keeping in view the techno economic considerations.

5.4.12 SCADA and data management systems are useful for efficient working of Distribution Systems. A time bound programme for implementation of SCADA and data management system should be obtained from Distribution Licensees and approved by the SERCs keeping in view the techno economic considerations. Efforts should be made to install substation automation equipment in a phased manner.

5.4.13 The Act has provided for stringent measures against theft of electricity. The States and distribution utilities should ensure effective implementation of these provisions. The State Governments may set up Special Courts as envisaged in Section 153 of the Act.

5.5 RECOVERY OF COST OF SERVICES & TARGETTED SUBSIDIES

5.5.1 There is an urgent need for ensuring recovery of cost of service from consumers to make the power sector sustainable.

5.5.2 A minimum level of support may be required to make the electricity affordable for consumers of very poor category. Consumers below poverty line who consume below a specified level, say 30 units per month, may receive special support in terms of tariff which are cross-subsidized. Tariffs for such designated group of consumers will be at least 50 % of the average (overall) cost of supply. This provision will be further re-examined after five years.

5.5.3 Over the last few decades cross-subsidies have increased to unsustainable levels. Cross-subsidies hide inefficiencies and losses in operations. There is urgent need to correct this imbalance without giving tariff shock to consumers. The existing cross-subsidies for other categories of consumers would need to be reduced progressively and gradually.

5.5.4 The State Governments may give advance subsidy to the extent they consider appropriate in terms of section 65 of the Act in which case necessary budget provision would be required to be made in advance so that the utility does not suffer financial problems that may affect its operations. Efforts would be made to ensure that the subsidies reach the targeted beneficiaries in the most transparent and efficient way.

5.6 TECHNOLOGY DEVELOPMENT AND R&D

5.6.1 Effective utilization of all available resources for generation, transmission and distribution of electricity using efficient and cost effective technologies is of paramount importance. Operations and management of vast and complex power systems require coordination among the multiple agencies involved. Effective control of power system at state, regional and national level can be achieved only through use of Information Technology. Application of IT has great potential in reducing technical & commercial losses in distribution and providing consumer friendly services.

Integrated resource planning and demand side management would also require adopting state of the art technologies.

Special efforts would be made for research, development demonstration and commercialization of non-conventional energy systems. Such systems would need to meet international standards, specifications and performance parameters.

5.6.2 Efficient technologies, like super critical technology, IGCC etc and large size units would be gradually introduced for generation of electricity as their cost effectiveness is established. Simultaneously, development and deployment of technologies for productive use of fly ash would be given priority and encouragement.

5.6.3 Similarly, cost effective technologies would require to be developed for high voltage power flows over long distances with minimum possible losses. Specific information technology tools need to be developed for meeting the requirements of the electricity industry including highly sophisticated control systems for complex generation and transmission operations, efficient distribution business and user friendly consumer interface.

5.6.4 The country has a strong research and development base in the electricity sector which would be further augmented. R&D activities would be further intensified and Missions will be constituted for achieving desired results in identified priority areas. A suitable funding mechanism would be evolved for promoting R& D in the Power Sector. Large power companies should set aside a portion of their profits for support to R&D.

5.7 COMPETITION AIMED AT CONSUMER BENEFITS

5.7.1 To promote market development, a part of new generating capacities, say 15% may be sold outside long-term PPAs . As the power markets develop, it would be feasible to finance projects with competitive generation costs outside the long-term power purchase agreement framework. In the coming years, a significant portion of the installed capacity of new generating stations could participate in competitive power markets. This will increase the depth of the power markets and provide alternatives for both generators and licensees/consumers and in long run would lead to reduction in tariff.
For achieving this, the policy underscores the following:-

a. It is the function of the Central Electricity Regulatory Commission to issue license for inter-state trading which would include authorization for trading throughout the country.
b. The ABT regime introduced by CERC at the national level has had a positive impact. It has also enabled a credible settlement mechanism for intra-day power transfers from licenses with surpluses to licenses experiencing deficits. SERCs are advised to introduce the ABT regime at the State level within one year.
c. Captive generating plants should be permitted to sell electricity to licensees and consumers when they are allowed open access by SERCs under section 42 of the Act .
d. Development of power market would need to be undertaken by the Appropriate Commission in consultation with all concerned.
e. The Central Commission and the State Commissions are empowered to make regulations under section 178 and section 181 of the Act respectively. These regulations will ensure implementation of various provisions of the Act regarding encouragement to competition and also consumer protection. The Regulatory Commissions are advised to notify various regulations expeditiously.
f. Enabling regulations for inter and intra State trading and also regulations on power exchange shall be notified by the appropriate Commissions within six months.

5.8 FINANCING POWER SECTOR PROGRAMMES INCLUDING PRIVATE SECTOR PARTICIPATION

5.8.1 To meet the objective of rapid economic growth and "power for all" including household electrification, it is estimated that an investment of the order of Rs.9,00,000 crores at 2002-03 price level would be required to finance generation, transmission, sub-transmission, distribution and rural electrification projects. Power being most crucial infrastructure, public sector investments, both at the Central Government and State Governments, will have to be stepped up. Considering the magnitude of the expansion of the sector required, a sizeable part of the investments will also need to be brought in from the private sector. The Act creates a conducive environment for investments in all segments of the industry, both for public sector and private sector, by removing barrier to entry in different segments. Section 63 of the Act provides for participation of suppliers on competitive basis in different segments which will further encourage private sector investment. Public service obligations like increasing access to electricity to rural households and small and marginal farmers have highest priority over public finances.

5.8.2 The public sector should be able to raise internal resources so as to at least meet the equity requirement of investments even after suitable gross budgetary support from the Government at the Centre and in the states in order to complete their on-going projects in a time-bound manner. Expansion of public sector investments would be dependent on the financial viability of the proposed projects. It would, therefore, be imperative that an appropriate surplus is generated through return on investments and, at the same time, depreciation reserve created so as to fully meet the debt service obligation. This will not only enable financial closure but also bankability of the project would be improved for expansion programmes, with the Central and State level public sector organizations, as also private sector projects, being in a position to fulfil their obligations toward equity funding and debt repayments.

5.8.3 Under sub-section (2) of Section 42 of the Act, a surcharge is to be levied by the respective State Commissions on consumers switching to alternate supplies under open access. This is to compensate the host distribution licensee serving such consumers who are permitted open access under section 42(2), for loss of the cross-subsidy element built into the tariff of such consumers. An additional surcharge may also be levied under sub-section (4) of Section 42 for meeting the fixed cost of the distribution licensee arising out of his obligation to supply in cases where consumers are allowed open access. The amount of surcharge and additional surcharge levied from consumers who are permitted open access should not become so onerous that it eliminates competition that is intended to be fostered in generation and supply of power directly to consumers through the provision of Open Access under Section 42(2) of the Act. Further it is essential that the Surcharge be reduced progressively in step with the reduction of cross-subsidies as foreseen in Section 42(2) of the Electricity Act 2003.

5.8.4 Capital is scarce. Private sector will have multiple options for investments. Return on investment will, therefore, need to be provided in a manner that the sector is able to attract adequate investments at par with, if not in preference to, investment opportunities in other sectors. This would obviously be based on a clear understanding and evaluation of opportunities and risks. An appropriate balance will have to be maintained between the interests of consumers and the need for investments.

5.8.5 All efforts will have to be made to improve the efficiency of operations in all the segments of the industry. Suitable performance norms of operations together with incentives and disincentives will need to be evolved along with appropriate arrangement for sharing the gains of efficient operations with the consumers . This will ensure protection of consumers' interests on the one hand and provide motivation for improving the efficiency of operations on the other.

5.8.6 Competition will bring significant benefits to consumers , in which case, it is competition which will determine the price rather than any cost plus exercise on the basis of operating norms and parameters. All efforts will need to be made to bring the power industry to this situation as early as possible, in the overall interest of consumers. Detailed guidelines for competitive bidding as stipulated in section 63 of the Act have been issued by the Central Government.

5.8.7 It will be necessary that all the generating companies, transmission licensees and distribution licensees receive due payments for effective discharge of their operational obligations as also for enabling them to make fresh investments needed for the expansion programmes. Financial viability of operations and businesses would, therefore, be essential for growth and development of the sector. Concerted efforts would be required for restoring the financial health of the sector. For this purpose, tariff rationalization would need to be ensured by the SERCs. This would also include differential pricing for base, intermediate and peak power.

5.8.8 Steps would also be taken to address the need for regulatory certainty based on independence of the regulatory commissions and transparency in their functioning to generate investor's confidence.

5.8.9 Role of private participation in generation, transmission and distribution would become increasingly critical in view of the rapidly growing investment needs of the sector. The Central Government and the State Governments need to develop workable and successful models for public private partnership. This would also enable leveraging private investment with the public sector finances. Mechanisms for continuous dialogue with industry for streamlining procedures for encouraging private participation in power sector need to be put in place.

Transmission & Distribution Losses

5.8.10 It would have to be clearly recognized that Power Sector will remain unviable until T&D losses are brought down significantly and rapidly. A large number of States have been reporting losses of over 40% in the recent years. By any standards, these are unsustainable and imply a steady decline of power sector operations. Continuation of the present level of losses would not only pose a threat to the power sector operations but also jeopardize the growth prospects of the economy as a whole. No reforms can succeed in the midst of such large pilferages on a continuing basis.

The State Governments would prepare a Five Year Plan with annual milestones to bring down these losses expeditiously. Community participation, effective enforcement, incentives for entities, staff and consumers, and technological upgradation should form part of campaign efforts for reducing these losses. The Central Government will provide incentive based assistance to States that are able to reduce losses as per agreed programmes.

5.9 ENERGY CONSERVATION

5.9.1 There is a significant potential of energy savings through energy efficiency and demand side management measures. In order to minimize the overall requirement, energy conservation and demand side management (DSM) is being accorded high priority. The Energy Conservation Act has been enacted and the Bureau of Energy Efficiency has been setup.

5.9.2 The potential number of installations where demand side management and energy conservation measures are to be carried out is very large. Bureau of Energy Efficiency (BEE) shall initiate action in this regard. BEE would also make available the estimated conservation and DSM potential, its staged implementation along with cost estimates for consideration in the planning process for National Electricity Plan.

5.9.3 Periodic energy audits have been made compulsory for power intensive industries under the Energy Conservation Act. Other industries may also be encouraged to adopt energy audits and energy conservation measures. Energy conservation measures shall be adopted in all Government buildings for which saving potential has been estimated to be about 30% energy. Solar water heating systems and solar passive architecture can contribute significantly to this effort.

5.9.4 In the field of energy conservation initial approach would be voluntary and self-regulating with emphasis on labelling of appliances. Gradually as awareness increases, a more regulatory approach of setting standards would be followed.

5.9.5 In the agriculture sector, the pump sets and the water delivery system engineered for high efficiency would be promoted. In the industrial sector, energy efficient technologies should be used and energy audits carried out to indicate scope for energy conservation measures. Motors and drive system are the major source of high consumption in Agricultural and Industrial Sector. These need to be addressed. Energy efficient lighting technologies should also be adopted in industries, commercial and domestic establishments.

5.9.6 In order to reduce the requirements for capacity additions, the difference between electrical power demand during peak periods and off-peak periods would have to be reduced. Suitable load management techniques should be adopted for this purpose. Differential tariff structure for peak and off peak supply and metering arrangements (Time of Day metering) should be conducive to load management objectives. Regulatory Commissions should ensure adherence to energy efficiency standards by utilities.

5.9.7 For effective implementation of energy conservation measures, role of Energy Service Companies would be enlarged. Steps would be taken to encourage and incentivise emergence of such companies.

5.9.8 A national campaign for bringing about awareness about energy conservation would be essential to achieve efficient consumption of electricity.

5.9.9. A National Action Plan has been developed. Progress on all the proposed measures will be monitored with reference to the specific plans of action.

5.10 ENVIRONMENTAL ISSUES

5.10.1 Environmental concerns would be suitably addressed through appropriate advance action by way of comprehensive Environmental Impact Assessment and implementation of Environment Action Plan (EAP).

5.10.2 Steps would be taken for coordinating the efforts for streamlining the procedures in regard to grant of environmental clearances including setting up of 'Land Bank' and 'Forest Bank'.

5.10.3 Appropriate catchment area treatment for hydro projects would also be ensured and monitored.

5.10.4 Setting up of coal washeries will be encouraged. Suitable steps would also be taken so that utilization of fly ash is ensured as per environmental guidelines.

5.10.5 Setting up of municipal solid waste energy projects in urban areas and recovery of energy from industrial effluents will also be encouraged with a view to reducing environmental pollution apart from generating additional energy.

5.10.6 Full compliance with prescribed environmental norms and standards must be achieved in operations of all generating plants.

5.11 TRAINING AND HUMAN RESOURCE DEVELOPMENT

In the new reforms framework ushered by Electricity Act 2003, it is particularly important that the electricity industry has access to properly trained human resource. Therefore, concerted action would be taken for augmenting training infrastructure so that adequate well-trained human resource is made available as per the need of the industry. Special attention would need to be paid by the

industry for establishing training infrastructure in the field of electricity distribution, regulation, trading and power markets. Efforts should be made so that personnel of electricity supply industry both in the private and public sector become more cost-conscious and consumer-friendly.

5.12 COGENERATION AND NON-CONVENTIONAL ENERGY SOURCES

5.12.1 Non-conventional sources of energy being the most environment friendly there is an urgent need to promote generation of electricity based on such sources of energy. For this purpose, efforts need to be made to reduce the capital cost of projects based on non-conventional and renewable sources of energy. Cost of energy can also be reduced by promoting competition within such projects. At the same time, adequate promotional measures would also have to be taken for development of technologies and a sustained growth of these sources.

5.12.2 The Electricity Act 2003 provides that co-generation and generation of electricity from non-conventional sources would be promoted by the SERCs by providing suitable measures for connectivity with grid and sale of electricity to any person and also by specifying, for purchase of electricity from such sources, a percentage of the total consumption of electricity in the area of a distribution licensee. Such percentage for purchase of power from non-conventional sources should be made applicable for the tariffs to be determined by the SERCs at the earliest. Progressively the share of electricity from non-conventional sources would need to be increased as prescribed by State Electricity Regulatory Commissions. Such purchase by distribution companies shall be through competitive bidding process. Considering the fact that it will take some time before non-conventional technologies compete, in terms of cost, with conventional sources, the Commission may determine an appropriate differential in prices to promote these technologies.

5.12.3 Industries in which both process heat and electricity are needed are well suited for cogeneration of electricity. A significant potential for cogeneration exists in the country, particularly in the sugar industry. SERCs may promote arrangements between the co-generator and the concerned distribution licensee for purchase of surplus power from such plants. Cogeneration system also needs to be encouraged in the overall interest of energy efficiency and also grid stability.

5.13 PROTECTION OF CONSUMER INTERESTS AND QUALITY STANDARDS

5.13.1 Appropriate Commission should regulate utilities based on pre-determined indices on quality of power supply. Parameters should include, amongst others, frequency and duration of interruption, voltage parameters, harmonics, transformer failure rates, waiting time for restoration of supply, percentage defective meters and waiting list of new connections. The Appropriate Commissions would specify expected standards of performance.

5.13.2 Reliability Index (RI) of supply of power to consumers should be indicated by the distribution licensee. A road map for declaration of RI for all cities and towns up to the District Headquarter towns as also for rural areas, should be drawn by up SERCs. The data of RI should be compiled and published by CEA.

5.13.3 It is advised that all State Commissions should formulate the guidelines regarding setting up of grievance redressal forum by the licensees as also the regulations regarding the Ombudsman and also appoint/designate the Ombudsman within six months.

5.13.4 The Central Government, the State Governments and Electricity Regulatory Commissions should facilitate capacity building of consumer groups and their effective representation before the Regulatory Commissions. This will enhance the efficacy of regulatory process.

6.0 COORDINATED DEVELOPMENT

6.1 Electricity being a concurrent subject, a well-coordinated approach would be necessary for development of the power sector. This is essential for the attainment of the objective of providing electricity-access to all households in next five years and providing reliable uninterrupted quality power supply to all consumers. The State Governments have a major role, particularly in creation of generation capacity, state level transmission and distribution. The Central Government would assist the States in the attainment of this objective. It would be playing a supportive role in fresh capacity addition and a major role in development of the National Grid. The State Governments need to ensure the success of reforms and restoration of financial health in distribution, which alone can enable the creation of requisite generation capacity. The Regulatory Commissions have the responsibility of ensuring that the regulatory processes facilitate the attainment of this objective. They also have a developmental role whose fulfillment would need a less formal and a consultative process.

The Electricity Act, 2003 also provides for mechanisms like "Coordination forum" and "Advisory Committees" to facilitate consultative process. The Act also requires the Regulatory Commissions to ensure transparency in exercise of their powers and in discharge of their functions. This in no way means that the Regulatory Commissions should follow formal judicial approach. In fact, quick disposal of matters would require an approach involving consultations with stakeholders.

6.2 Under the Act, the Regulatory Commissions are required to perform wide-ranging responsibilities. The appropriate Governments need to take steps to attract regulatory personnel with required background. The Govt. of India would promote the institutional capability to provide training to raise regulatory capacity in terms of the required expertise and skill sets. The appropriate Governments should provide financial autonomy to the Regulatory Commissions. The Act provides that the appropriate Government shall constitute a Fund under section 99 or section 103 of the Act, as the case may be, to be called as Regulatory Commission Fund. The State Governments are advised to establish this Fund expeditiously.

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RESOLUTION

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TARIFF POLICY

1.0 INTRODUCTION

1.1. In compliance with section 3 of the Electricity Act 2003 the Central Government hereby notifies the Tariff policy in continuation of the National Electricity Policy (NEP) notified on 12th February 2005.

1.2. The National Electricity Policy has set the goal of adding new generation capacity of more than one lakh MW during the 10th and 11th Plan periods to have per capita availability of over 1000 units of electricity per year and to not only eliminate energy and peaking shortages but to also have a spinning reserve of 5% in the system. Development of the power sector has also to meet the challenge of providing access for electricity to all households in next five years.

1.3. It is therefore essential to attract adequate investments in the power sector by providing appropriate return on investment as budgetary resources of the Central and State Governments are incapable of providing the requisite funds. It is equally necessary to ensure availability of electricity to different categories of consumers at reasonable rates for achieving the objectives of rapid economic development of the country and improvement in the living standards of the people.

1.4. Balancing the requirement of attracting adequate investments to the sector and that of ensuring reasonability of user charges for the consumers is the critical challenge for the regulatory process. Accelerated development of the power sector and its ability to attract necessary investments calls for, inter alia, consistent regulatory approach across the country. Consistency in

approach becomes all the more necessary considering the large number of States and the diversities involved.

2.0 LEGAL POSITION

2.1 Section 3 (1) of the Electricity Act 2003 empowers the Central Government to formulate the tariff policy. Section 3 (3) of the Act enables the Central Government to review or revise the tariff policy from time to time.

2.2 The Act also requires that the Central Electricity Regulatory Commission (CERC) and State Electricity Regulatory Commissions (SERCs) shall be guided by the tariff policy in discharging their functions including framing the regulations under section 61 of the Act.

2.3 Section 61 of the Act provides that Regulatory Commissions shall be guided by the principles and methodologies specified by the Central Commission for determination of tariff applicable to generating companies and transmission licensees.

2.4 The Forum of Regulators has been constituted by the Central Government under the provisions of the Act which would, inter alia, facilitate consistency in approach specially in the area of distribution.

3.0 EVOLUTION OF THE POLICY

The tariff policy has been evolved in consultation with the State Governments and the Central Electricity Authority (CEA) and keeping in view the advice of the Central Electricity Regulatory Commission and suggestions of various stakeholders.

4.0 OBJECTIVES OF THE POLICY

The objectives of this tariff policy are to:

(a) Ensure availability of electricity to consumers at reasonable and competitive rates;

(b) Ensure financial viability of the sector and attract investments;

(c) Promote transparency, consistency and predictability in regulatory approaches across jurisdictions and minimise perceptions of regulatory risks;

(d) Promote competition, efficiency in operations and improvement in quality of supply.

5.0 GENERAL APPROACH TO TARIFF

5.1 Introducing competition in different segments of the electricity industry is one of the key features of the Electricity Act, 2003. Competition will lead

to significant benefits to consumers through reduction in capital costs and also efficiency of operations. It will also facilitate the price to be determined competitively. The Central Government has already issued detailed guidelines for tariff based bidding process for procurement of electricity by distribution licensees for medium or long-term period vide gazette notification dated 19th January, 2005.

All future requirement of power should be procured competitively by distribution licensees except in cases of expansion of existing projects or where there is a State controlled/owned company as an identified developer and where regulators will need to resort to tariff determination based on norms provided that expansion of generating capacity by private developers for this purpose would be restricted to one time addition of not more than 50% of the existing capacity.

Even for the Public Sector projects, tariff of all new generation and transmission projects should be decided on the basis of competitive bidding after a period of five years or when the Regulatory Commission is satisfied that the situation is ripe to introduce such competition.

5.2 The real benefits of competition would be available only with the emergence of appropriate market conditions. Shortages of power supply will need to be overcome. Multiple players will enhance the quality of service through competition. All efforts will need to be made to bring power industry to this situation as early as possible in the overall interests of consumers. Transmission and distribution, i.e. the wires business is internationally recognized as having the characteristics of a natural monopoly where there are inherent difficulties in going beyond regulated returns on the basis of scrutiny of costs.

5.3 Tariff policy lays down following framework for performance based cost of service regulation in respect of aspects common to generation, transmission as well as distribution. These shall not apply to competitively bid projects as referred to in para 6.1 and para 7.1 (6). Sector specific aspects are dealt with in subsequent sections.

a) Return on Investment

Balance needs to be maintained between the interests of consumers and the need for investments while laying down rate of return. Return should attract investments at par with, if not in preference to, other sectors so that the electricity sector is able to create adequate capacity. The rate of return should be such that it allows generation of reasonable surplus for growth of the sector.

The Central Commission would notify, from time to time, the rate of return on equity for generation and transmission projects keeping in view the assessment of overall risk and the prevalent cost of capital which shall be followed by the SERCs also. The rate of return notified by CERC for transmission may be adopted by the State Electricity Regulatory Commissions (SERCs) for distribution with appropriate modification taking into view the higher risks involved. For uniform approach in this matter, it would be desirable to arrive at a consensus through the Forum of Regulators.

While allowing the total capital cost of the project, the Appropriate Commission would ensure that these are reasonable and to achieve this objective, requisite benchmarks on capital costs should be evolved by the Regulatory Commissions.

Explanation: For the purposes of return on equity, any cash resources available to the company from its share premium account or from its internal resources that are used to fund the equity commitments of the project under consideration should be treated as equity subject to limitations contained in (b) below.

The Central Commission may adopt the alternative approach of regulating through return on capital.

The Central Commission may adopt either Return on Equity approach or Return on Capital approach whichever is considered better in the interest of the consumers.

The State Commission may consider 'distribution margin' as basis for allowing returns in distribution business at an appropriate time. The Forum of Regulators should evolve a comprehensive approach on "distribution margin" within one year. The considerations while preparing such an approach would, inter-alia, include issues such as reduction in Aggregate Technical and Commercial losses, improving the standards of performance and reduction in cost of supply.

b) Equity Norms

For financing of future capital cost of projects, a Debt : Equity ratio of 70:30 should be adopted. Promoters would be free to have higher quantum of equity investments. The equity in excess of this norm should be treated as loans advanced at the weighted average rate of interest and for a weighted average tenor of the long term debt component of the project after ascertaining the reasonableness of the interest rates and taking into account the effect of debt restructuring done, if any. In case of equity below the normative level, the actual equity would be used for determination of Return on Equity in tariff computations.

c) **Depreciation**

The Central Commission may notify the rates of depreciation in respect of generation and transmission assets. The depreciation rates so notified would also be applicable for distribution with appropriate modification as may be evolved by the Forum of Regulators.

The rates of depreciation so notified would be applicable for the purpose of tariffs as well as accounting.

There should be no need for any advance against depreciation.

Benefit of reduced tariff after the assets have been fully depreciated should remain available to the consumers.

d) **Cost of Debt**

Structuring of debt, including its tenure, with a view to reducing the tariff should be encouraged. Savings in costs on account of subsequent restructuring of debt should be suitably incentivised by the Regulatory Commissions keeping in view the interests of the consumers.

e) **Cost of Management of Foreign Exchange Risk**

Foreign exchange variation risk shall not be a pass through. Appropriate costs of hedging and swapping to take care of foreign exchange variations should be allowed for debt obtained in foreign currencies. This provision would be relevant only for the projects where tariff has not been determined on the basis of competitive bids.

f) **Operating Norms**

Suitable performance norms of operations together with incentives and dis-incentives would need be evolved along with appropriate arrangement for sharing the gains of efficient operations with the consumers. Except for the cases referred to in para 5.3 (h)(2), the operating parameters in tariffs should be at "normative levels" only and not at "lower of normative and actuals". This is essential to encourage better operating performance. The norms should be efficient, relatable to past performance, capable of achievement and progressively reflecting increased efficiencies and may also take into consideration the latest technological advancements, fuel, vintage of

equipments, nature of operations, level of service to be provided to consumers etc. Continued and proven inefficiency must be controlled and penalized.

The Central Commission would, in consultation with the Central Electricity Authority, notify operating norms from time to time for generation and transmission. The SERC would adopt these norms. In cases where operations have been much below the norms for many previous years, the SERCs may fix relaxed norms suitably and draw a transition path over the time for achieving the norms notified by the Central Commission.

Operating norms for distribution networks would be notified by the concerned SERCs. For uniformity of approach in determining such norms for distribution, the Forum of Regulators should evolve the approach including the guidelines for treatment of state specific distinctive features.

g) Renovation and Modernatisation

Renovation and modernization (it shall not include periodic overhauls) for higher efficiency levels needs to be encouraged. A multi-year tariff (MYT) framework may be prescribed which should also cover capital investments necessary for renovation and modernization and an incentive framework to share the benefits of efficiency improvement between the utilities and the beneficiaries with reference to revised and specific performance norms to be fixed by the Appropriate Commission. Appropriate capital costs required for pre-determined efficiency gains and/or for sustenance of high level performance would need to be assessed by the Appropriate Commission.

(h) Multi Year Tariff

1) Section 61 of the Act states that the Appropriate Commission, for determining the terms and conditions for the determination of tariff, shall be guided inter-alia, by multi-year tariff principles. The MYT framework is to be adopted for any tariffs to be determined from April 1, 2006. The framework should feature a five-year control period. The initial control period may however be of 3 year duration for transmission and distribution if deemed necessary by the Regulatory Commission on account of data uncertainties and other practical considerations. In cases of lack of reliable data, the Appropriate Commission may state assumptions in MYT for first control period and a fresh control period may be started as and when more reliable data becomes available.

2) In cases where operations have been much below the norms for many previous years the initial starting point in determining the revenue requirement and the improvement trajectories should be recognized at "relaxed" levels and not the "desired" levels. Suitable benchmarking studies may be conducted to establish

the "desired" performance standards. Separate studies may be required for each utility to assess the capital expenditure necessary to meet the minimum service standards.

3) Once the revenue requirements are established at the beginning of the control period, the Regulatory Commission should focus on regulation of outputs and not the input cost elements. At the end of the control period, a comprehensive review of performance may be undertaken.

4) Uncontrollable costs should be recovered speedily to ensure that future consumers are not burdened with past costs. Uncontrollable costs would include (but not limited to) fuel costs, costs on account of inflation, taxes and cess, variations in power purchase unit costs including on account of hydro-thermal mix in case of adverse natural events.

5) Clear guidelines and regulations on information disclosure may be developed by the Regulatory Commissions. Section 62 (2) of the Act empowers the Appropriate Commission to require licensees to furnish separate details, as may be specified in respect of generation, transmission and distribution for determination of tariff.

(i) **Benefits under CDM**

Tariff fixation for all electricity projects (generation, transmission and distribution) that result in lower Green House Gas (GHG) emissions than the relevant base line should take into account the benefits obtained from the Clean Development Mechanism (CDM) into consideration, in a manner so as to provide adequate incentive to the project developers.

5.4 While it is recognized that the State Governments have the right to impose duties, taxes, cess on sale or consumption of electricity, these could potentially distort competition and optimal use of resources especially if such levies are used selectively and on a non- uniform basis.

In some cases, the duties etc. on consumption of electricity is linked to sources of generation (like captive generation) and the level of duties levied is much higher as compared to that being levied on the same category of consumers who draw power from grid. Such a distinction is invidious and inappropriate. The sole purpose of freely allowing captive generation is to enable industries to access reliable, quality and cost effective power. Particularly, the provisions relating to captive power plants which can be set up by group of consumers has been brought in recognition of the fact that efficient expansion of small and medium industries across the country will lead to faster economic growth and creation of larger employment opportunities.

For realizing the goal of making available electricity to consumers at reasonable and competitive prices, it is necessary that such duties are kept at reasonable level.

5.5 Though, as per the provisions of the Act, the outer limit to introduce open access in distribution is 27.1.2009, it would be desirable that, in whichever states the situation so permits, the Regulatory Commissions introduce such open access earlier than this deadline.

6.0 GENERATION

Accelerated growth of the generation capacity sector is essential to meet the estimated growth in demand. Adequacy of generation is also essential for efficient functioning of power markets. At the same time, it is to be ensured that new capacity addition should deliver electricity at most efficient rates to protect the interests of consumers. This policy stipulates the following for meeting these objectives.

6.1 Procurement of power

As stipulated in para 5.1, power procurement for future requirements should be through a transparent competitive bidding mechanism using the guidelines issued by the Central Government vide gazette notification dated 19th January, 2005. These guidelines provide for procurement of electricity separately for base load requirements and for peak load requirements. This would facilitate setting up of generation capacities specifically for meeting peak.

6.2 Tariff structuring and associated issues

(1) A two-part tariff structure should be adopted for all long term contracts to facilitate Merit Order dispatch. According to National Electricity Policy, the Availability Based Tariff (ABT) is to be introduced at State level by April 2006. This framework would be extended to generating stations (including grid connected captive plants of capacities as determined by the SERC). The Appropriate Commission may also introduce differential rates of fixed charges for peak and off peak hours for better management of load.

(2) Power Purchase Agreement should ensure adequate and bankable payment security arrangements to the Generating companies. In case of persisting default in spite of the available payment security mechanisms like letter of credit, escrow of cash flows etc. the generating companies may sell to other buyers.

(3) In case of coal based generating stations, the cost of project will also include reasonable cost of setting up coal washeries, coal beneficiation system and dry ash handling & disposal system.

6.3 Harnessing captive generation

Captive generation is an important means to making competitive power available. Appropriate Commission should create an enabling environment that encourages captive power plants to be connected to the grid.

Such captive plants could inject surplus power into the grid subject to the same regulation as applicable to generating companies. Firm supplies may be bought from captive plants by distribution licensees using the guidelines issued by the Central Government under section 63 of the Act.

The prices should be differentiated for peak and off-peak supply and the tariff should include variable cost of generation at actual levels and reasonable compensation for capacity charges.

Alternatively, a frequency based real time mechanism can be used and the captive generators can be allowed to inject into the grid under the ABT mechanism.

Wheeling charges and other terms and conditions for implementation should be determined in advance by the respective State Commission, duly ensuring that the charges are reasonable and fair.

Grid connected captive plants could also supply power to non-captive users connected to the grid through available transmission facilities based on negotiated tariffs. Such sale of electricity would be subject to relevant regulations for open access.

6.4 Non-conventional sources of energy generation including Co-generation:

(1) Pursuant to provisions of section 86(1)(e) of the Act, the Appropriate Commission shall fix a minimum percentage for purchase of energy from such sources taking into account availability of such resources in the region and its impact on retail tariffs. Such percentage for purchase of energy should be made applicable for the tariffs to be determined by the SERCs latest by April 1, 2006.

It will take some time before non-conventional technologies can compete with conventional sources in terms of cost of electricity. Therefore, procurement by distribution companies shall be done at preferential tariffs determined by the Appropriate Commission.

(2) Such procurement by Distribution Licensees for future requirements shall be done, as far as possible, through competitive bidding process under Section 63 of the Act within suppliers offering energy from same type of non-conventional sources. In the long-term, these technologies would need to compete with other sources in terms of full costs.

(3) The Central Commission should lay down guidelines within three months for pricing non-firm power, especially from non–conventional sources, to be followed in cases where such procurement is not through competitive bidding.

7.0 TRANSMISSION

The transmission system in the country consists of the regional networks, the inter-regional connections that carry electricity across the five regions, and the State networks. The national transmission network in India is presently under development. Development of the State networks has not been uniform and capacity in such networks needs to be augmented. These networks will play an important role in intra-State power flows and also in the regional and national flows. The tariff policy, insofar as transmission is concerned, seeks to achieve the following objectives:

1. Ensuring optimal development of the transmission network to promote efficient utilization of generation and transmission assets in the country;
2. Attracting the required investments in the transmission sector and providing adequate returns.

7.1 Transmission pricing

(1) A suitable transmission tariff framework for all inter-State transmission, including transmission of electricity across the territory of an intervening State as well as conveyance within the State which is incidental to such inter-state transmission, needs to be implemented with the objective of promoting effective utilization of all assets across the country and accelerated development of new transmission capacities that are required.

(2) The National Electricity Policy mandates that the national tariff framework implemented should be sensitive to distance, direction and related to quantum of power flow. This would be developed by CERC taking into consideration the advice of the CEA. Such tariff mechanism should be implemented by 1st April 2006.

(3)Transmission charges, under this framework, can be determined on MW per circuit kilometer basis, zonal postage stamp basis, or some other pragmatic variant, the ultimate objective being to get the transmission system users to share the total transmission cost in proportion to their respective utilization of the

transmission system. The overall tariff framework should be such as not to inhibit planned development/augmentation of the transmission system, but should discourage non-optimal transmission investment.

(4) In view of the approach laid down by the NEP, prior agreement with the beneficiaries would not be a pre-condition for network expansion. CTU/STU should undertake network expansion after identifying the requirements in consonance with the National Electricity Plan and in consultation with stakeholders, and taking up the execution after due regulatory approvals.

(5) The Central Commission would establish, within a period of one year, norms for capital and operating costs, operating standards and performance indicators for transmission lines at different voltage levels. Appropriate baseline studies may be commissioned to arrive at these norms.

(6) Investment by transmission developer other than CTU/STU would be invited through competitive bids. The Central Government will issue guidelines in three months for bidding process for developing transmission capacities. The tariff of the projects to be developed by CTU/STU after the period of five years or when the Regulatory Commission is satisfied that the situation is right to introduce such competition (as referred to in para 5.1) would also be determined on the basis of competitive bidding.

(7) After the implementation of the proposed framework for the inter-State transmission ,a similar approach should be implemented by SERCs in next two years for the intra-State transmission, duly considering factors like voltage, distance, direction and quantum of flow.

(8) Metering compatible with the requirements of the proposed transmission tariff framework should be established on priority basis. The metering should be compatible with ABT requirements, which would also facilitate implementation of Time of Day (ToD) tariffs.

7.2 Approach to transmission loss allocation

(1) Transactions should be charged on the basis of average losses arrived at after appropriately considering the distance and directional sensitivity, as applicable to relevant voltage level, on the transmission system. Based on the methodology laid down by the CERC in this regard for inter- state transmission, the Forum of Regulators may evolve a similar approach for intra-state transmission.

The loss framework should ensure that the loss compensation is reasonable and linked to applicable technical loss benchmarks. The benchmarks may be determined by the Appropriate Commission after considering advice of CEA.

It would be desirable to move to a system of loss compensation based on incremental losses as present deficiencies in transmission capacities are overcome through network expansion.

(2) The Appropriate Commission may require necessary studies to be conducted to establish the allowable level of system loss for the network configuration, and the capital expenditure required to augment the transmission system and reduce system losses. Since additional flows above a level of line loading leads to significantly higher losses, CTU/STU should ensure upgrading of transmission systems to avoid the situations of overloading. The Appropriate Commission should permit adequate capital investments in new assets for upgrading the transmission system.

7.3 Other issues in transmission

(1) Financial incentives and disincentives should be implemented for the CTU and the STU around the key performance indicators (KPI) for these organisations. Such KPIs would include efficient network construction, system availability and loss reduction.

(2) All available information should be shared with intending users by the CTU/STU and the load dispatch centers, particularly information on available transmission capacity and load flow studies.

8.0 DISTRIBUTION

Supply of reliable and quality power of specified standards in an efficient manner and at reasonable rates is one of the main objectives of the National Electricity Policy. The State Commission should determine and notify the standards of performance of licensees with respect to quality, continuity and reliability of service for all consumers. It is desirable that the Forum of Regulators determines the basic framework on service standards. A suitable transition framework could be provided for the licensees to reach the desired levels of service as quickly as possible. Penalties may be imposed on licensees in accordance with section 57 of the Act for failure to meet the standards.

Making the distribution segment of the industry efficient and solvent is the key to success of power sector reforms and provision of services of specified standards. Therefore, the Regulatory Commissions need to strike the right balance between the requirements of the commercial viability of distribution licensees and consumer interests. Loss making utilities need to be transformed into profitable ventures which can raise necessary resources from the capital markets to provide services of international standards to enable India to achieve its full growth potential.

Efficiency in operations should be encouraged. Gains of efficient operations with reference to normative parameters should be appropriately shared between consumers and licensees.

8.1 Implementation of Multi-Year Tariff (MYT) framework

1) This would minimise risks for utilities and consumers, promote efficiency and appropriate reduction of system losses and attract investments and would also bring greater predictability to consumer tariffs on the whole by restricting tariff adjustments to known indicators on power purchase prices and inflation indices. The framework should be applied for both public and private utilities.

2) The State Commissions should introduce mechanisms for sharing of excess profits and losses with the consumers as part of the overall MYT framework .In the first control period the incentives for the utilities may be asymmetric with the percentage of the excess profits being retained by the utility set at higher levels than the percentage of losses to be borne by the utility. This is necessary to accelerate performance improvement and reduction in losses and will be in the long term interest of consumers by way of lower tariffs.

3) As indicated in para 5.3 (h), the MYT framework implemented in the initial control period should have adequate flexibility to accommodate changes in the baselines consequent to metering being completed.

4) Licensees may have the flexibility of charging lower tariffs than approved by the State Commission if competitive conditions require so without having a claim on additional revenue requirement on this account in accordance with Section 62 of the Act .

5) At the beginning of the control period when the "actual" costs form the basis for future projections, there may be a large uncovered gap between required tariffs and the tariffs that are presently applicable. The gap should be fully met through tariff charges and through alternative means that could inter-alia include financial restructuring and transition financing.

6) Incumbent licensees should have the option of filing for separate revenue requirements and tariffs for an area where the State Commission has issued multiple distribution licenses, pursuant to the provisions of Section 14 of the Act read with para 5.4.7 of the National Electricity Policy.

7) Appropriate Commissions should initiate tariff determination and regulatory scrutiny on a suo moto basis in case the licensee does not initiate filings in time. It is desirable that requisite tariff changes come into effect from the date of commencement of each financial year and any gap on account of delay in filing should be on account of licensee.

8.2 Framework for revenue requirements and costs

8.2.1 The following aspects would need to be considered in determining tariffs:

(1) All power purchase costs need to be considered legitimate unless it is established that the merit order principle has been violated or power has been purchased at unreasonable rates. The reduction of Aggregate Technical & Commercial (ATC) losses needs to be brought about but not by denying revenues required for power purchase for 24 hours supply and necessary and reasonable O&M and investment for system upgradation. Consumers, particularly those who are ready to pay a tariff which reflects efficient costs have the right to get uninterrupted 24 hours supply of quality power. Actual level of retail sales should be grossed up by normative level of T&D losses as indicated in MYT trajectory for allowing power purchase cost subject to justifiable power purchase mix variation (for example, more energy may be purchased from thermal generation in the event of poor rainfall) and fuel surcharge adjustment as per regulations of the SERC.

(2) ATC loss reduction should be incentivised by linking returns in a MYT framework to an achievable trajectory. Greater transparency and nurturing of consumer groups would be efficacious. For government owned utilities improving governance to achieve ATC loss reduction is a more difficult and complex challenge for the SERCs. Prescription of a MYT dispensation with different levels of consumer tariffs in succeeding years linked to different ATC loss levels aimed at covering full costs could generate the requisite political will for effective action to reduce theft as the alternative would be stiffer tariff increases. Third party verification of energy audit results for different areas/localities could be used to impose area/locality specific surcharge for greater ATC loss levels and this in turn could generate local consensus for effective action for better governance. The SERCs may also encourage suitable local area based incentive and disincentive scheme for the staff of the utilities linked to reduction in losses.

The SERC shall undertake independent assessment of baseline data for various parameters for every distribution circle of the licensee and this exercise should be completed latest by March, 2007.

The SERC shall also institute a system of independent scrutiny of financial and technical data submitted by the licensees.

As the metering is completed upto appropriate level in the distribution network, latest by March, 2007, it should be possible to segregate technical losses. Accordingly technical loss reduction under MYT framework should then be treated as distinct from commercial loss reduction which require a different approach.

(3) Section 65 of the Act provides that no direction of the State Government regarding grant of subsidy to consumers in the tariff determined by the State Commission shall be operative if the payment on account of subsidy as decided by the State Commission is not made to the utilities and the tariff fixed by the State Commission shall be applicable from the date of issue of orders by the Commission in this regard. The State Commissions should ensure compliance of this provision of law to ensure financial viability of the utilities. To ensure implementation of the provision of the law, the State Commission should determine the tariff initially, without considering the subsidy commitment by the State Government and subsidised tariff shall be arrived at thereafter considering the subsidy by the State Government for the respective categories of consumers.

(4) Working capital should be allowed duly recognising the transition issues faced by the utilities such as progressive improvement in recovery of bills. Bad debts should be recognised as per policies developed and subject to the approval of the State Commission.

(5) Pass through of past losses or profits should be allowed to the extent caused by uncontrollable factors. During the transition period controllable factors should be to the account of utilities and consumers in proportions determined under the MYT framework.

(6) The contingency reserves should be drawn upon with prior approval of the State Commission only in the event of contingency conditions specified through regulations by the State Commission. The existing practice of providing for development reserves and tariff and dividend control reserves should be discontinued.

8.2.2. The facility of a regulatory asset has been adopted by some Regulatory Commissions in the past to limit tariff impact in a particular year. This should be done only as exception, and subject to the following guidelines:

a. The circumstances should be clearly defined through regulations, and should only include natural causes or force majeure conditions. Under business as usual conditions, the opening balances of uncovered gap must be covered through transition financing arrangement or capital restructuring;

b. Carrying cost of Regulatory Asset should be allowed to the utilities;

c. Recovery of Regulatory Asset should be time-bound and within a period not exceeding three years at the most and preferably within control period;

d. The use of the facility of Regulatory Asset should not be repetitive.

e. In cases where regulatory asset is proposed to be adopted, it should be ensured that the return on equity should not become unreasonably low in any year so that the capability of the licensee to borrow is not adversely affected.

8.3 Tariff design : Linkage of tariffs to cost of service

It has been widely recognised that rational and economic pricing of electricity can be one of the major tools for energy conservation and sustainable use of ground water resources.

In terms of the Section 61 (g) of the Act, the Appropriate Commission shall be guided by the objective that the tariff progressively reflects the efficient and prudent cost of supply of electricity.

The State Governments can give subsidy to the extent they consider appropriate as per the provisions of section 65 of the Act. Direct subsidy is a better way to support the poorer categories of consumers than the mechanism of cross-subsidizing the tariff across the board. Subsidies should be targeted effectively and in transparent manner. As a substitute of cross-subsidies, the State Government has the option of raising resources through mechanism of electricity duty and giving direct subsidies to only needy consumers. This is a better way of targetting subsidies effectively.

Accordingly, the following principles would be adopted:

1. In accordance with the National Electricity Policy, consumers below poverty line who consume below a specified level, say 30 units per month, may receive a special support through cross subsidy. Tariffs for such designated group of consumers will be at least 50% of the average cost of supply. This provision will be re-examined after five years.

2. For achieving the objective that the tariff progressively reflects the cost of supply of electricity, the SERC would notify roadmap within six months with a target that latest by the end of year 2010-2011 tariffs are within ± 20 % of the average cost of supply. The road map would also have intermediate milestones, based on the approach of a gradual reduction in cross subsidy.

For example if the average cost of service is Rs 3 per unit, at the end of year 2010-2011 the tariff for the cross subsidised categories excluding those referred to in para 1 above should not be lower than Rs 2.40 per unit and that for any of the cross-subsidising categories should not go beyond Rs 3.60 per unit.

3. While fixing tariff for agricultural use, the imperatives of the need of using ground water resources in a sustainable manner would also need to be kept in mind in addition to the average cost of supply. Tariff for agricultural use may be set at different levels for different parts of a state depending of the condition of the ground water table to prevent excessive depletion of ground water. Section 62 (3) of the Act provides that geographical position of any area could be one of the criteria for tariff differentiation. A higher level of subsidy could be considered to support poorer farmers of the region where adverse ground water table condition requires larger quantity of electricity for irrigation purposes subject to suitable restrictions to ensure maintenance of ground water levels and sustainable ground water usage.

4. Extent of subsidy for different categories of consumers can be decided by the State Government keeping in view various relevant aspects. But provision of free electricity is not desirable as it encourages wasteful consumption of electricity besides, in most cases, lowering of water table in turn creating avoidable problem of water shortage for irrigation and drinking water for later generations. It is also likely to lead to rapid rise in demand of electricity putting severe strain on the distribution network thus adversely affecting the quality of supply of power. Therefore, it is necessary that reasonable level of user charges are levied. The subsidized rates of electricity should be permitted only up to a pre-identified level of consumption beyond which tariffs reflecting efficient cost of service should be charged from consumers. If the State Government wants to reimburse even part of this cost of

electricity to poor category of consumers the amount can be paid in cash or any other suitable way. Use of prepaid meters can also facilitate this transfer of subsidy to such consumers.

5. Metering of supply to agricultural / rural consumers can be achieved in a consumer friendly way and in effective manner by management of local distribution in rural areas through commercial arrangement with franchisees with involvement of panchayat institutions, user associations, cooperative societies etc. Use of self closing load limitors may be encouraged as a cost effective option for metering in cases of "limited use consumers" who are eligible for subsidized electricity.

8.4 Definition of tariff components and their applicability

1. Two-part tariffs featuring separate fixed and variable charges and Time differentiated tariff shall be introduced on priority for large consumers (say, consumers with demand exceeding 1 MW) within one year. This would also help in flattening the peak and implementing various energy conservation measures.
2. The National Electricity Policy states that existing PPAs with the generating companies would need to be suitably assigned to the successor distribution companies. The State Governments may make such assignments taking care of different load profiles of the distribution companies so that retail tariffs are uniform in the State for different categories of consumers. Thereafter the retail tariffs would reflect the relative efficiency of distribution companies in procuring power at competitive costs, controlling theft and reducing other distribution losses.
3. The State Commission may provide incentives to encourage metering and billing based on metered tariffs, particularly for consumer categories that are presently unmetered to a large extent. The metered tariffs and the incentives should be given wide publicity.
4. The SERCs may also suitably regulate connection charges to be recovered by the distribution licensee to ensure that second distribution licensee does not resort to cherry picking by demanding unreasonable connection charges. The connection charges of the second licensee should not be more than those payable to the incumbent licensee.

8.5 Cross-subsidy surcharge and additional surcharge for open access

8.5.1 National Electricity Policy lays down that the amount of cross-subsidy surcharge and the additional surcharge to be levied from consumers who are permitted open access should not be so onerous that it eliminates competition which

is intended to be fostered in generation and supply of power directly to the consumers through open access.

A consumer who is permitted open access will have to make payment to the generator, the transmission licensee whose transmission systems are used, distribution utility for the wheeling charges and, in addition, the cross subsidy surcharge. The computation of cross subsidy surcharge, therefore, needs to be done in a manner that while it compensates the distribution licensee, it does not constrain introduction of competition through open access. A consumer would avail of open access only if the payment of all the charges leads to a benefit to him. While the interest of distribution licensee needs to be protected it would be essential that this provision of the Act, which requires the open access to be introduced in a time-bound manner, is used to bring about competition in the larger interest of consumers.

Accordingly, when open access is allowed the surcharge for the purpose of sections 38,39,40 and sub-section 2 of section 42 would be computed as the difference between (i) the tariff applicable to the relevant category of consumers and (ii) the cost of the distribution licensee to supply electricity to the consumers of the applicable class. In case of a consumer opting for open access, the distribution licensee could be in a position to discontinue purchase of power at the margin in the merit order. Accordingly, the cost of supply to the consumer for this purpose may be computed as the aggregate of (a) the weighted average of power purchase costs (inclusive of fixed and variable charges) of top 5% power at the margin, excluding liquid fuel based generation, in the merit order approved by the SERC adjusted for average loss compensation of the relevant voltage level and (b) the distribution charges determined on the principles as laid down for intra-state transmission charges.

Surcharge formula:

$$S = T - [\, C\,(1 + L / 100) + D \,]$$

Where

S is the surcharge

T is the Tariff payable by the relevant category of consumers;

C is the Weighted average cost of power purchase of top 5% at the margin excluding liquid fuel based generation and renewable power

D is the Wheeling charge

L is the system Losses for the applicable voltage level, expressed as a percentage

The cross-subsidy surcharge should be brought down progressively and, as far as possible, at a linear rate to a maximum of 20% of its opening level by the year 2010-11.

8.5.2 No surcharge would be required to be paid in terms of sub-section (2) of Section 42 of the Act on the electricity being sold by the generating companies with consent of the competent government under Section 43(A)(1)(c) of the Electricity Act, 1948 (now repealed) and on the electricity being supplied by the distribution licensee on the authorisation by the State Government under Section 27 of the Indian Electricity Act, 1910 (now repealed), till the current validity of such consent or authorisations.

8.5.3 The surcharge may be collected either by the distribution licensee, the transmission licensee, the STU or the CTU, depending on whose facilities are used by the consumer for availing electricity supplies. In all cases the amounts collected from a particular consumer should be given to the distribution licensee in whose area the consumer is located. In case of two licensees supplying in the same area the licensee from whom the consumer was availing supply shall be paid the amounts collected.

8.5.4 The additional surcharge for obligation to supply as per section 42(4) of the Act should become applicable only if it is conclusively demonstrated that the obligation of a licensee, in terms of existing power purchase commitments, has been and continues to be stranded, or there is an unavoidable obligation and incidence to bear fixed costs consequent to such a contract. The fixed costs related to network assets would be recovered through wheeling charges.

8.5.5 Wheeling charges should be determined on the basis of same principles as laid down for intra-state transmission charges and in addition would include average loss compensation of the relevant voltage level.

8.5.6 In case of outages of generator supplying to a consumer on open access, standby arrangements should be provided by the licensee on the payment of tariff for temporary connection to that consumer category as specified by the Appropriate Commission.

9.0 Trading Margin

The Act provides that the Appropriate Commission may fix the trading margin, if considered necessary. Though there is a need to promote trading in

electricity for making the markets competitive, the Appropriate Commission should monitor the trading transactions continuously and ensure that the electricity traders do not indulge in profiteering in situation of power shortages. Fixing of trading margin should be resorted to for achieving this objective.

Sd/-

(U.N. PANJIAR)
Additional Secretary to the Government of India

To

The Manager,
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भारत का राजपत्र
The Gazette of India

असाधारण

EXTRAORDINARY

भाग III- खण्ड 4

PART III-Section 4

प्राधिकार से प्रकाशित

PUBLISHED BY AUTHORITY

No. 26 NEW DELHI, MONDAY, JANUARY 18, 2010

CENTRAL ELECTRICITY REGULATORY COMMISSION

NEW DELHI

No. L-1/12/2010-CERC Dated: 14th January, 2010

NOTIFICATION

In exercise of powers conferred under sub-section (1) of Section 178 and Section 66 read with clause (y) of sub-section (2) of Section 178 of the Electricity Act, 2003 and all other powers enabling it in this behalf, and after previous publication, the Central Electricity Regulatory Commission hereby makes the following regulations for the development of market in power from Non Conventional Energy Sources by issuance of transferable and saleable credit certificates:

1. Short title and commencement and extent of application

1. These Regulations may be called the Central Electricity Regulatory Commission (Terms and Conditions for Recognition and Issuance of Renewable Energy Certificate for Renewable Energy Generation) Regulations, 2010.
2. These Regulations shall come into force from the date of their notification in the Official Gazette.
3. These Regulations shall apply throughout India except the State of Jammu and Kashmir.

2. Definitions and Interpretation:

(1) In these Regulations, unless the context otherwise requires,

a) **'Act'** means the 'Electricity Act, 2003 (36 of 2003);

b) **'Central Agency'** means the agency as may be designated by the Commission under clause (1) of Regulation 3;

c) **'Certificate'** means the renewable energy certificate issued by the Central Agency in accordance with the procedures laid down by it and under the provisions specified in these regulations;

d) **'Commission'** means the Central Electricity Regulatory Commission referred to in subsection (1) of Section 76 of the Act;

e) **'eligible entity'** means the entity eligible to receive the certificates under these regulations;

f) **'floor price'** means the minimum price as determined by the Commission in accordance with these regulations at and above which the certificate can be dealt in the power exchange;

g) **'forbearance price'** means the ceiling price as determined by the Commission in accordance with these regulations within which only the certificates can be dealt in the power exchange;

h) **'MNRE'** means the Ministry of New and Renewable Energy;

i) **'obligated entity'** means the entity mandated under clause (e) of sub-section (1) of Section 86 of the Act to fulfil the renewable purchase obligation;

j) **'Power Exchange'** means that power exchange which operates with the approval of the Commission;

k) []¹

l) **'renewable energy sources'** means renewable sources such as small hydro, wind, solar including its integration with combined cycle, biomass, bio fuel cogeneration, urban or municipal waste and such other sources as recognized or approved by MNRE;

m) **'renewable purchase obligation'** means the requirement specified by the State Commissions under clause (e) of sub-section (1) of Section 86 of the Act, for the obligated entity to purchase electricity from renewable energy sources;

n) **'State Agency'** means the agency in the concerned state as may be designated by the State Commission to act as the agency for accreditation and recommending the renewable energy projects for registration and to undertake such functions as may be specified under clause (e) of sub-section (1) of Section 86 of the Act;

o) **'State Commission'** means the State Commission referred to in sub-section (64) of Section 2 of the Act and includes a Joint Commission referred to in sub-section (1) of Section 83 of the Act;

p) **'Year'** means a financial year.

(2) Words and expressions used in these Regulations and not defined herein but defined in the Act or any other regulations issued by the Commission, shall have the same meaning assigned to them respectively in the Act, or such other regulations issued by the Commission.

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[1] Deleted vide Second Amendment Regulations, 2013 w.e.f. 11.7.2013

3. Central Agency and its functions:

(1) The Commission shall designate an agency as the Central Agency after satisfying itself that the said agency has the required capability of performing its functions as provided under these regulations.

(2) The functions of the Central Agency will be to undertake:

(i) registration of eligible entities,

(ii) issuance of certificates,

(iii) maintaining and settling accounts in respect of certificates,

(iv) repository of transactions in certificates, and

(v) such other functions incidental to the implementation of renewable energy certificate mechanism as may be assigned by the Commission from time to time.

(3) Subject to provisions of these regulations, the Central Agency, with approval of the Commission and after inviting comments from the State Agency shall issue a detailed procedure for registration of eligible entities, verification of generation of electricity and its injection into the grid by the eligible entity, issuance of certificates and other relevant and residual matters:

Provided that the detailed procedure shall be prepared by the Central Agency and submitted to the Commission for approval within sixty days from the date of notification of these regulations:

Provided further that while preparing the detailed procedure the Central Agency shall give three weeks time to the State Agency and other stakeholders for comments:

Provided also that the Commission may at any time either on its own motion or on an application or representation made by any interested party direct the Central Agency to modify, add or delete any of the provisions of the detailed procedure as deemed appropriate and upon such directions by the Commission the detailed procedure shall be implemented with such modifications.

(4) The Commission may issue directions to the Central Agency in regard to the discharge of its functions and the Central Agency shall always act in accordance with the directions issued by the Commission.

4. Categories of Certificates:

(1) There shall be two categories of certificates, viz., solar certificates issued to eligible entities for generation of electricity based on solar as renewable energy source, and non-solar certificates issued to eligible entities for generation of electricity based on renewable energy sources other than solar:

(2) The solar certificate shall be sold to the obligated entities to enable them to meet their renewable purchase obligation for solar, and non-solar certificate shall be sold to the obligated entities to enable them to meet their obligation for purchase from renewable energy sources other than solar.

5. Eligibility and Registration for Certificates:

(1) A generating company engaged in generation of electricity from renewable energy sources shall be eligible to apply for registration for issuance of and dealing in Certificates if it fulfils the following conditions:

a. it has obtained accreditation from the State Agency;

[(b) it does not have any power purchase agreement for the capacity related to such generation to sell electricity, with the obligated entity for the purpose of meeting its renewable purchase obligation, at a tariff determined under section 62 or adopted under Section 63 of the Act by the Appropriate Commission:

Provided that in case of renewable energy sources based co-generation plants, the connected load capacity as assessed or sanctioned by the concerned distribution licensee, shall be considered as the capacity for captive consumption for the purpose of issue of certificates, irrespective of the capacity of such plants covered under the power purchase agreement.][2]

c. it sells the electricity generated either (i) to the distribution licensee of the area in which the eligible entity is located, [at the pooled cost of power purchase of such distribution licensee as determined by the appropriate commission][3] (ii) to any other licensee or to an open access consumer at a mutually agreed price, or through power exchange at market determined price.

Explanation. - for the purpose of these regulations 'Pooled Cost of Purchase' means the weighted average pooled price at which the distribution licensee has purchased the electricity including cost of self generation, if any, in the previous year from all the energy suppliers long-term and short-term, but excluding those based on renewable energy sources, as the case may be.

[Provided that such a generating company having entered into a power purchase agreement for sale of electricity, with the obligated entity for the purpose of meeting its renewable purchase obligation, at a tariff determined under Section 62 or adopted under section 63 of the Act by the Appropriate Commission shall not, in case of pre-mature termination of the agreement, be eligible for participating in the Renewable Energy Certificate (REC) scheme for a period of three years from the date of termination of such agreement or till the scheduled date of expiry of power purchase agreement whichever is earlier ,if any order or ruling is found to have been passed by an Appropriate Commission or a competent court against the generating company for material breach of the terms and conditions of the said power purchase agreement:

[ ][4]

[Provided further that a renewable energy generator selling electricity component to third party through open access shall be eligible for the entire energy generated from such plant for participating in the REC scheme subject to the condition that such generator does not avail or does not propose to avail any benefit in the form of concessional/promotional transmission or wheeling charges or banking facility benefit:

Provided also that if such a renewable energy generator forgoes on its own, the benefits of concessional/promotional transmission or wheeling charges or banking facility benefit, it shall become eligible for participating in the REC scheme only after the date of forgoing such benefits:

Provided also that the above mentioned condition for renewable energy generator selling electricity component to third party through open access for participating in the REC scheme shall not apply if the benefits given to such renewable energy generator in the form of concessional transmission or wheeling charges and/or banking facility benefit are withdrawn by the concerned State Electricity Regulatory Commission and/or the State Government:

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[2] Substituted vide Second Amendment Regulations, 2013 w.e.f 11.7.2013

[3] Substituted vide Second Amendment Regulations, 2013 w.e.f 11.7.2013

[4] Initially added vide First Amendment Regulations, 2010 w.e.f. 1.10.2010 and later substituted vide Second Amendment Regulations, 2013 w.e.f. 11.7.2013 and later deleted vide Fourth Amendment Regulations, 2016 w.e.f. 30.3.2016

Provided also that if any dispute arises as to whether a renewable energy generator has availed such concessional/promotional benefits, the same shall be referred to the Appropriate Commission for decision.

Explanation: For the purpose of this Regulation, the expression "banking facility benefit" shall mean only such banking facility whereby any renewable energy generator gets the benefit of utilizing the banked energy at any time (including peak hours) even when it has injected into grid during off-peak hours."][5]

[(d) It does not sell electricity generated from the plant, either directly or through trader, to an obligated entity for compliance of the renewable purchase obligation by such entity.][6]

[(1A) A distribution licensee shall be eligible to apply for registration with the Central Agency for issuance of and dealing in Certificates if it fulfils the following conditions:

(a) It has procured renewable energy, in the previous financial year, at a tariff determined under Section 62 or adopted under Section 63 of the Act, in excess of the renewable purchase obligation as may be specified by the Appropriate Commission or in the National Action Plan on Climate Change or in the Tariff Policy, whichever is higher:

Provided that the renewable purchase obligation as may be specified for a year, by the Appropriate Commission should not be lower than that for the previous financial year.

Provided further that any shortfall in procurement against the non-solar or solar power procurement obligation set by the Appropriate Commission in the previous three years, including the shortfall waived or carried forward by the said Commission, shall be adjusted first and only the remaining additional procurement beyond the threshold renewable purchase obligation - being that specified by the Appropriate Commission or in the National Action Plan Climate Change or in the Tariff Policy, whichever is higher - shall be considered for issuance of RECs to the distribution licensees.

b) It has obtained a certification from the Appropriate Commission, towards procurement of renewable energy as provided in sub - clause (a) of this regulation.][7]

[(1B) A Captive Generating Plant (CGP) based on renewable energy sources, including renewable energy generating plant not fulfilling the conditions of CGP as prescribed in the Electricity Rules, 2005 but having self-consumption, shall not be eligible for participating in the REC scheme for the energy generated from such plant to the extent of self-consumption, if such a plant:

a) has been commissioned prior to 29th September 2010 or after 31st March 2016; or

b) is not registered with Central Agency under REC scheme on or before 30th June 2016.

Provided that a CGP based on renewable energy sources, including renewable energy generating plant not fulfilling the conditions of CGP as prescribed in the Electricity Rules, 2005 but having self-consumption, and fulfilling both the following conditions:

a) having date of commissioning between 29th September 2010 and 31st March 2016; and

b) registered with Central Agency under REC scheme on or before 30th June 2016

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[5] Added vide Fourth Amendment Regulations, 2016 w.e.f. 30.3.2016

[6] Added vide Second Amendment Regulations, 2013 w.e.f. 11.7.2013

[7] Added vide Third Amendment Regulations, 2014 w.e.f. 1.01.2015

shall be eligible for the entire energy generated from such plant for participating in the REC scheme subject to the condition that such plant does not avail or does not propose to avail any benefit in the form of concessional/promotional transmission or wheeling charges and/or banking facility benefit:

Provided further that if such plant meeting the eligibility criteria for REC, forgoes on its own, the benefits of concessional transmission or wheeling charges and/or banking facility benefit, it shall become eligible for participating in the REC scheme only after a period of three years has elapsed from the date of forgoing such benefits:

Provided also that the above mentioned condition for participating in the REC scheme shall not apply if the benefits given to such plant in the form of concessional transmission or wheeling charges and or banking facility benefit are withdrawn by the concerned State Electricity Regulatory Commission and/or the State Government:

Provided also that if any dispute arises as to whether a CGP or any other renewable energy generator has availed such concessional/promotional benefits, the same shall be referred to the Appropriate Commission for decision.

Explanation:- For the purpose of this regulation, the expression „banking facility benefit" shall mean only such banking facility whereby the CGP or any other renewable energy generator gets the benefit of utilizing the banked energy at any time (including peak hours) even when it has injected into grid during off-peak hours.]8

(2) The generating company [or the distribution licensee, as the case may be][9] after fulfilling the eligibility criteria as provided in clause (1) of this regulation may apply for registration with the Central Agency in such manner as may be provided in the detailed procedure:

(3) The Central Agency shall accord registration to such applicant within fifteen days from the date of application for such registration.

Provided that an applicant shall be given a reasonable opportunity of being heard before his application is rejected with reasons to be recorded in writing.

(4) A person aggrieved by the order of the Central Agency under proviso to clause (3) of this regulation may appeal before the Commission within fifteen days from the date of such order, and the Commission may pass order, as deemed appropriate on such appeal.

6. Revocation of Registration

(1) If the Central Agency, after making an enquiry or based on the report of the Compliance Auditors, is satisfied that public interests so require, it may revoke registration of the eligible entity in any of the following cases, namely:-

(a) where the eligible entity, in the opinion of the Central Agency, makes wilful and prolonged default in doing anything required of him by or under these regulations;

(b) where the eligible entity breaks any of the terms and conditions of its accreditation or registration, the breach of which is expressly declared by such accreditation or registration to render it liable to revocation;

(c) where the eligible entity fails within the period required in this behalf by the Central Agency - (i) to show, to the satisfaction of the Central Agency, that it is in a position fully and efficiently to discharge the duties and obligations imposed on it by its accreditation or registration; or (ii) to make the deposit or furnish the security, or pay the fees or other charges required by its accreditation or registration.

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[8] Inserted vide Fourth Amendment Regulations, 2016 w.e.f. 30.3.2016

[9] Added vide Third Amendment Regulations, 2014 w.e.f. 1.01.2015

(2) The Central Agency before revoking the registration under Clause (1) of this regulation shall give to the eligible entity reasonable opportunity for being heard.

(3) Notwithstanding the provisions of sub-regulations (2) and (3) above, the Commission may from time to time direct the Central Agency to initiate enquiry and/or revocation process if the Commission deems it fit where any or all of the conditions as at clauses (a) to (c) of sub-regulation (1) exist.

(4) A person aggrieved by the order of the Central Agency under proviso to clause (1) of this regulation may appeal before the Commission within fifteen days of such order being communicated, and the Commission may pass order, as deemed appropriate on such appeal.

7. Denomination and issuance of Certificates

(1) [The eligible entity [other than distribution licensee][10] shall apply to the Central Agency for certificates within six months from the corresponding generation from eligible renewable energy projects:

Provided that the application for issuance of certificates may be made on 10th, 20th and last day of the month.][11]

[(1A) The eligible distribution licensees shall apply to the Central Agency for Certificates within three months from the date of obtaining the certification, as provided in clause (1 A) of the Regulation 5, from the concerned Appropriate Commission.][12]

(2) The Certificates shall be issued to the eligible entity after the Central Agency duly satisfies itself that all the conditions for issuance of Certificate, as may be stipulated in the detailed procedure, are complied with by the eligible entity:

(3) The Certificates shall be issued by the Central Agency within fifteen days from the date of application by the eligible entities.

(4) The Certificates shall be issued to the eligible entity on the basis of the units of electricity generated from renewable energy sources and injected into the Grid [or deemed to be injected in case of self consumption by eligible [captive generating plant][13]][14] and duly accounted in the Energy Accounting System as per the Indian Electricity Grid Code or the State Grid Code as the case may be, and the directions of the authorities constituted under the Act to oversee scheduling and dispatch and energy accounting, or based on written communication of distribution licensee to the concerned State Load Dispatch Centre with regard to the energy input by renewable energy generators which are not covered under the existing scheduling and dispatch procedures.

(5) The process of certifying the energy injection shall be as stipulated in the detailed procedures to be issued by the Central agency.

[(6) Each Certificate issued shall represent one Megawatt hour of electricity generated from renewable energy source e and injected or deemed to be injected (in case of self consumption by eligible [captive generating plant][15] into the grid.][16]

[(7) The Commission shall determine through a separate order, the quantum of Certificate to be issued to the eligible entities being the solar generating companies registered under REC

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[10] Added vide Third Amendment Regulations, 2014 w.e.f. 1.01.2015

[11] Substituted vide Second Amendment Regulations, 2013 w.e.f. 11.7.2013

[12] Added vide Third Amendment Regulations, 2014 w.e.f. 1.01.2015

[13] Substituted vide Second Amendment Regulations, 2013 w.e.f. 11.7.2013

[14] Added vide First Amendment Regulations, 2010 w.e.f. 1.10.2010

[15] Substituted vide Second Amendment Regulations, 2013 w.e.f. 11.7.2013

[16] Substituted vide First Amendment Regulations, 2010 w.e.f. 1.10.2010

framework prior to 1st January 2015, for one Megawatt hour of electricity generated and injected into the grid or deemed to be injected (in case of self-consumption by eligible CGP) into the grid as per the following formula:

Vintage Multiplier=Floor Price of Base Year / Current Year Floor Price

Where,

i. "Base year" means the year 2012-13 being the year in which the floor price was determined for solar REC for a period of five years"

(8) The vintage multiplier as specified in clause (7) of this Regulation shall be provided to the solar generating companies registered under REC framework prior 1st January 2015 and shall be applicable [for the existing and future solar RECs][17] for the period from 1st January 2015 up to 31 st March 2017, after which such projects shall be eligible for one REC for one megawatt hour of electricity generated.][18]

8. Dealing in the certificates

(1) [Unless otherwise specifically permitted by the Commission by order, the certificate shall be dealt only through the power exchange and not in any other manner except as provided in clause (3) of this regulation.][19]

(2) The Certificate issued to eligible entity by the Central Agency may be placed for dealing in any of the Power Exchanges as the Certificate holder may consider appropriate, and such Certificate shall be available for dealing in accordance with the rules and byelaws of such Power Exchange:

Provided that the Power Exchanges shall obtain prior approval of the Commission on the rules and byelaws including the mechanism for discovery of price of the Certificates in the Power Exchange.

[(3) An eligible renewable energy generator including an eligible captive generating plant shall be permitted to retain the certificates for offsetting its renewable purchase obligation as a consumer subject to certification and verification by the concerned State Agency:][20]

9. Pricing of Certificate

(1) The price of Certificate shall be as discovered in the Power Exchange:

Provided that the Commission may, in consultation with the Central Agency and Forum of Regulators from time to time provide for the floor price and forbearance price separately for solar and non-solar Certificates.

(2) The Commission while determining the floor price and forbearance price, shall be guided inter alia by the following principles:

(a) Variation in cost of generation of different renewable energy technologies falling under solar and non-solar category, across States in the country:

(b) Variation in the Pooled Cost of Purchase across States in the country;

(c) Expected electricity generation from renewable energy sources including:-

(i) expected renewable energy capacity under [tariff, for sale of electricity to an obligated entity for the purpose of meeting its renewable purchase obligations,

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[17] Inserted vide Corrigendum dated 27.01.2015

[18] Added vide Third Amendment Regulations, 2014 w.e.f. 1.01.2015

[19] Substituted vide Second Amendment Regulations, 2013 w.e.f. 11.7.2013

[20] Added vide Second Amendment Regulations, 2013 w.e.f. 11.7.2013 later substituted vide Fourth Amendment Regulations, 2016 w.e.f. 30.3.2016

determined under Section 62 or adopted under Section 63 of the Act by the Appropriate Commission.][21]

(ii) expected renewable energy capacity under mechanism of certificates;

(d) Renewable purchase obligation targets set by various State Commissions.

10. Validity and extinction of Certificates

(1) [[After registration, the renewable energy generation plant shall be eligible for issuance of Certificates under these Regulations from the date of commercial operation or from the date of registration of such plant by the Central Agency whichever is later:

[Provided further that the Certificate issued under these regulations shall remain valid for one thousand and ninety five days from the date of issuance:

Provided that the RECs which expired in the financial year 2014-15 and the RECs issued till the date of effect of CERC (Terms and Conditions for recognition and issuance of Renewable Energy Certificate for Renewable Energy Generation) (Third Amendment) Regulations, 2014 shall remain valid for one thousand and ninety five days from the date of issuance or up to 31st March 2017, whichever is later.

Provided also that the Certificate issued to an eligible entity for the electricity generated at a time when such entity fulfilled the eligibility criteria for accreditation, shall remain valid for the said period of one thousand and ninety five days, even if accreditation of such entity is revoked at a later date:][22]

Provided that where an eligible entity has obtained accreditation and registration on the basis of false information or by suppressing material information and the accreditation of such entity is revoked at a later date, the Certificates already issued to such entity but not redeemed shall stand revoked from the date of issue of such Certificates and in respect of Certificates already redeemed, such entity shall deposit the amount realized from sale of such Certificates along with the interest with the Central Agency at the rate of two (2) percent in excess of the applicable State Bank of India Base rate per annum.]][23]

(2) Subject to the time limit as provided in clause (1) of this Regulation, a Certificate shall be deemed to have been extinguished after it has been exchanged by way of sale and purchase in the Power Exchange.

11. Fees and charges:

(1) The Commission may from time to time, based on the proposal in this regard from the Central Agency, determine, by order, the fees and charges payable by the eligible entities for participation in the scheme for registration, eligibility of certificates, issuance of certificates and other matters connected therewith.

(2) The fees and charges payable under these regulations may include one-time registration fee and charges, annual fee and charges, the transaction fee and charges for issue of certificate and charges for dealing in the certificate in accordance with these regulations, as the Commission may consider appropriate.

(3) The fees and charges paid by the eligible entities shall be collected by the Central Agency and utilised for the purpose of meeting the cost and expense towards the remuneration payable to the compliance auditors, the officers, employees, consultants and representatives engaged to perform the functions under these regulations.

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[21] Substituted vide Second Amendment Regulations, 2013 w.e.f. 11.7.2013

[22] Substituted vide Third Amendment Regulations, 2014 w.e.f. 1.01.2015

[23] Substituted vide Second Amendment Regulations, 2013 w.e.f. 11.7.2013

12. Funding for capacity building of State Agency:

(1) The Commission may, by order, provide for a certain percentage of the proceeds from the sale of Certificates for the purpose of training and capacity building of the State Agencies and other facilitative mechanisms for the implementation and monitoring of the detailed procedures issued by the Central Agency.

(2) The proceeds as provided under clause (1) of this regulation shall be collected by the power exchange and transferred to the Commission or such agency as may be directed by the Commission.

13. Appointment of compliance auditors:

(1) The Commission may, in consultation with the Central Agency, appoint from time to time compliance auditors to inquire into and report on the compliance of these Regulations by the person applying for registration, or on the compliance by the renewable energy generators in regard to the eligibility of the Certificates and all matters connected thereto.

(2) The compliance auditor shall have the qualifications and experience as contained in the Schedule to these Regulations:

Provided that the Commission may by order amend the Schedule from to time.

(3) The Commission may from time to time fix the remuneration and charges payable to such auditors and all such amount payable shall be met out of the funds which the Central Agency may collect from the eligible entities.

14. Power to give directions:

The Commission may from time to time issue such directions and orders as considered appropriate for the implementation of these regulations and for the development of market in power for Renewable Energy Sources.

15. Power to Relax:

The Commission may by general or special order, for reasons to be recorded in writing, and after giving an opportunity of hearing to the parties likely to be affected may relax any of the provisions of these regulations on its own motion or on an application made before it by an interested person.

Sd/-
(Alok Kumar)
Secretary

Schedule

Qualification of Auditors

The auditor could be an individual person or a firm having persons with qualification and experience in the following areas:

a. Finance or accounts or commerce, and

b. having qualifications and experience in the field of engineering with specialisation in generation, transmission or distribution of electricity, experience that demonstrates an adequate understanding of the electricity sector, institutions involved including Regulatory Commission, utilities, government institutions, State agencies and their roles and responsibilities.

Note:

The Central Electricity Regulatory Commission (Terms and Conditions for Recognition and Issuance of Renewable Energy Certificate for Renewable Energy Generation) Regulations, 2010 were notified in Part III, Section 4, No. 26 of the Gazette of India (Extraordinary) dated 18.1.2010 and amended vide:-

(a) First Amendment Regulations, 2010 published in Part III, Section 4, No. 249 of the Gazette of India (Extraordinary) dated 01.10.2010.

(b) Second Amendment Regulations, 2013 published in Part III, Section 4, No. 192 of the Gazette of India (Extraordinary) dated 11.7.2013.

(c) Third Amendment Regulations, 2014 published in Part III, Section 4, No. 380 of the Gazette of India (Extraordinary) dated 31.12.2014.

(d) Corrigendum dated 27.01.2015.

(e) Fourth Amendment Regulations, 2016 published in Part III, Section 4, No. 112 of the Gazette of India (Extraordinary) dated 30.03.2016.

IN THE HIGH COURT OF GUJARAT AT AHMEDABAD

SPECIAL CIVIL APPLICATION NO. 171 of 2011
With
CIVIL APPLICATION NO. 11627 of 2011
In
SPECIAL CIVIL APPLICATION NO. 564 of 2011
With
CIVIL APPLICATION NO. 10435 of 2012
In
SPECIAL CIVIL APPLICATION NO. 558 of 2011
With
SPECIAL CIVIL APPLICATION NO. 7084 of 2011
With
CIVIL APPLICATION NO. 10439 of 2012
In
SPECIAL CIVIL APPLICATION NO. 936 of 2011
With
SPECIAL CIVIL APPLICATION NO. 936 of 2011
With
CIVIL APPLICATION NO. 10440 of 2012
In
SPECIAL CIVIL APPLICATION NO. 791 of 2011
With
CIVIL APPLICATION NO. 10436 of 2012
In
SPECIAL CIVIL APPLICATION NO. 597 of 2011
With
SPECIAL CIVIL APPLICATION NO. 597 of 2011
With
CIVIL APPLICATION NO. 10434 of 2012
In
SPECIAL CIVIL APPLICATION NO. 8027 of 2011
With
SPECIAL CIVIL APPLICATION NO. 564 of 2011
With

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CIVIL APPLICATION NO. 10441 of 2012
In
SPECIAL CIVIL APPLICATION NO. 7084 of 2011
With
CIVIL APPLICATION NO. 10437 of 2012
In
SPECIAL CIVIL APPLICATION NO. 564 of 2011
With
CIVIL APPLICATION NO. 9013 of 2011
In
SPECIAL CIVIL APPLICATION NO. 171 of 2011
With
SPECIAL CIVIL APPLICATION NO. 8027 of 2011
With
SPECIAL CIVIL APPLICATION NO. 558 of 2011
With
SPECIAL CIVIL APPLICATION NO. 791 of 2011
With
SPECIAL CIVIL APPLICATION NO. 10471 of 2013

FOR APPROVAL AND SIGNATURE:

HONOURABLE MR.JUSTICE ANANT S. DAVE

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1 Whether Reporters of Local Papers may be allowed to see the judgment ?

2 To be referred to the Reporter or not ?

3 Whether their Lordships wish to see the fair copy of the judgment ?

4 Whether this case involves a substantial question of law as to the interpretation of the Constitution of India or any order made thereunder ?

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HINDALCO INDUSTRIES LIMITED (UNIT : BIRLA COPPER)....Petitioner(s)

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Versus

GUJARAT ELECTRICITY REGULATORY COMMISSION....Respondent(s)

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Appearance:

MR MIHIR THAKORE Senior Advocate with MR PERCY KAVINA Senior Advocate with MR SANDEEP SINGHI with MR SHAMIK BHATT for Singh & Company for the Petitioner(s) No. 1 [SCA Nos.171/2011, 597/2011, 564/2011 and 558/2011]

MR MIHIR H. JOSHI Senior Advocate with MR GAURAV S MATHUR for the Petitioner(s) No.1 [SCA Nos.7984/2011 & 10471/2013]

MR SN SOPARKAR Senior Advocate with MR RS SANJANWALA Senior Advocate with MR MAHESH SAHASRANAMAN [SCA No.791/2011]

MR KAMAL TRIVEDI Senior Advocate with MR BD KARIA, ADVOCATE for the Respondent-GERC in all SCAs and CAs

MR PM THAKKAR Senior Advocate with MR HEMAL K MAKWANA Advocate for the Applicant-Indian Wind Energy Association

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CORAM: **HONOURABLE MR.JUSTICE ANANT S. DAVE**

Date : 12/03/2015

COMMON CAV JUDGMENT

1 In all these nine petitions, the petitioners challenge the order dated 17.4.2010 and the regulations issued vide notification dated 17.4.2010, namely, the Gujarat Electricity Regulatory Commission (Procurement of Power from Renewable Sources] Regulations, 2010 (hereinafter referred to as 'the Regulations'] passed by the respondent, Gujarat Electricity Regulatory Commission, as being without

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jurisdiction, discriminatory, ultra-vires the Electricity Act, 2003, amounting to unreasonable restriction and violative of Articles 14 and 19(1)(g) of the Constitution of India. By the impugned order, the Gujarat Electricity Regulatory Commission, in exercise of power under Section 86(1)(e) of the Electricity Act, 2003 [for short, 'the Act'], has mandated all the petitioners, who are having 'captive power plant' [CPP] or 'captive generating plant' [CGP], to purchase electricity (in kWh) from renewable energy sources at a defined minimum percentage of their total consumption during a year, by treating them as 'Obligated Entities' and bringing them within the purview of 'Renewable Purchase Obligation'.

2 The common issue raised in all these petitions is based on interpretation of Section 86(1)(e) with other provisions of Electricity Act, 2003, Rules and Regulations, etc.

3 Details of the activities of the petitioners are as under:

Hindalco Industries Limited, petitioner of Special Civil Application No.171 of 2011, has set up a mega Greenfield copper smelting and refining. It produces copper cathodes and continuous cast copper rods. It has total capacity of the smelter upto 5 lakh tons per year at single location at Dahej.

Grasim Industries Limited, petitioner of

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Special Civil Application No.558 of 2011, is engaged in manufacture of cellulosic fibers. It has captive power plant unit i.e. Birla Cellulosic, at Kosamba, Dist: Bharuch.

Aditya Birla Nuvo Limited, petitioner of Special Civil Application No.564 of 2011, is engaged in manufacture of viscose filament yarn, caustic soda. It has captive power plant at Veraval.

Ultratech Cement Limited, petitioner of Special Civil Application No.597 of 2011, is engaged in manufacture of cement at Kovaya, Dist: Amreli and is having a number of units of CPP of different capacity under operation.

Reliance Industries Limited, petitioner of Special Civil Application No.791 of 2011, is engaged in oil refinery business at Jamnagar.

Arvind Limited, petitioner of Special Civil Application No.936 of 2011, is engaged in the business of textiles and clothing having multi product textile facility at Naroda road, Ahmedabad.

DCM Shriram Consolidated Limited, petitioner of Special Civil Application No.7084 of 2011, has a division at Bharuch in the name of Shriram Alkali & Chemicals. It is engaged in the business of manufacturing chlor-alkali products viz. caustic soda, chlorine, hydrogen and hydrochloric acid at its unit

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at Bharuch.

United Phosphorus Limited, petitioner of Special Civil Application No.8027 of 2011, is in the business of producing chloro alkalies and agro chemicals, at Jhagadia, Dist: Bharuch.

Nirma Limited, petitioner of Special Civil Application No.10471 of 2013, is engaged in the business of manufacturing soaps and detergent, soda ash, caustic soda, salt and pharmaceuticals. It has 6 units/divisions in Gujarat.

4 Admittedly, the petitioners are running various manufacturing plants in the State of Gujarat and they have, as a vital step towards making the plants self-sufficient in their energy requirements and for uninterrupted supply of power, installed 'captive power plant' [CPP] or 'captive generating plant' [CGP] at their respective units. It is the case of the petitioners that the CPPs came up during the time when the State of Gujarat was facing severe electricity shortage and unreliable electricity supply to the industries, which hampered industrial growth and production in the State. As a result, to overcome the shortage and unreliable power supply crisis, the State decided to promote CPPs/CGPs and, especially, encouraged co-generation to meet with power and steam requirements of the respective industries. The industry at large more particularly, the continuous process industries were also constrained to set up

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their own CPPs within the framework of the then prevailing Electricity Supply Act, 1948. Thus, the CPPs were set up by the industrial consumers with a huge investment.

5 The respondent framed Regulations vide notification dated 29.10.2005. The 2005 Regulations, in substance, provided for each Distribution Licensee to purchase a defined minimum quantum of its total consumption of electricity during a year from renewable sources. After considering the objections raised and hearing the interested parties, the respondent by order dated 8.5.2009 camp up with the draft of fresh Power Procurement from Renewable Sources Regulation, vide Notification No.1 of 2009. According to the 2009 Regulations, the minimum power purchase requirement from renewable sources was made applicable to the CPPs. The petitioners filed writ petitions challenging the order dated 8.5.2009 passed by the respondents. This Court [Coram: K.S. Jhaveri, J.], by order dated 9.11.2009, disposed of all the writ petitions as having become infructuous, since the impugned order dated 8.5.2009 passed by the respondent will not survive in the eyes of law on withdrawal of concerned Review Petition No.933 of 2008.

6 It is the case of the petitioners that, subsequently, the respondent prepared a new draft of Regulations on Power Procurement from Renewable Sources {dated 8.1.2010} which in substance were a replica of the earlier 2009 Regulations. A public

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hearing was conducted on 4.3.2010 and the petitioners raised objections. The respondent, after giving due consideration to the objections raised by various CPPs, passed the Regulations on 17.4.2010. The subject Regulations, qua the CPPs, have not been implemented by notification as on date, as is stated under clause 1(iv) of the Regulations which provides that Clause 8 of the Regulations, dealing with the RPO imposition upon the CPPs and open access users, shall come into force from a date to be notified by the respondent separately. However, clause 2(k) of the Regulations classifies the CPPs as 'Obligatory Entity' and clause 3(b) states that RPO would be applicable to a CPP having capacity of 5 MW and above, having been notified with effect from 17.4.2010. It is submitted that the issue of CPPs being at par with the renewable energy producers came up before the Appellate Tribunal for Electricity in the matter of Century Rayon vs. Maharashtra Electricity Regulatory Commission and others, and the Appellate Tribunal, by order dated 26.4.2010, held that CPPs are at par with renewable energy producers and thus RPPO cannot be imposed upon them.

7 The respondent passed order No.7 of 2010 and Notification No.4 of 2010 on 16.4.2010, designating the Gujarat Energy Development Agency (GEDA) as the State Agency for the purpose of the Procurement of power of Energy from Renewable Sources Regulations, (Notification No.3 of 2010) in addition to pre-assigned functions of accrediting and recommending the

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renewable energy projects for registration in the State. In the order dated 17.4.2010, the respondent held as under:

> [i] The Commission is empowered to frame the Regulations for procurement of power from renewable energy sources as a promotional measure. The Commission has jurisdiction to frame the Regulations.
>
> [ii] The Draft Regulations do not violate any provisions of the Constitution;
>
> [iii] The Commission decides to retain the provisions regarding RECs as included in the Draft Regulations;
>
> [iv] The proposed regulations, in no way, interfere with the operation of generating plants since RPO is not related to generation from such plants but to consumers availing generation from such CPPs.
>
> [v] Section 49 gives open access consumers the freedom to purchase electricity from 'any person'. Imposing an RPO does operate as a restriction on this freedom, since the specified percentage of the total consumption has to be from renewable energy sources (or to be compensated by purchasing RECs). However, it is a reasonable and permissible restriction.

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[vi] RPO shall be applied to consumption from CPPs with generating capacity of 5 MW or more.

[vii] For fulfilling the RPO, only the electricity generated or co-generated from renewable energy sources, can be considered eligible.

[viii] The Regulations are framed in pursuance of the powers vested in the Commission under section 181 of the Act. As such, power to seek compliance of the Regulations also vests with the Commission.

8. Learned Senior Advocates, Mr. Mihir Thakor, Mr. Percy Kavina, Mr. S.N.Soparkar, Mr. R.S.Sanjanwala and Mr. Mihir Joshi, appearing for the petitioner – companies strenuously urged that GERC erred in law as well as on facts in fastening obligation upon the petitioners by bringing them under purview of `obligated entities' inasmuch as while discharging functions under the Act, 2003, Regulatory Commission is to be guided by National Electricity Policy is National Electricity Plan and Tariff Policy published under Section 3 of the Act, 2003. That CGPs / GPPs are not obligated entities in view of their distinct status under Section 9 of the Part-III under the heading Generation of Electricity of Act, 2003, since CGPs are not under regulatory regional for availing licences etc. Learned counsels for the petitioners

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raised the following contentions:

[a] The respondent has no jurisdiction to pass the order impugned. The respondent has failed to appreciate the overall scheme of the Act and the scope of its limited regulatory powers qua CPPs. The Act recognizes the special provision of CPPs, which is reflected in Section 9 of the Act which starts with a non-obstante clause entitling a person to '.. construct, maintain or operate a captive generating plant and dedicated transmission lines'. Section 9(2) of the Act provides that, 'every person who has constructed a captive generating plant and maintains and operates such plant, shall have the right to open access for the purpose of carrying electricity from his captive generating plant to the destination of his use.' Proviso to Section 9(1) clearly indicates the limited extent of regulation which the Act contemplates over CPPs by providing that, "..... the supply of electricity from captive generating plant through the grid shall be regulated in the same manner as the generating station of a generating company.". Hence, the CPPs are outside the regulatory control of the respondent, except as it contemplated under the proviso to Section 9(1) of the Act and, consequently, Section 86(1)(e) cannot be pressed into service so as to extend the RPO to the CPPs.

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[b] The order impugned is outside the ambit and scope of Sections 86(1)(e), 61(h) and 181 of the Act, in as much as, these sections do not empower the respondent to create compulsory obligation upon a person requiring such person to purchase a certain quantity or percentage of electricity from such source as the respondent may require. No unbridled or unfettered discretion is conferred on the respondent under the Act to exercise powers in breach of the fundamental rights to frame such regulation specifying a quantum or percentage of power to be purchased from the renewable energy sources. The CPPs are outside the regulatory control of the respondent.

[c] The respondent has misconstrued the provisions of Section 86(1)(e) of the Act and wrongly held that both 'co-generation' and 'generation' relate to 'electricity from renewable sources of energy'. That, interpretation of the term 'co-generation' is contrary to the ratio laid down by the APTEL vide its order dated 26.4.2010 in the matter of Century Rayon vs. Maharashtra Electricity Regulatory Commission and others,wherein it is observed that co-generation of CPPs is at par with renewable energy producers and thus the RPPO cannot be imposed upon them. The principle of judicial discipline requires that the judgments of the higher appellate authorities should be followed scrupulously and unreservedly by its

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subordinate authorities. Failure thereof would amount to destructive of one of the basic principles of the administration of justice.

8.1 Section 86(1)(e) clearly mandates that both co-generation and generation of electricity from renewable sources of energy, are to be promoted. This section cannot be interpreted so as to mean that co-generation has also to be from renewable sources of energy since that would violate the language of the provision. Further more, consumption of electricity by a captive consumer from its captive power plant is not 'consumption of electricity in the area of distribution licensees' as contemplated in Section 86(1)(e). The test is not whether a captive consumer is within the geographical area of a distribution licensee but whether the captive consumer is supplied electricity by a licensee.

[d] The impugned Regulations are ultra vires the Act. That, the respondent has misconstrued the purport of the phrase contained in Section 86(1)(e) of the Act 'a percentage of the total consumption of electricity in the area of a distribution licensee' . It is submitted that, on true interpretation of Section 86(1)(e), it could only mean the electricity consumed in the area of supply of the distribution licensee as is distributed by the distribution licensee and cannot include CPPs simply because they are physically located within the area of a

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distribution licensee, notwithstanding the fact that the CPPs are otherwise outside the regulatory sphere of the respondent. Section 86(1)(e) has to be read subject to the non-obstante provision contained in Section 9 of the Act. A CPP in terms of Section 2(8) of the Act means, 'a power plant set up by any person to generate electricity primarily for his own use...'. An artificial distinction is pressed into service so as to avoid the mandate of Section 9 of the Act. Section 9 explicitly contemplates the right of the CPPs to (a) construct, (b) maintain or operate a captive generating plant, whereas, Section 86(1)(b) merely entitles the State Commission to regulate electricity purchase and procurement process of the distribution licensee. Hence, the respondent has no power to impose restriction which interferes with the right of the CPPs to freely construct, maintain or operate a captive generating plant in terms of the provisos to Section 9(1).

(e) Section 61 of the Act refers to fixation of tariff by the appropriate Commission which also contemplates that in doing so, the Commission shall be guided by 'the promotion of co-generation and the generation of electricity from renewable sources of energy' and, thus, there is no tariff fixation exercise by an appropriate commission involved in the use of electricity by

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a captive consumer from its captive power plant.

(f) Under the scheme of the Act, both renewable source of energy and co-generation power plant are equally entitled to be promoted by the State Commission through suitable methods and suitable directions, in view of the fact that co-generation plants, who provide many number of benefits to environment as well as to the public at large, are entitled to be treated at par with the other renewable energy sources. But, the captive users of electricity in co-generation mode have been discriminated in a hostile manner in as much as it denies the right of equality.

(g) As defined in the Electricity Rules, 2005, a captive consumer is really not a consumer but defined as a 'captive user' in Rule 3(2) (explanation)(1)(b).

(h) Mere use of fossil fuel would not make co-generation plant as a conventional plant.

(i) The respondent has failed to appreciate the waste heat recovery is classified as co-generation and the extent of waste heat recovery ought to have been given as a credit while imposing the RPO.

[j] The respondent has erred in observing, on the reading of definition of the word 'specified'

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as contained in Section 2(62) of the Act that the same implies that whenever the word 'specified' is used in the Act, the appropriate Commission is mandated to frame the relevant Regulations relating to the particular section(s) of the Act.

(k) That the impugned order is beyond the purview of Section 181 of the Act to frame the Regulation for procurement of power from renewable energy sources as a promotional measure. That the respondent has no power or jurisdiction to mandate compulsory purchase of electricity from a particular source.

(l) That the impugned resolution is arbitrary and violative of Articles 19(1)(g) and 301 of the Constitution of India. The action of the respondent in imposing upon the CPPs, the mandatory requirement to purchase renewable energy directly and proximately interferes with the exercise of freedom of trade guaranteed by Articles 19(1)(g) and 301 of the Constitution of India. The offending provisions contained in the Regulations constitute an unreasonable restriction on the petitioners' fundamental rights guaranteed under Articles 19(1)(g) of the Constitution of India and infringe the constitutional right of the petitioners of free trade and commerce under Article 301 of the Constitution of India.

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8.2 In addition to the submissions made herein above by the learned counsel for the petitioners, the following submissions are also taken note of and they are as under:

8.3 It is submitted that Section 86(1)(e) clearly mandates that both co-generation and generation of electricity from renewable sources of energy are to be promoted. That, this section cannot be interpreted so as to mean that co-generation has also to be from renewable sources of energy since that would violate the language of the provision. Furthermore, consumption of electricity by a captive consumer from its captive power plant is not 'consumption of electricity in the area of distribution licensees' as contemplated in Section 86(1)(e). That, the test is not whether the captive consumer is within the geographical area of a distribution licensee but whether the captive consumer is supplied with electricity by a licensee. To illustrate, a captive consumer, on an island mode who does not take any power from the distribution licensee but entirely relies upon its captive power plant, though being within the geographical area of a distribution licensee, would not fall within the contemplation of Section 86(1)[e] and no obligation for compulsory purchase can be inflicted on such a captive consumer. On the other hand, if a captive consumer relies upon the distribution licensee for 10% of its requirements or at times when its captive power plant is non operational or under maintenance, it

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cannot be said that such captive consumer will be fastened with the RPO for its entire power requirement, since that would be violative of Article 19(1)(g) of the Constitution of India. Not only that, to the extent that the captive consumer obtains power from a distribution licensee, a captive consumer is suffering the RPO, to the extent that a distribution licensee suffers the same. Reference may be made in this connection to the definitions contained in Sections 2(15) – consumer, 2(17) distribution licensee, 2(3) area of supply, 2(26) electricity trader, 2(8) captive generating plant, 2(70) supply and 2(71). Consumption, therefore, has to be read in the context of actual consumption through the distribution licensees.

8.4 Section 61 which refers to fixation of tariff by the appropriate commission, also contemplates that in so doing, the Commission shall be guided by 'the promotion of co-generation and the generation of electricity from renewable sources of energy'. Clearly, that is no tariff fixation exercise by an appropriate commission involved in the use of electricity by a captive consumer from its captive power plant.

8.5 The extent of RPO indicated in the subject Regulations is too high and no realistic study of the extent of electricity available from renewable energy sources was available or carried out, before framing the subject Regulations. The respondent has

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purportedly relied upon some assessment of availability of electricity from various renewable energy sources in the State with the help of GEDA, but no such study or material has been made available to the CPPs like the petitioner, nor is any such study detailed in the order impugned. There is nothing on record to demonstrate that the total electricity requirement of the Captive Power Consumer, should the subject Regulations be implemented, will be definitely met by producers of renewable energy.

8.6 The respondent has failed to appreciate that in view of the mismatch between the availability of renewable energy on the one hand and the demand which would be generated upon the implementation of RPO, makes the RPO unworkable, impractical and against the interest of Industry at large. The failure of the respondent to undertake a study of RE and the potential demand to be generated before framing the RPO is an abuse of purported jurisdiction of the respondent.

8.7 The respondent, while acknowledging the uncertainty in the availability of renewable energy, appears to suggest that REC is the remedy for such uncertainty and the resultant mismatch between the availability of renewable energy and the requirement of obligated entities to meet the RPO. On the one hand, Captive Consumers would be constrained to reduce the capacity of their CPPs as a consequence of meeting the RPO and then, once the capacity of its CPP is thus

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reduced, if electricity from renewable energy sources is not forthcoming and there is a demand-supply gap, the REC is hardly a solution for the industry.

8.8 The respondent has failed to appreciate that the captive consumption saves upto 20% of the transmission and distribution losses otherwise incurred, if this power was to be wheeled from the distant power plants of the Generators through the Distribution Licensees. Furthermore, it also saves concomitant fuel sources and emissions thereof.

8.9 The respondent has failed to appreciate that the Electricity Act 2003 recognizes the need to create competition. Section 61 of the Electricity Act lists out the guiding factors to determine the tariff and sub-section [c] of Section 61 reads as under:

> "[c] the factors which would encourage competition, efficiency, economical use of the resources, good performance and optimum investments."

The respondent has ignored the mandate of the guiding investments. The subject Regulations, which provide for special benefits and special status for producers of renewable energy, in the process creating unequal playing fields between such producers and CPPs are unfair, arbitrary and inconsistent with the object and purport of Section 61[c] of the Electricity Act 2003.

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8.10 The respondent has failed to appreciate that the concept of Renewable Energy Certificates is at its nascent stage. The subject Regulations contemplate the concept of Renewable Energy Certificates as provided in the Central Electricity Regulatory Commission (Terms and Conditions for recognition and issues of Renewable energy Certificate for Renewable Energy) Regulations, 2010. Rule 5.1 of the subject Regulations states that the REC issued shall be valid instruments for the discharge of the mandatory obligations set out in the subject Regulations for the obligated entity to purchase electricity from renewable energy sources. That, the mechanism of REC and Power Exchange has not been fully established as on date. In fact, the entire concept and mechanism of RECs and Power Exchange is in its infancy. Even in most of the developed countries, such concepts are at formative stages and is even otherwise, only applicable to distribution licensees and not to CPPs. Thus, levying an obligation on the CPPs without acquisition of large and accurate generates data, development of suitable enforcement mechanism would lead to erratic and adverse results on the industry at large. It was imperative before any such compulsory obligations are created and the mechanism of RECs and Power Exchange are enforced, that the basic groundwork in this respect, the modalities for such certificates and their trading, should have been first worked out and only then, any such regulations be considered. Enforcing regulations without as much as the clarity of concepts in question

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and without the mechanism in place, will surely create a chaos and inconceivable difficulty for the CPPs.

8.11 Under the scheme of the Act, both renewable source of energy and co-generation power plant, are equally entitled to be promoted by State Commission through the suitable methods and suitable directions, in view of the fact that co-generation plants, who provide many number of benefits to environment as well as to public at large, are to be entitled to be treated at par with the other renewable energy sources. The intention of the Legislature is to clearly promote co-generation in this industry generally irrespective of the nature of the fuel used for such co-generation and not co-generation or generation from renewable energy sources alone.

8.12 The impugned regulations are in violation of Article 14 of the Constitution of India. That the regulations are one sided in favour of the producers of power from renewable sources and discriminatory qua the captive and open access users.

[i] The respondent has erred in not following the mandate of the Act but rather taking the National Electricity Policy and the Tariff Policy as guiding principles, in implementing the Act.

9. While adopting the submissions made by the learned Senior Counsels appearing for the co-petitioners, Mr. S.N. Soparkar, learned Senior Counsel

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appearing for the petitioner in Special Civil Application No.791 of 2011, has contended that the Act requires the SERC to promote both renewable source of energy and co-generation by providing suitable measures, namely, (i) for connectivity with the grid and sale of electricity by such source; (ii) for compulsory purchase of electricity from such source of a specific percentage. The impugned Regulation, which proposes that each distribution licensee and captive and open access user/consumer shall purchase electricity from renewable source at a specified minimum percentage of his/her total consumption within the area of distribution licensee during a year, would run counter to law so enacted by the Act of 2003 by leaving out promotion of co-generation [except for co-generation from bio-fuel] as envisaged by the Act and giving discriminatory treatment to co-generation sources other than bio-fuel including bagasse based resources. Inclusion of CPP within obligated entity under the Regulation is beyond the purview of the Act and the Rules made thereunder in as much as including of CPP would result into significant disadvantage by putting an additional burden on co-generation power plant to purchase power generated from renewable source at a higher cost and without any requirement and, therefore, it would be violative of Articles 14, 19(1)(g) and 301 of the Constitution of India.

9.1 Under the scheme of the Act, both renewable source of energy and co-generation power plant are equally entitled to be promoted by State Commission

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through the suitable methods and suitable directions in view of the fact that co-generation plants, who provide many number of benefits to environment as well as to public at large, are to be entitled to be treated at par with the other renewable energy sources. The intention of the legislature is to clearly promote co-generation in the industry generally irrespective of the nature of the fuel used for such co-generation and not co-generation or generation from renewable energy sources alone.

9.2 In the peculiar facts of installation of CPP by the petitioner, it is submitted that the petitioner installed Heat Recovery System Generators [HRSG] which recover heat from exhaust of gas turbines and the same heat is used for industrial purpose and running steam turbines which are, in turn, used for further power generation. Learned Senior Counsel has placed reliance on Section 86(1) of the Act about functions of the State Commission and definition of 'co-generation' under Section 2(12) and submitted that, indisputably, co-generation based on fossil fuel has tremendous scope and significant contribution to the benefit for environment by way of curtailing emissions harmful to the atmosphere. The learned Senior Counsel has also relied upon efficiency factory of power plant based on thermal and combined cycle power plants having co-generation. According to the learned Senior Counsel, since generation includes co-generation, use of the word 'co-generation' separately in Section 86(1)(e) of the Act would be redundant if interpretation is

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afforded as canvassed by the learned counsel for the respondent-commission. Reliance is placed on the National Electricity Policy clauses 5.2.26, 5.12.3 and Tariff Policy of 2006 clauses 6.3 and 6.4 in addition to his submission about distinct status of captive power plant.

9.3 Thus, according to the learned Senior Counsel, a plain reading of Section 86(1)(e) of the Act would provide for discharge of following functions: (i) promote co-generation; (ii) promote generation of electricity from renewable source of energy; (iii) provide suitable measures for connectivity with the grid; (iv) for sale of electricity to any person and (v) specify percentage of total consumption of electricity in the area of distribution licensee for purchase of electricity produced by co-generator and generation through renewable source of energy. Inter-alia, reliance is placed on the decision dated 2.12.2013 of the Appellate Tribunal for Electricity in Appeal No.53 of 2012 that purchase obligation under Section 86(1)(e) of the Act can be fastened only from electricity generated from renewable source of energy and a distribution company cannot be fastened with obligation to purchase a percentage of consumption from fossil fuel based co-generation. Even reference is made to various regulations framed by the West Bengal Regulatory Commission for co-generation and generation of electricity from renewable source of energy, Regulations 2008, Rajasthan Electricity

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Regulatory Commission and Maharashtra Regulatory Commission exempting grid connected captive generated plants provided that such CPP consume power from fossil fuel based co-generation plants.

10 In support of the above contentions, learned counsels for the petitioners rely upon the judgment of the Appellate Tribunal of Electricity [APTEL], to which reference is made later on.

11 Affidavit-in-reply is filed on behalf of the respondent opposing the petition. In order to sustain the legality of the impugned order and the Regulations, the respondent has highlighted the following aspects:-

11. A reference is made to National Action Plan on Climate Change [for short 'NAPC'] and Eight National Missions formulated thereby representing multi-pronged, long-term and integrated strategies for achieving key goals in the context of climate change. The NAPC also, inter-alia, suggested 'Renewable Energy Technologies Programme' [for short, 'RET']. While referring to RETs for power generation, it is stated in NAPC with reference to grid connected system that the Electricity Act, 2003 and the Tariff Policy, 2006 provide for both the Central Electricity Regulatory Commission (CERA) and State Electricity Regulatory Commissions (SERC) to prescribe a certain percentage of total power to be purchased from renewable based sources. That, under Section 86 of the Act, functions

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of the Commission are prescribed whereby the Commission is required to specify a certain percentage of the 'total consumption' of electricity in the 'area of a distribution licensee' to be purchased from electricity generated from renewable sources. This is known as Renewable Purchase Obligation (RPO). Under Section 3 of the Act, the Central Government has formulated National Electricity Policy and the Tariff Policy. Both these policies recognise that since it will take some time for non-conventional electricity generators to compete effectively with conventional generators, the appropriate Commission may determine differential/preferential tariffs to promote these technologies. That, renewable sources of energy vary widely from one State/Region to another and as such it would be easy to meet RPO at 5% in some States whereas in other States it would be difficult and, therefore, the concept of a tradable Renewable Energy Certificate (REC) is introduced. Renewable energy generators would be issued RECs to the extent of power sold by them over and above the RPO. These RECs will be tradable, i.e. the same can be sold to purchasers in States where it is difficult to meet the RPO. The REC value is determined by a free market price discovery process through a 'power exchange.' In this manner, it can be ensured that renewable energy generators recover their costs and the RPO is in effect achieved in all States. CERC has framed regulations in exercise of power conferred under Section 178 of the Act for the development of market in power from non-conventional energy sources by issuance of

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transferable and saleable credit certificates. These regulations were notified on 14.1.2010 and are called as 'Central Electricity Regulatory Commission (Terms and Conditions for recognition and issuance of Renewable Energy Certificate for Renewable Energy Generation) Regulations, 2010'. In the context of the above, it is submitted that the RPO is percentage of 'consumption' of electricity. The category of the consumer is not material in as much as the policy objective is to ensure that 5% of the total electricity consumed be generated from renewable sources. In order to achieve this policy objective, it is necessary to impose RPO uniformly so as to ensure in totality 5% of the total electricity consumed be generated from renewable sources and, therefore, it is necessary that RPO is to be imposed under Section 86(1)(e) of the Act on distribution licensees, open access consumers as well as captive generation consumers as a regulatory measure.

11.2 Following preliminary objections are raised by the respondent with regard to maintainability of the petitions under Articles 226 and 227 of the Constitution of India.

11.3 That the Commission considered the submissions/ comments/ objections received from four objectors even after the stipulated time of filing the objection. Thereafter, hearing took place before the Commission on 4.3.2010 and, after following due procedure, the Regulation was published on 26.5.2010.

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The Regulations shall come into force from a date to be notified by the Commission separately, since the mechanism of REC was not in force on the date of notification of the Regulations. Thus, the said Regulations are yet to be made applicable to the petitioners having captive generating plant referred to in clause 8 of the said Regulations.

11.4 The petitioners have alternative efficacious remedy before the Appellate Tribunal to challenge the order impugned.

11.5 There is delay in filing the petitions challenging the impugned order.

11.6 The petitions are also not maintainable as REC Mechanism has been launched as per the report of Press Information Bureau dated 18.11.2010. It is stated in the Report that under this mechanism the RE Generator can sell the electricity component locally at the price of conventional electricity and trade the environmental attribute in the form of REC separately. Further, SERCs of other States have also framed similar Regulations.

11.7 The present petitions are filed only with a view to restrict the process the implementation of statutory provisions and National Action Plan of the Government of India for Climate Change.

12 Shri Kamal Trivedi, learned Senior Counsel

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appearing with Mr. Bhargav Karia for GERC made following submission on behalf of the respondents:

[I] According to learned Senior Counsel rationale for providing Renewable Purchase Obligation has its genesis in the Standing Committee on Energy (2002) Thirteen Lok Sabha in its 31st Report in the Electricity Bill, 2001 in para nos. (I)(v) of 1.16, para 3,18, 3.20 and 3.21 emphasized the need to promote non-conventional and renewable source based generation along with National Electricity Plan and Policy. GERC has published the Regulations under section 86(1)(e) read with section 181 of the Act.

[II] It is submitted that whether the word 'and' appearing in between co-generation and generation in Section 86(1)(e) of the Electricity Act, 2003 is disjunctive or conjunctive is required to be interpreted in its true perspective.

[i] The word 'and' between the words 'co-generation' and 'generation' is conjunctive and not disjunctive. Co-generation and generation are process or method of production of electricity in which the sources are utilized to get the final result.

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[ii] The aforesaid submission is further fortified by the use of the word 'sources' as appearing in Section 86(1)(e) as qualifying both generation and co-generation of electricity. The emphasis in Section 86(1)(e) is on the 'sources' of the energy and not on the 'technology' of production. The intention behind Section 86(1)(e) is to promote non-conventional and renewable sources of energy and not to promote fossil fuels.

[iii] In the above interpretation the words 'for purchase of electricity from such sources' have purposive interpretation to all words of the sentence because it gives meaning that the co-generation and generation from renewable sources are required to be promoted. The 'co-generation' and 'generation' of electricity as stated in the said section are both processes meant to utilize the input fuel which should be based on renewable energy sources. This would give a proper legal meaning to the section.

(iv) In support of the submission that the word 'and' between co-generation and generation is to be read as conjunctive and not disjunctive, reliance is placed on the decision of the Hon'ble Supreme Court in the case of Municipal Corporation of Delhi vs. Tek Chand Bhatia, reported in (1980) 1 SCC

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158 (paras 5 and 10).

[III] Applicability of Renewable Power Purchase Obligation to captive power plant owners who consume electricity from conventional or fossil fuel based generation.

In Section 86(1)(e) of the Act, it is stated that the Commission is required to specify, purchase of electricity from such sources a percentage of the total consumption of electricity in the area of distribution licensee. Here, the emphasis is on the words 'total consumption' and 'in the area of distribution licensee' for interpretation. On a combined reading of Section 2(3) and Section 86(1)(e) of the Act, it is clear that the area of distribution licensee referred to in the said section would mean the distribution license supply area in which the consumer receives power supply either from distribution licensee or from a third party through open access or from his power plant (Captive Generating Plant). Hence, while determining the total consumption of the electricity in the area of the distribution licensee consumption from all the above categories of persons is required to be considered. Thus, the said section recognizes that 'Renewable Purchase Obligation' is applicable to the total consumption. It is submitted that all the captive generating plants

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are situated in the license area of supply of any distribution licensee. Hence, it is incorrect to say that the electricity generated from CGP consumed by its owner is not part of the total consumption. The person who consumes the electricity generated from fossil fuel based (conventional source of energy) Captive Generating Plant is also required to include in its total consumption of electricity generated from renewable sources as specified by the Commission. If such person is not consuming the electricity from renewable sources based generation, he is required to purchase renewable energy and consume the same. Thus, the person who consumes electricity shall have to purchase renewable energy if he is not fulfilling the Renewable Purchase Obligation notified by the State Electricity Regulatory Commission for fulfillment of RPO. A Division Bench of the Rajasthan High Court has, in its judgment dated 31.8.2012 in D.B. Civil Writ Petition No.2772/2012 and others, on pages 58, 59, and 60, also held that the renewable purchase obligation is applicable to captive consumers who consume electricity from conventional source based generation.

[IV] Tariff determination has no relevance to the applicability of renewable purchase obligation.

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Part VII of the Electricity Act, 2003, which consists of Sections 61 to 65, deals with Tariff Regulations, determination of tariff, public notice for tariff and subsidy, if any, desired to be given by the Government. The various sections of the above Act describe the functioning of the Commission to carry out tariff determination. Section 86 falls under Part X of the Electricity Act, 2003 which pertains to State Regulatory Commissions. Sections 86(1)(a) to 86(1)(k) specify different and distinct functions from each other and are required to be complied with by the Commission in its entirety.

[V] On the issue as to whether the Renewable Purchase Obligation applies to purchase of energy or consumption of energy.

Sections 86(1)(e) specifically provides that the renewable purchase obligation is applicable to consumption of electricity. The electricity generated by the Captive Generating Plants is ultimately consumed by the owner of such plant and thus falls within the ambit of consumption, self or from the grid. The person who consumes the electricity generated from fossil fuel based (conventional source of energy) Captive Generating Plant is also required to include in its total consumption of electricity generated from renewable sources as specified by the Commission. If such person consumes the

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electricity generated from renewable sources of energy from its own captive generating plant, it is not required to purchase renewable energy. However, if such person is not consuming the electricity from renewable sources based generation, he is required to purchase renewable energy and consume the same. Thus, the person who consumes electricity shall have to purchase renewable energy if he is not fulfilling the Renewable Purchase Obligation notified by the State Electricity Regulatory Commission for fulfillment of RPO.

[VI] While opposing contention that co-generation is at par with the renewable electricity generation, it is submitted that as per definition under section 2(12) of 'co-generation', the words 'process, 'produces' and 'two or more forms of useful energy' are very important to decide what is co-generation and whether the same is equated with the renewable source of energy or not. The word 'process' which is included in the aforesaid definition refers to be methodology/production of electricity by utilizing the input energy from any source and the same is converted to other forms of energy by utilization of various plant and machinery. Co-generation and National generation are the processes in which the source i.e. input or source could be conventional viz. coal, oil, gas or non-conventional viz. wind, solar, bagasse,

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the input is processed and output in the form of electricity is obtained. Thus, co-generation is a method which gives two or more output (produced) of useful energy. The process for co-generation can utilize any of the sources viz. conventional energy source (fossil fuel), i.e. coal, oil and gas, or non-conventional energy source (renewable energy source) i.e. wind, solar, mini and micro hydro power plant, biomass, bagasse, and municipal solid waste. When the input energy source is coal, oil or gas, the electricity generated from it is called the electricity generated from conventional sources. Similarly, the electricity generated from non-conventional energy sources is called electricity generated from non-conventional sources. The process which is carried out to convert input energy source which is in fuel form to electricity and some other form of energy simultaneously is called co-generation. The energy source which is input to co-generation is important to decide whether the same is qualifying for promotion under Section 86(1)(e) of the Act. As mentioned earlier, the term 'co-generation' is defined in section 2(12) as 'a process which simultaneously produces two or more forms of useful energy (including electricity)'. The definition of co-generation is silent about the source, i.e input relevant for receiving the two outputs which is the end result. However, as per section 2 of the Electricity Act, 2003 which contains all

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definitions, the definitions given are qualified by the express 'in this Act, unless the context otherwise required'. In other words, the definition given in section 2 of the Act is to be interpreted in the context of the relevant provision of the section where the term is used. Hence, even though section 2(12) does not indicate the source, in the context of Section 86(1)(e) of the Act, the term 'co-generation' shall have the meaning of the process which simultaneously produces two or more form of useful energy (including electricity) only from renewable sources. Thus, the source which is renewable stated in Section 86(1)(e) of the Act is important and linked with both co-generation and generation from renewable sources only, and being important from environmental point of view.

[VII] Inter alia, learned Senior counsel referred to provisions of National Electricity Policy and Tariff Policy notified under Section 3 of the Electricity Act, 2003 also emphasize promotion of energy from renewable/non-conventional based generation.

Clause 5.12.1 and 5.12.2 of the Tariff Policy provide for promotion of non-conventional sources of energy based generation. Clause 5.12.1 and particularly clause 5.12.2 categorically bring out that the intent of Section 86(1)(e) of the Act contemplates promotion of both generation

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and co-generation only from non-conventional and renewable sources of energy. Clause 5.12.3 when read in conjunction with the two earlier clauses makes it clear that the co-generation being discussed in the subject of promotion is for co-generation in the Sugar Industry (bagasse) which would indicate that even the co-generation mentioned in Section 86(1)(e) of the Act is meant to be from renewable source. Clause 6.4(1) of the Tariff Policy also envisages promotion of non-conventional sources of energy generation including co-generation.

12.1 A reference is made to Availability of the renewable energy sources in the State by the learned Counsel that Renewable Purchase Obligation has to be decided with consideration of the renewable sources available in the State. According to the Annual Report FY 2012-2013 of the Ministry of New and Renewable Energy, the potential of the wind power in the State of Gujarat is 10609 MW, out of which only 3093 MW of wind generators have been installed so far. The potential of Biomass available in the State of Gujarat is 1221 MW and installed capacity is 31.2 MW as per the details available from the Gujarat Energy Development Agency. The potential of Bagasse available in the State of Gujarat is 350 MW. TERI estimated, the potential of Solar Power Generation in Gujarat is more than 10,000 MW, against which the capacity of Solar Power Projects so far commissioned is only 872.5 MW. Thus, sufficient potential of renewable energy

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generation is available in the State to meet the Renewable Purchase Obligation by the obligated party. Moreover, the GERC has recognized renewable energy certificate as a valid instrument for fulfillment of Renewable Purchase Obligation by the obligated entities. The National Action Plan on Climate Change of the Government of India also stipulated that the State Electricity Regulatory Commission shall fix minimum renewable purchase standards at 5% for the year 2010-2011, to be increased by 1% each year for 10 years.

12.2 As regards the order of the Appellate Tribunal in the case of Century Rayon, dated 26.4.2010, it is submitted that the said order is not applicable to a CPP who is not co-generating plant. Moreover, the order of the Appellate Tribunal dated 26.4.2010 was pronounced after the impugned order dated 17.4.2010.

12.3 The following judgments are relied upon on behalf of the respondent:

[i] Tata Power Company Limited vs. Reliance Energy Limited and others, reported in (2009) 16 Supreme Court Cases 659

[ii] Ambuja Cements Limited vs. Rajasthan Electricity Regulatory Commission, by judgment and order dated 31.8.2012, a Division Bench consisting of Hon'ble the Chief Justice Mr. Arun

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Mishra [as His Lordship then was] and Hon'ble Mr Justice Narendra Kumar Jain of the High Court of Judicature for Rajasthan at Jaipur, Bench Jaipur.

13 In rejoinder, it is submitted on behalf of the petitioners, while denying the averments made in the affidavit-in-reply, that, irrespective of any such alleged Action Plan, policies or formulations, the impugned Regulations need to be consistent with the Constitution, the Act and the Rules. A plain reading of Section 9 of the Act excludes CPPs from the Regulatory Control of the respondent except to the extent of the proviso thereto, and they are not covered under Section 86 of the Act. Paragraph 6.4 of the National Tariff policy contemplates procurement of power from the renewable energy sources by Distribution Companies. The said policy does not contemplate procurement of power by captive power plants. That, CPPs are not Distribution Companies as defined under the Act and paragraph 6.4 squarely excludes applicability of the provisions of national Tariff Policy to the CPPs. Similarly, Paragraph 3 of para 5.12 of the National Electricity Policy contemplates promotion of arrangements between the co-generator and the concerned distribution licensee for purchase of surplus power from plants having co-generation process and para 5.12 does not contemplate purchase of power from the Renewable Energy Sources by the CPPs. It is reiterated that RECs is impractical and unworkable. That, RECs cannot be a substitute for the power requirement of the CPPs.

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13.1 It is submitted that under clause 2(2), co-generation is included in the definition of Renewable Energy in Notification dated 23.03.2007 issued by Rajasthan Electricity Regulatory Commission and further clause 3(p) about purchase / sale of renewable energy also included co-generation distinguishing and segregating purchase / sale of `electricity component' RE sources including co-generation. Therefore, law laid down in the case of Ambuja Cement [supra] will not be applicable.

14 In order to adjudicate the issues involved in these petitions, it is necessary to advert to the Statement of Objects and Reasons of the Electricity Act, 2003 and other relevant provisions, which read as under:

"Statement of Objects and Reasons

The Electricity Supply Industry in India is presently governed by three enactments, namely, the Indian Electricity Act, 1901, the Electricity (Supply) Act, 1948, the Electricity Regulatory Commissions Act, 1998.

1.1 xxx

1.2 xxx

1.3 xxx

2. xxx

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3. With the policy of encouraging private sector participation in generation, transmission and distribution and the objective of distancing the regulatory responsibilities from the Government to the Regulatory Commissions, the need for harmonising and rationalising the provisions in the Indian Electricity Act, 1901, the Electricity (Supply) Act, 1948, and the Electricity Regulatory Commissions Act, 1998, in a new self-contained comprehensive legislation arose. Accordingly, it became necessary to enact a new legislation for regulating the electricity supply industry in the country which would replace the existing laws, preserve its core features other than those relating to the mandatory existence of the State Electricity Board and the responsibilities of the State Government and the State Electricity Board with respect to regulating licensees. There is also need to provide for newer concepts like power trading and open access. There is also need to obviate the requirement of each State Government to pass its own Reforms Act. The Bill has progressive features and endeavours to strike the right balance given the current realities of the power sector in India. It gives the State enough flexibility to develop their power sector in the manner they consider appropriate. The Electricity Bill, 2001 has been finalised after extensive discussions and consultations with the States and all other stake holders and experts.

4. The main features of the Bill are as follows:-

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[i] Generation is being delicensed and captive generation is being freely permitted. Hydro projects would, however, need approval of the State Government and clearance from the Central Electricity Authority which would go into the issues of dam safety and optimal utilisation of water resources.

[ii] There would be a Transmission Utility at the Central as well as State level, which would be a Government company and have the responsibility of ensuring that the transmission network is developed in a planned and coordinated manner to meet the requirements of the sector. The load dispatch function could be kept with the Transmission Utility or separated. In the case of separation the load despatch function would have to remain with a State Government organisation/company.

[iii] There is provision for private transmission licensees.

[iv] There would be open access in transmission from the outset with provision for surcharge for taking care of current level of cross subsidy with the surcharge being gradually phased out.

[v] Distribution licensees would be free to undertake generation and generating companies would be free to take up distribution licensees.

[vi] The State Electricity Regulatory

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Commissions may permit open access in distribution in phases with surcharge for -

[a] current level of cross subsidy to be gradually phased out along with cross subsidies; and

[b] obligation to supply.

[vii] For rural and remote areas stand alone systems for generation and distribution would be permitted.

[viii] For rural areas decentralised management of distribution through Panchayats, Users Associations, Cooperatives or Franchisees would be permitted.

[ix] Trading as a distinct activity is being recognized with the safeguard of the Regulatory Commissions being authorized to fix ceilings on trading margins, if necessary.

[x] Where there is direct commercial relationship between a consumer and a generating company or a trader the price of power would not be regulated and only the transmission and wheeling charges with surcharge would be regulated.

[xi] There is provision for a transfer scheme by which company/companies can be created by the State Government from the State Electricity Boards. The State Governments have the option of continuing

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with the State Electricity boards which under the new scheme of things would be a distribution licensee and the State Transmission Utility which would also be owning generation assets. The service conditions of the employees would as a result of restructuring not be inferior.

(xii) An Appellate Tribunal has been created for disposal of appeals against the decision of the CERC and State Electricity Regulatory Commissions so that there is speedy disposal of such matters. The State Electricity Regulatory Commission is a mandatory requirement.

[xiii] Provisions relating to theft of electricity have a revenue focus.

5 xx xx

6. xx xx

Preamble

"An Act to consolidate the laws relating to generation, transmission, distribution, trading and use of electricity and generally for taking measures conducive to development of electricity industry, promoting competition therein, protecting interest of consumers and supply of electricity to all areas, rationalisation of electricity tariff, ensuring transparent policies regarding subsidies, promotion of efficient and environmentally benign policies, constitution of Central Electricity Authority, Regulatory Commissions and establishment of Appellate Tribunal and for matters connected there

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with or incidental thereto.

2. **Definitions**:- In this Act, unless the context otherwise requires-

[3] 'area of supply' means the area within which a distribution licensee is authorised by his licence to supply electricity.

[4] 'Appropriate Commission' means the Central Regulatory Commission referred to in sub-section (1) of section 76 or the State Regulatory Commission referred to in section 82 or the Joint Commission referred to in section 83, as the case may be.

[8] 'Captive generating plant' means a power plant set up by any person to generate electricity primarily for his own use and includes a power plant set up by any co-operative society or association of persons for generating electricity primarily for use of members of such co-operative society or association;

[12] 'Cogeneration' means a process which simultaneously produces two or more forms of useful energy (including electricity);

[13] 'company' means a company formed and registered under the Companies Act, 1956 (1 of 1956) and includes any body corporate under a Central, State or Provincial Act.

[14] 'consumer' means any persons who is

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supplied with electricity for his own use by a licensee or the Government or by any other person engaged in the business of supplying electricity to the public under this Act or any other law for the time being in force and includes any person whose premises are for the time being connected for the purpose of receiving electricity with the works of a licensee, the Government or such other persons, as the case may be;

[17] `distribution licensee' means a licensee authorised to operate and maintain a distribution system for supplying electricity to the consumers in his area of supply;

[23] "electricity" means electrical energy-

[a] generated, transmitted, supplied or traded for any purpose; or

[b] used for any purpose except the transmission of a message;

[29] "generate" means to produce electricity from a generating station for the purpose of giving supply to any premises or enabling a supply to be so given;

[32] "grid" means the high volt age backbone system of inter-connected transmission lines, sub-station and generating plants;

[46] "notification" means notification

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published in the Official Gazette and the expression "notify" shall be construed accordingly;

[47] "open access" means the non-discriminatory provision for the use of transmission lines or distribution system or associated facilities with such lines or system by any licensee or consumer or a person engaged in generation in accordance with the regulations specified by the Appropriate Commission;

[49] "person" shall include any company or body corporate or association or body of individuals, whether incorporated or not, or artificial juridical person;

[52] "prescribed" means prescribed by rules made by the Appropriate Government under this Act;

[57] "regulations" means regulations made under this Act;

[62] "specified" means specified by regulations made by the Appropriate Commission or the Authority, as the case may be, under this Act;

[63] "stand alone system" means the electricity system set-up to generate power and distribute electricity in a specified area without connection to the grid;

[64] State Commission" means the State Electricity Regulatory Commission constituted under

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sub-section (1) of section 82 and includes a Joint Commission constituted under sub-section (1) of section 83;

[70] "supply", in relation to electricity, means the sale of electricity to a licensee or consumer;

Part II Section 3 of Act, 2003

National Electricity Policy and Plan

3. xx xx

4. The Central Government shall, after consultation with the State Governments, prepare and notify a national policy, permitting stand alone systems (including those based on renewable sources of energy and non-conventional sources of energy) for rural areas.

Part III Generation of Electricity

7. Generating company and requirement for setting up of generating station.

8. Hydro-electric generation.

9. Captive Generation.

[1] Notwithstanding anything contained in this Act, a person may construct, maintain or operate a captive generating plant and dedicated transmission

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lines:

Provided that the supply of electricity from the captive generating plant through the grid shall be regulated in the same manner as the generating station of a generating company.

Provided further that no licence shall be required under this Act for supply of electricity generated from a captive generating plant to any licencee in accordance with the provisions of this Act and the rules and regulations made thereunder and to any consumer subject to the regulations made under sub-section (2) of section 42.

[2] Every person, who has constructed a captive generating plant and maintains and operates such plant, shall have the right to open access for the purposes of carrying electricity from his captive generating plant to the destination of his use:
Provided that such open access shall be subject to availability of adequate transmission facility and such availability of transmission facility shall be determined by the Central Transmission Utility or the State Transmission Utility, as the case may be:
Provided further that any dispute regarding the availability of transmission facility shall be adjudicated upon by the Appropriate Commission.

11. Directions to generating companies:-

[1] The Appropriate Government may specify that a generating company shall, in extraordinary

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circumstances, operate and maintain any generating station in accordance with the directions of that Government.

Part VII Tariff

61. The Appropriate Commission shall, subject to the provisions of this Act, specify the terms and conditions for the determination of tariff, and in doing so, shall be guided by the following, namely:-

[a] the principles and methodologies specified by the Central Commission for determination of the tariff applicable to generating companies and transmission licensees;

[b] the generation, transmission, distribution and supply of electricity are conducted on commercial principles;

[c] the factors which would encourage competition, efficiency, economical use of the resources, good performance and optimum investments;

[d] safeguarding of consumers' interest and at the same time, recovery of the cost of electricity in a reasonable manner;

[e] the principles rewarding efficiency in performance;

[f] multi year tariff principles;

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[g] that the tariff progressively reflects the cost of supply of electricity and also, reduces and eliminates cross-subsidies within the period to be specified by the Appropriate Commission;

[h] the promotion of co-generation and generation of electricity from renewable sources of energy;

[i] the National Electricity Policy and tariff policy:

Provided that the terms and conditions for determination of tariff under the Electricity (Supply) Act, 1948, the Electricity Regulatory Commission Act, 1998 and the enactments specified in the Schedule as they stood immediately before the appointed date, shall continue to apply for a period of one year or until the terms and conditions for tariff are specified under this section, whichever is earlier.

62. Determination of tariff;- (1) The Appropriate Commission shall determine the tariff in accordance with provisions of this Act for -

[a] supply of electricity by a generating company to a distribution licensee: Provided that the Appropriate Commission may, in case of shortage of supply of electricity, fix the

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minimum and maximum ceiling of tariff for sale or purchase of electricity in pursuance of an agreement, entered into between a generating company and a licensee or between licensees, for a period not exceeding one year to ensure reasonable prices of electricity;

[b] transmission of electricity ;

[c] wheeling of electricity;

[d] retail sale of electricity.

Provided that in case of distribution of electricity in the same area by two or more distribution licensees, the Appropriate Commission may, for promoting competition among distribution licensees, fix only maximum ceiling of tariff for retail sale of electricity.

Provided that in case of distribution of electricity in the same area by two or more distribution licensees, the Appropriate Commission may, for promoting competition among distribution licensees, fix only maximum ceiling of tariff for retail sale of electricity.

86. Functions of State Commission;- [1] The State Commission shall discharge the following functions, namely:

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[a] determine the tariff for generation, supply, transmission and wheeling of electricity, wholesale, bulk or retail, as the case may be, within the State: Providing that where open access has been permitted to a category of consumers under section 42, the State Commission shall determine only the wheeling charges and surcharge thereon, if any, for the said category of consumers;

[b] regulate electricity purchase and procurement process of distribution licensees including the price at which electricity shall be procured from the generating companies or licensees or from other sources through 46 agreements for purchase of power for distribution and supply within the State;

[c] facilitate intra-state transmission and wheeling of electricity;

[d] issue licences to persons seeking to act as transmission licensees, distribution licensees and electricity traders with respect to their operations within the State;

[e] promote co-generation and generation of electricity from renewable sources of energy by providing suitable measures for connectivity with the grid and sale of electricity to any person, and also specify, for purchase of electricity from such sources, a percentage of the total consumption of electricity in the area

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of a distribution licence;

[f] adjudicate upon the disputes between the licensees, and generating companies and to refer any dispute for arbitration;

[g] levy fee for the purposes of this Act;

[h] specify State Grid Code consistent with the Grid Code specified under clause (h) of sub-section (1) of section 79;

[i] specify or enforce standards with respect to quality, continuity and reliability of service by licensees;

[j] fix the trading margin in the intra-State trading of electricity, if considered, necessary; and

[k] discharge such other functions as may be assigned to it under this Act.

[2] The State Commission shall advise the State Government on all or any of the following matters, namely :-

[i] promotion of competition, efficiency and economy in activities of the electricity industry;

[ii] promotion of investment in electricity industry;

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[iii] reorganization and restructuring of electricity industry in the State;

[iv] matters concerning generation, transmission, distribution and trading of electricity or any other matter referred to the State Commission by that Government.

[3] The State Commission shall ensure transparency while exercising its powers and discharging its functions.

[4] In discharge of its functions the State Commission shall be guided by the National Electricity Policy, National Electricity Plan and tariff policy published under section 3."

181. Powers of State Commissions to make regulations– [1] the State Commissions may, by notification, make regulations consistent with this Act and the rules generally to carry out the provisions of this Act.

[2] In particularly and without prejudice to the generality of the power contained in sub-section (1), such regulations may provide for all or any of the following matters, namely.....:-

National Action Plan on Climate Change

4.2.2 Grid Connection Systems

The Electricity Act and the National Tariff Policy,

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2006 provide for both the Central Electricity Regulatory Commission (CERC) and the State Electricity Regulatory Commissions (SERC) to prescribe a certain percentage of total power purchased by the grid from renewable based sources. It also prescribes that a preferential tariff may be followed for renewable based power.

The following enhancements in the regulatory/tariff regime may be considered to help mainstream renewables based sources in the national power system:

[i] A dynamic minimum renewable purchase standard (DMRPS) may be set, with escalation each year till a pre-defined level is reached, at which time the requirements may be revisited. It is suggested that starting 2009-10, the national renewables standard excluding hydropower with storage capacity in excess of daily peaking capacity, or based on agriculture based renewables sources that are used for human food may be set at 5% of total grids purchase, to increase by 1% each year for 10 years. SERCs may set higher percentages than this minimum at each point in time.

[ii] Central and state governments may set up a verification mechanism to ensure that renewables based power is actually procured as per the applicable standard (DMRPS or SERC specified). Appropriate authorities may also issue certificates that procure renewables based power in excess of the national standard. Such certificates may be

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tradeable, to enable utilities falling short to meet their renewable standard obligations. In the event of some utilities still falling short, penalties as may be allowed under the Electricity Act 2003 and rules thereunder may be considered.

[iii] Procurement of renewables based power by the SEBs/other power utilities should, in so far as the applicable renewable standard (DMRPS or SERC specified) is concerned, be based on competitive bidding, without regard to scheduling, or the tariffs of conventional power (however determined). Further, renewables based power may, over and above, the applicable renewables standard, be enabled to compete with conventional generation on equal basis (whether bid tariffs or cost-plus tariffs), without regard to scheduling (i.e. renewables based power supply above the renewables standard should be considered as displacing the marginal conventional peaking capacity). All else being equal, in such cases, the renewables based power should be preferred to the competing conventional power.

Non-conventional Energy Sources

5.2.20 Feasible potential of non-conventional energy resources, mainly small hydro, wind and bio-mass would also need to be exploited fully to create additional power generation capacity. With a view to increase the overall share of non-conventional energy sources in the electricity mix, efforts will be made to encourage private sector participation

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through suitable promotional measures.

Captive Generation.

5.2.24. The liberal provision in the Electricity Act, 2003 with respect to setting up of captive power plant has been made with a view to not only securing reliable, quality and cost effective power but also to facilitate creation of employment opportunities through speedy and efficient growth of industry.

5.2.25 The provision relating to captive power plants to be set up by group of consumers is primarily aimed at enabling small and medium industries or other consumers that may not individually be in a position to set up plant of optimal size in a cost effective manner. It needs to be noted that efficient expansion of small and medium industries across the country would lead to creation of enormous employment opportunities.

5.2.26 A large number of captive and standby generating stations in India have surplus capacity that could be supplied to the grid continuously or during certain time periods. These plants offer a sizeable and potentially competitive capacity that could be harnessed for meeting demand for power. Under the Act, captive generators have access to licensees and would get access to consumers who are allowed open access. Grid inter-connections for captive generators shall be facilitated as per

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section 30 of the Act. This should be done on priority basis to enable captive generation to become available as distributed generation along the grid. Towards this end, non-conventional energy sources including co-generation could also play a role. Appropriate commercial arrangements would need to be instituted between licensees and the captive generators for harnessing of spare capacity energy from captive power plants. The appropriate Regulatory Commission shall exercise regulatory oversight on such commercial arrangements between captive generators and licensees and determine tariffs when a licensee is the off-taker of power from captive plant."

5.12 Cogeneration and non-conventional energy sources

5.12.1 Non-conventional sources of energy being the most environment friendly there is an urgent need to promote generation of electricity based on such sources of energy. For this purpose, efforts need to be made to reduce the capital cost of projects based on non-conventional and renewable sources of energy. Cost of energy can also be reduced by promoting competition within such projects. At the same time, adequate promotional measures would also have to be taken for development of technologies and a sustained growth of these sources.

5.12.2 The Electricity Act 2003 provides that co-generation and generation of electricity from non-

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conventional sources would be promoted by the SERCs by providing suitable measures for connectivity with grid and sale of electricity to any person and also by specifying, for purchase of electricity from such sources, a percentage of the total consumption of electricity in the area of a distribution licensee. Such percentage for purchase of power from non-conventional sources should be made applicable for the tariffs to be determined by the SERCs at the earliest. Progressively the share of electricity from non-conventional sources would need to be increased as prescribed by State Electricity Regulatory Commissions. Such purchase by distribution companies shall be through competitive bidding process. Considering the fact that it will take some time before non-conventional technologies compete,in terms of cost, with non-conventional sources, the Commission may determine an appropriate differential in prices to promote these technologies.

5.12.3 Industries in which both process heat and electricity are needed are well suited for cogeneration of electricity. A significant potential for cogeneration exists in the country, particularly in the sugar industry. SERCs may promote arrangements between the co-generator and the concerned distribution licensee for purchase of surplus power from such plants. Cogeneration system also needs to be encouraged in the overall interest of energy efficiency and also grid stability.

Tariff Policy

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6.3 Harnessing captive generation.

Captive generation is an important means to making competitive power available. Appropriate Commission should create an enabling environment that encourages captive power plants to be connected to the grid.

Such captive plants could inject surplus power into the grid subject to the same regulation as applicable to generating companies. Firm supplies may be bought from captive plants by distribution licensees using the guidelines issued by the Central Government under section 63 of the Act.

The prices should be differentiated for peak and off-peak supply and the tariff should include variable cost of generation at actual levels and reasonable compensation for capacity charges.

Alternatively, a frequency based real time mechanism can be used and the captive generators can be allowed to inject into the grid under the ABT mechanism.

Wheeling charges and other terms and conditions for implementation should be determined in advance by the respective State Commission, duly ensuring that the charges are reasonable and fair.

Grid connected captive plants could also supply power to non-captive users connected to the

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grid through available transmission facilities based on negotiated tariffs. Such sale of electricity would be subject to relevant regulations for open access.

6.4 Non-conventional sources of energy generation including Co-generation:

[1] Pursuant to provisions of section 86(1)(e) of the Act, the Appropriate Commission shall fix a minimum percentage for purchase of energy from such sources taking into account availability of such resources in the region and its impact on retail tariffs. Such percentage for purchase of energy should be made applicable for the tariffs to be determined by the SERCs latest by April 1, 2006.

It will take some time before non-conventional technologies can compete with conventional sources in terms of cost of electricity. Therefore, procurement by distribution companies shall be done at preferential tariffs determined by the Appropriate Commission.

[2] Such procurement by Distribution Licensees for future requirements shall be done, as far as possible, through competitive bidding process under Section 63 of the Act within suppliers offering energy from same type of non-conventional sources. In the long-term, these technologies would need to compete with other sources in terms of full costs.

[3] The Central Commission should lay down

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guidelines within three months for pricing non-firm power, especially from non-conventional sources, to be followed in cases where such procurement is not through competitive bidding.

15 At the outset, scope and analysis of the Electricity Act, 2003 was considered by the Apex Court in the case of Tata Power Company Limited vs. Reliance Energy Limited and others, reported in (2009) 16 Supreme Court Cases 659. The Apex Court held that the Act, as a result of poor performance of State Electricity Boards, was enacted with a view to encourage participation of private sector and lays down policies for generation, transmission and distribution of electricity. The Central Government intended to have an independent body for determination of tariff in a professional manner and for this reason the Act provided for establishment of Electricity Regulatory Commission. The Apex Court has also outlined the salient features of the Act viz. (i) delicensing of power generation, (ii) general permission for captive generation, (iii) only concurrence is required in case of hydro-electric generation, (iv) open access in transmission, (v) separation of power generation from transmission and distribution, and (vi) trading in electricity subject to obtaining of licence, and, thus, the Act provides for measures which are conducive to development of electricity industry, generation of power and promotion of competition. The Apex Court envisaged a kind of problem for generating companies from

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licensing regime and, this being the primary object of the Act, while interpreting any of the provisions of the Act, the avowed objects are to be kept in mind. While holding that the activities of the generating companies are beyond the purview of the licensing provisions, the Apex court followed the principle of purposive construction.

16 In a batch of Civil Writ Petition No. 2772 of 2012 and others, in the case of Ambuja Cements Limited vs. Rajasthan Electricity Regulatory Commission, by judgment and order dated 31.8.2012, a Division Bench consisting of Hon'ble the Chief Justice Mr. Arun Mishra [as His Lordship then was] and Hon'ble Mr Justice Narendra Kumar Jain of the High Court of Judicature for Rajasthan at Jaipur, Bench Jaipur, upon a challenge to the Regulations framed, namely, Regulations 4 and 5 pertaining to renewable energy obligation and payment of surcharge for shortfall obligation by notification dated 23.3.2007 issued by the Rajasthan Electricity Regulatory Commission in exercise of power under Section 86(1)(e) read with Section 181 of the Electricity Act, 2003, imposing obligation on the captive power plants and open access consumers to purchase minimum energy from renewable sources and to pay surcharge in case of short-fall in meeting out the RE obligation, be declared ultra vires Sections 7, 9, 86(1)(a) and (e) and 181 of the Act of 2003, Articles 14, 19(1)(g) of the Constitution of India, National Electricity Policy, 2005 and Tariff Policy 2006, inter-alia, contending that the

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Regulatory Commission had no authority to issue notification to non-licensee like the petitioners in these petitions, namely, CPP or CGP and, upon consideration of similar contentions raised hereinabove in all these petitions and considering various provisions of the Electricity Act, 2003, Rules and Regulations framed thereunder, held as under:

> "In the light of the aforesaid provisions, it is apparent that thrust of the Act of 2003, provisions contained in the National Electricity Policy, 2005 and the Tariff Policy, 2006 is to ensure that there is no licensing of captive power generation of energy and generating company may establish, operate and maintain generating station without obtaining a license under the Act of 2003; at the same time, there is need to promote co-generation and generation of electricity from non-conventional sources; it is provided in Para 6.4 of Tariff Policy, Para 5.12.2 of the National Electricity Policy and Section 86(1)(e) of the Act of 2003 that the Regulatory Commission shall fix minimum percentage for purchase of energy from such sources taking into account availability of such resources in the region and its impact on retail tariffs; non-conventional technologies cannot compete with conventional sources in terms of cost of electricity, as such, Regulatory Commission has power to determine the preferential tariffs.
>
> The submission raised by the petitioners is that under section 7 of the Act of 2003, the generating company can establish, operate and

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maintain generating station including captive power plant without obtaining a license; section 9 contains non-obstante clause; licensing is contemplated only to transmit electricity, distribute electricity or undertake trading in electricity as provided under section 12 and license can be granted under section 14 for the aforesaid purposes and thus, licensees stand on different footing and the industries like petitioners having independent captive power plants cannot be treated alike licensees as they are not required to obtain license for setting up captive power plants and they have to be given free play and cannot be obligated to purchase energy from renewable sources; for regulation of supply, distribution, consumption or use of electricity, directions are contemplated to the licensee alone under section 23 of the Act of 2003 and no directions could have been given by the Regulatory Commission to the petitioners having captive power plants to purchase energy from renewable source as they are not licensees; they could not be treated alike licensees and thus, imposition of RE obligation through impugned Regulations cannot be sustained.

In our opinion, obligations upon licensee are different and merely by the fact that no license is required to be obtained by the petitioners for establishing, operating and maintaining captive power plant by virtue of Sections 7 and 9 of the Act of 2003, it cannot be inferred that the petitioners involved in the manufacture of various industrial

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activities such as cement, textile, chemical, clinker, guwar gum powder, rayons, white cement, copper, tyre, tube, flaps, fertilizers, agri.-inputs, non-ferrous metals, lead, zinc etc., cannot be fastened with the obligation to purchase energy from renewable sources as provided in the Regulations of 2007 and 2010. The provisions made with respect to obligations and liabilities for licensee cannot come in the way to carry out the objectives of the Act of 2003, National Electricity Policy and Tariff Policy. Under section 86(1)(e) the Regulatory Commission has to discharge the function for promoting co-generation and generation of energy from renewable sources. Section 53(e) provides that the Authority may, in consultation with the State Government, specify suitable measures for keeping by a generating company or licensee the maps, plans and sections relating to supply or transmission of electricity. Section 60, which deals with market domination, empowers the Regulatory Commission to issue directions as it considers appropriate to a licensee or a generating company if such licensee or generating company enters into any agreement or abuses its dominant position or enters into a combination which is likely to cause or causes an adverse effect on competition in electricity industry. Thus, generating company is not totally free from the control of the Regulatory Commission, as submitted by the petitioners.

When we come to the provisions contained in Section 86(1) (e) and 181 of the Act of 2003 under which the impugned Regulations have been

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framed, the Regulatory Commission has to discharge functions for promoting cogeneration and generation of electricity from renewable sources of energy and for this purpose, the Regulatory Commission has power to provide suitable measures for connectivity with the grid and sale of electricity to any person and also specify for purchase of electricity from such sources, a percentage of the total consumption of electricity in the area of a distribution licensee. Thus, it is apparent that under Section 86(1)(e) of the Act of 2003, the Regulatory Commission has power to direct the petitioners running captive power plants to purchase energy from renewable sources considering the percentage of the total consumption of electricity in the area of distribution licensee. **The word 'total consumption' has been used by the legislature in Section 86(1)(e) and total consumption in an area of a distribution licensee can be by three ways either supply through distribution licensee or supply from captive power plants by using lines and transmission lines of distribution licensee or from any other source by using transmission lines of distribution licensee. The area would always be of distribution licensee, as the transmission lines and the system is of distribution licensee, the total consumption is very significant. The total consumption has to be seen by consumers of distribution licensee, captive power plants and on supply through distribution licensee. It cannot be inferred by mention of area of distribution licensee that only consumers of the distribution licensee are included. The total consumption has the reference to the various modes of**

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consumption which are possible in the area of distribution licensee. In case the submission of the petitioners is accepted, in that event, the consumers of the distribution licensee would only be saddled with the liability of renewable energy obligation, that would be discriminatory when consumption is through captive power plant or open access. The total consumption in the area of distribution licensee would be total consumption in all modes otherwise anomalous results would occur.

The objective behind imposition of RE obligation upon captive power plants and open access consumers is to promote generation of electricity from renewable sources; it would have long lasting impact in protecting environment; as per CEAs annual report of 2003, the installed capacity is 107973 MW in the country; the break up is hydro power generation- 26910 MW (24.9%), thermal power generation 76607 MW (71%) nuclear power generation 2720 MW (2.5%) and wind power generation 1736 MW (1.6%), out of thermal power generation coal comprises 63801 MW, gas- 11633 MW and diesel 1173 MW representing 59.1% and 10.8% and 1.1% of the total installed capacity respectively; thus, the coal is dominating the scenario and will continue to do so in future also,; the thermal generation causes generation of green house gases (GHG) namely, carbon dioxide CO2, sulphur dioxide, nitrogen oxide and solid particulate matter which beyond a specific limit are hazardous for health; global warming is affected by increased emission of green house gases resulting into fundamental changes in approach

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towards development of energy sector in all the countries; **objective behind imposition of RE obligation is in the greater public interest which would have long impact on protection of environment; there is need of the hour to protect environment; it is in ecology to boost interest of the production by utilizing renewable sources of energy; Regulatory Commission has solemn obligation to protect and improve the present and future environment generation; Article 51-A(g) of the Constitution casts duty on the citizen to protect and improve the natural environment; considering the global warming, mandate of Article 21 and 51-A(g) of the Constitution, provisions of the Act of 2003, National Electricity Policy and Tariff Policy, the action has been taken by the Regulatory Commission imposing obligation upon captive power plant and open access consumers also to purchase electricity from renewable sources and the same is in public interest as energy generated from renewable sources is pollution free.** There are no purchasers of the energy generated by renewable sources; they cannot compete in the market as such production is costly; the Regulatory Commission has been conferred with the power to impose obligation on captive power plants and open access consumers also to purchase energy from renewable sources in order to protect ecology from environmental degradation; **merely because petitioners are having independent captive power plants and they are not licensees, still they can be asked to promote and purchase energy from renewable sources and we find that the RE obligation imposed upon captive power plants and open access**

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consumers through impugned Regulations cannot in any manner be said to be restrictive of any of the rights conferred on the petitioners under Article 19(1)(g) of the Constitution nor the obligation can be said to be violative of Article 14 of the Constitution.

In Krishnan Kakkanth V/s Government of Kerala and ors. (AIR 1997 SC 128), the Apex Court held that fundamental rights guaranteed under Article 19 are not absolute but the same are subject to reasonable restrictions to be imposed against enjoyment of such rights. The reasonableness of restriction is to be determined in an objective manner and from the stand point of the interests of general public and not from the stand point of the interests of the persons upon whom the restrictions are imposed or upon abstract consideration. **A restriction cannot be said to be unreasonable merely because in a given case, it operates harshly and even if the persons affected be petty traders. In determining the infringement of the right guaranteed under Article 19(1), the nature of right alleged to have been infringed, the underlying purpose of the restriction imposed, the extent and urgency of the evil sought to be remedied thereby, the disproportion of the imposition, the prevailing conditions at the time, enter into judicial verdict.** Under clause (1)(g) of Article 19, every citizen has a freedom and rights to choose his own employment or take up any trade or calling subject only to the limits as may be imposed by the State in the interests of public welfare and the other grounds

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mentioned in clause (6) of Article 19. But the Constitution does not recognize franchise or rights to business which are dependent on grants by the State or business affected by public interest. **In the present case, RE obligation on the captive power plant and open access consumers to purchase minimum energy from renewable sources and to pay surcharge in case of short fall in meeting out the RE obligation, has been imposed under the impugned Regulations and such RE obligation cannot in any manner be regarded as restrictive infringing rights of the petitioners under Article 19(1)(g) of the Constitution.**

Para 6.4 of the Tariff Policy also authorizes the Regulatory Commission to fix minimum percentage for purchase of energy from renewable sources taking into account the availability of such resources in the region; Tariff Policy also provides that non-conventional sources of energy generation including cogeneration cannot compete at present with conventional sources in terms of cost of electricity, therefore, preferential tariff can be determined by the Regulatory Commission. The provisions are not confined to the distribution companies only. **Para 5.12.1 of the National Electricity Policy** also provides that non-conventional sources of energy being the most environment friendly, there is an urgent need to promote generation of electricity based on such sources of energy. **In our opinion, the RE obligation, which has been put on the petitioners running captive power plants, under the Regulations of 2007 and 2010 is in furtherance of the**

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aforesaid objective; it is a promotional measure taken for growth of renewable energy by directing purchase of particular percentage of energy from renewable sources; at the same time, it is open to the industries like the petitioners to generate electricity through captive power plants to the maximum and no restriction has been put up on quantity of generation of electricity by the industries, only obligation is that they have to purchase certain percentage of energy from renewable sources considering total consumption.

Para 5.12.2 of the National Electricity Policy provides that under the Act of 2003, the Regulatory Commission would promote co-generation and generation of electricity from non-conventional sources by providing suitable measures for connectivity with grid and sale of electricity to any person and also by specifying for purchase of electricity from such sources, a percentage of the total consumption of electricity in the area of a distribution licensee. **Thus, it is open to the Regulatory Commission to prescribe the percentage of the total consumption of electricity in the area of a distribution licensee and percentage of total consumption can be specified in the area of distribution licensee as per the National Electricity Policy, precisely it has been done under the impugned Regulations as the consumption from captive power plant is also consumption which has to be included in the total consumption in the area of distribution licensee.**

As per Para 5.2.24 of the National

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Electricity Policy relating to captive generation, the liberal provision in the Act of 2003 with respect to setting up of captive power plant has been made with a view to not only securing reliable, quality and cost effective power but also to facilitate creation of employment opportunities through speedy and efficient growth of industry. Cost effectiveness is also one of the objectives of setting up of captive power plant under Para 5.2.24 and to utilize electricity generated by large number of captive and standby generating stations in India, they have surplus capacity that could be supplied to the grid continuously or during certain time periods. **Thus, by imposing RE obligation upon captive power plants and open access consumers, it cannot be said that any of the objectives of the National Electricity Policy or Tariff Policy or Act of 2003 have been defeated; there is no embargo put under the impugned Regulations on their functioning; at the same time, promotion of energy from renewable sources has to be made so as to protect environment and global warming.**

Section 86(1)(b) of the Act of 2003 has been relied upon by the petitioners which provides that the Regulatory Commission in discharge of the functions may regulate electricity purchase and procurement process of distribution licensees including the price at which electricity shall be procured from the generating companies or licensees or from other sources through agreements for purchase of power for distribution and supply within the State. In our opinion, as apparent from the very language of Section 86(1)(b), it deals with the

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purchase and procurement process of distribution licensees and also deals with the prices at which electricity shall be procured from the generating companies and in case generating companies are having surplus, it is open for them to supply to the grid. **The provisions of Section 86(1)(e) of the Act of 2003 provides independent functions and the provisions contained in Section 86(1)(b) cannot control and confine the operation of Section 86(1)(e) with respect to distribution licensee only; Section 86(1)(b) deals with power to regulate electricity purchase and procurement process of distribution licensees and the price at which electricity shall be procured from the generating companies or licensees, whereas Section 86(1)(e) deals with promotion of co-generation and generation of electricity from "renewable source" of energy by providing suitable measures which are specified in the said provisions and thus, section 86(1)(b) cannot control and confine operation of Section 86(1)(e) to distribution licensee alone, as suggested by the petitioners. We have no hesitation in rejecting the said submission of petitioners. On plain reading of the aforesaid provision, submission is not borne out.**

Section 86(4) provides that in discharge of its functions, the Regulatory Commission shall be guided by the National Electricity Policy, National Electricity Plan and Tariff Policy published under section 3. We find no repugnancy in the impugned Regulations framed by the Regulatory Commission imposing RE obligation upon captive power plant and open access consumers to purchase energy from

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renewable sources nor they can be regarded violative of National Electricity Policy, 2005 and Tariff Policy, 2006 published under section 3 of the Act of 2003 by the Central Government, rather impugned Regulations aim to fulfill the objectives of the said policies.

It was also submitted on behalf of the petitioners that Section 181(1) of the Act of 2003 gives only general power to the Regulatory Commission to frame Regulations consistent with the Act and the rules generally to carry out the provisions of the said Act and none of the matters contained in clauses (a) to (zp) of Section 181(2) provide for framing of the impugned Regulations in respect of captive power plant and open access consumers and thus, they submitted that framing of the impugned Regulations is beyond the rule making authority conferred upon the Regulatory Commission under section 181 of the Act of 2003. The submission is based upon misconstruction of provisions of Section 86(1)(e); as we have already rejected the submission that Section 86(1)(b) has to control the operation of Section 86(1)(e), the submission is baseless. Section 181(1) provides that the State Commission may by notification, make regulations consistent with the Act and the rules generally to carry out the provisions of the said Act and as per the interpretation of Section 86(1)(e) along with National Electricity Policy and Tariff Policy for promotion of renewable energy, we find that the power to frame impugned Regulations under sections 86(1)(e) and 181 of the Act of 2003 imposing RE obligation

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upon captive power plant and open access consumers to purchase energy from renewable sources, has been rightly exercised by the Regulatory Commission and the impugned Regulations cannot in any manner be said to be beyond provisions contained in the Act of 2003 or National Electricity Policy or Tariff Policy; Section 86(1)(e) authorizes the Regulatory Commission to impose RE obligation upon the industries having independent captive power plants and open access consumers and thus, it cannot be said that the impugned Regulations imposing RE obligation on captive power plant and open access consumers are contrary to the object and purpose of the Act of 2003 or National Electricity Policy or Tariff Policy. The RE obligation put on the captive power plants and open access consumers to purchase minimum energy from renewable source and to pay surcharge in case of shortfall in meeting out the obligation through impugned Regulations are clearly sustainable in law.

In PTC India Ltd. V/s Central Electricity Regulatory Commission ((2010) 4 SCC 603), the Apex Court has considered the scope and analysis of the Act of 2003 and held that the Act of 2003 contemplates three kinds of delegated legislation. Firstly, under Section 176, the Central Government is empowered to make rules to carry out the provisions of the Act. Correspondingly, the State Governments are also given powers under Section 180 to make rules. Secondly, under Section 177, the Central Authority is also empowered to make regulations consistent with the Act and the rules to carry out the provisions of the Act. Thirdly, under

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Section,178 the Central Commission can make regulations consistent with the Act and the rules to carry out the provisions of the Act. SERCs have a corresponding power under Section 181. A holistic reading of the Act of 2003 leads to the conclusion that regulations can be made as long as two conditions are satisfied, namely, that they are consistent with the Act and that they are made for carrying out the provisions of the Act. The Apex Court rejected the contention that under the Act of 2003, the power to make regulations under section 178 has to be correlated to the functions ascribed to each authority under the Act of 2003 and that CERC can enact regulations only on topics enumerated in section 178(2). The Apex Court has further held that apart from section 178(1) which deals with "generality" even under section 178(2) (ze) CERC could enact a regulation on any topic which may not fall in the enumerated list provided such power falls within the scope of the Act of 2003. Trading is an activity recognized under the Act of 2003. The Apex Court has laid down thus:-

> "28. The 2003 Act contemplates three kinds of delegated legislation. Firstly, under Section 176, the Central Government is empowered to make rules to carry out the provisions of the Act. Correspondingly, the State Governments are also given powers under Section 180 to make rules. Secondly, under Section 177, the Central Authority is also empowered to make regulations consistent with the Act and the rules to carry out the provisions of the Act. Thirdly, under

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Section178, the Central Commission can make regulations consistent with the Act and the rules to carry out the provisions of the Act. SERCs have a corresponding power under Section 181. The rules and regulations have to be placed before Parliament and the State Legislatures, as the case may be, under Section 179 and 182. The Parliament has the power to modify the rules/ regulations. This power is not conferred upon the State Legislatures. A holistic reading of the 2003 Act leads to the conclusion that regulations can be made as long as two conditions are satisfied, namely, that they are consistent with the Act and that they are made for carrying out the provisions of the Act.

65. The above two citations have been given by us only to demonstrate that under the 2003 Act, applying the test of "general application", a Regulation stands on a higher pedestal vis-à-vis an Order (decision) of CERC in the sense that an Order has to be in conformity with the regulations. However, that would not mean that a regulation is a pre- condition to the order (decision). therefore, we are not in agreement with the contention of the appellant(s) that under the 2003 Act, power to make regulations under Section 178 has to be correlated to the functions ascribed to each authority under the 2003 Act and that CERC can enact regulations only on topics enumerated in Section 178(2). In our view, apart from Section 178(1) which deals

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with "generality" even under Section178(2)(ze) CERC could enact a regulation on any topic which may not fall in the enumerated list provided such power falls within the scope of 2003 Act. Trading is an activity recognized under the said 2003 Act."

In the present case, the impugned Regulations framed by the Regulatory Commission imposing RE obligation on the captive power plant and open access consumers to purchase minimum energy from renewable sources and to pay surcharge in case of shortfall in meeting out the RE obligation, are consistent with the Act of 2003, National Electricity Policy and Tariff Policy and they are made for carrying out the provisions of the Act of 2003, National Electricity Policy and Tariff Policy."

[Emphasis supplied in each of the paragraphs]

17 Thus, a Division Bench of High Court of Judicature for Rajasthan at Jaipur, Bench Jaipur, held that changes in Regulations 4 and 5 impugned in those petitions were, in any manner, neither violative of any of the provisions of the Electricity Act, 2003, Rules and Regulations made thereunder nor ultra vires Articles 14, 19(1)(g) and 300A of the Constitution of India. The very findings based on the interpretation of the Electricity Act, 2003, Rules and Regulations made thereunder and the reasons assigned for arriving

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at the finding about obligation upon the CPPs to purchase electricity from such sources, namely, by co-generation and generation of electricity from renewable sources of energy keeping in mind a percentage of total consumption of electricity in the area of distribution licensee which also included captive power plants situated in the area of distribution licensee and total consumption of electricity in such a case will not exclude consumption of electricity by the CPPs, and that, while interpreting Section 86(1)(e) of the Act, keeping in mind other functions enumerated in Section 86(4) of the Act and while discharging such functions, the State Electricity Commission shall be guided by the National Electricity Policy, 2005 and Tariff Policy 2006 framed under Section 3 and so provided under Section 86(4) of the Act, read with Sections 61 and 62 under the head 'Tariff of Part VII of the Act, 2003, are required to be adopted in the facts of these cases also as I am in respectful agreement with the same.

18 Thus, what emerges from the above judgment in the case of Ambuja Cements Limited (supra) is as under:

> [i] That, obligations upon licensee are different and merely by the fact that no license is required to be obtained by the petitioners for establishing, operating and maintaining captive power plant by virtue of Sections 7 and 9 of the

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Act of 2003, it cannot be inferred that such CPPs are out of regulatory regime of SERC and that the CPPs cannot be fastened with the obligation to purchase energy from renewable sources under the impugned Regulations.

[ii] That CPP is obligated entity and the provisions made with respect to obligations and liabilities for licensee cannot come in the way to carry out the objectives of the Act of 2003, National Electricity Policy and Tariff Policy.

[iii] From a conjoint reading of Sections 86(1)(e), 53(e) and 60 with regard to discharge of functions by the Regulatory Commission for promoting co-generation and generation of electricity from renewable sources of energy and in consultation with the State Government to specify suitable measures for keeping by a generating company or licensee the maps, plans and sections relating to supply or transmission of electricity and also about market domination, etc. it empowers the Regulatory Commission to issue directions not only to the licensee but also to the generating company in certain eventualities.

[iv] The Regulations are framed in exercise of powers under Section 181 read with Section 86(1)(e) of the Act of 2003 and it is for promoting co-generation and generation of electricity from

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renewable sources of energy only.

[v] That, Section 86(1)(e) of the Act of 2003 empowers the Regulatory Commission to direct captive power plant operators to purchase energy from renewable sources and the basic requirement is of applying criteria of considering percentage of total consumption of electricity in the area of distribution licensee. That, total consumption in an area of distribution licensee can be by three ways, namely, either supply through distribution licensee or supply from captive power plants by using lines and transmission lines of distribution licensee or from any other source by using transmission lines of distribution licensee. The fact remains that the area would always be of distribution licensee as the transmission lines and the system is of distribution licensee and, therefore, the phrase 'total consumption' is seen by consumers of distribution licensee, captive power plants and on supply through distribution licensee. Thus, the total consumption in the area of distribution licensee would be total consumption in all modes, otherwise serious consequences would follow.

[vi] The objective behind imposition of RE obligation upon captive power plants and open access consumers is to promote generation of electricity from renewable sources, so that it

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would have long lasting impact in protecting environment and comparative data about consumption of fossil fuel like coal etc, power through thermal generation, which causes green house gases and carbon dioxide and other toxic gases resulting into hazardous effect on the health and global warming, etc. are seen in the context of duty cast under Article 51A(g) of the Constitution of India on the citizen to protect and improve the national environment for meaningful existence under Article 21 of the Constitution of India. With such avowed object if the Regulations are framed, it cannot be said that the Regulations are restrictive infringing any of the rights conferred upon the petitioners under Article 19(1)(g) of the Constitution of India nor the obligation can be said to be violative of Article 14 of the Constitution of India.

[vii] That, para 6.4 of the Tariff Policy also authorizes the Regulatory Commission to fix minimum percentage for purchase of energy from renewable sources and these provisions are not confined to distribution companies only. At the same time, para 5.12.1 of the National Electricity Policy also provides for non-conventional sources of energy as environment friendly and, therefore, RE obligations by the Regulations are just and proper. Even paras 5.12.2 and 5.2.24 of the National Electricity

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Policy provide suitable measures for connectivity with grid and sale of electricity to any person and setting up of captive power plants are not only with a view to secure reliable, quality and cost effective power but also to facilitate creation of employment opportunities and to utilize electricity generated by large number of captive and standby generating stations in India, surplus capacity being supplied to the grid continuously or during certain time intervals.

[viii] Section 86(1)(e) provides independent functions. Section 86(1)(b) cannot control and confine the operation of Section 86(1)(e) with respect to distribution licensee alone, as contended by the learned counsel for the petitioners. Even Section 86(4) mandates Regulatory Commission to be guided by the National Electricity Policy, National Electricity Plan and Tariff Policy published under Section 3.

[ix] That, on an elaborate discussion with regard to interpretation of Section 86(1) of the Act, the contention of the petitioners that it is only about conferring general power to the Regulatory Commission to frame regulations in consonance with the Act and the Rules with a view to carry out the provisions of the said Act and none of the matters contained in clauses (a) to (zp) of Section 181(2) provides for framing of

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the impugned Regulations in respect of captive power plants, etc. and, therefore, it is beyond the rule making authority conferred upon the Regulatory Commission, is based upon misconception of interpretation of the provisions of Section 86(1)(e) of the Act in view of rejection of the submission that Section 86(1)(b) does not control operation of Section 86(1)(e).

[x] That, in PTC India Ltd (supra), the Apex Court has considered the scope and analysis of the Act of 2003 holding that the Act of 2003 contemplates three kinds of delegated legislation, firstly, under Section 176 Central Government correspondingly under Section 180 State Governments; secondly, under Section 177 the Central Authority; and, thirdly, under Section 178 the Central Commission, who can make regulations consistent with the Act and the Rules to carry out the provisions of the Act. That, likewise, SERC have corresponding power under Section 181 and, applying the test of 'general application', a Regulation stands on a higher pedestal vis-à-vis an order (decision) of CERC and such order shall be in conformity with the Regulations.

FURTHER FINDINGS

19 It is worth-noting that, under Part III, under the heading 'Generation of Electricity', Section 7 provides for generating company and

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requirement for setting up of generating station; Section 8 is about hydro-electric generation; and Section 9 defines 'captive generation'. If definition of 'captive generation' under Section 9 is read in juxtaposition to definition of 'captive generating plant' under Section 2(8), a person can construct, maintain or operate captive generating plant and dedicated transmission line, and proviso to sub-section (1) of section 9 provides that supply of electricity from the captive generating plant through the grid shall be regulated in the same manner as the generating station of a generating company. The newly inserted proviso by the Act 26 of 2007 with effect from 15.6.2007 provides that no licence shall be required under the Act of 2003 for supply of electricity generated from a captive generating plant to any licencee in accordance with the provisions of the Act, Rules and Regulations made thereunder and to any consumer subject to the regulations made under sub-section (2) of Section 42. Thus, while dispensing with the requirement of obtaining licence by CGP/CPP for supply of electricity generated from CGP, no exemption is given to CGP/CPP to be regulated by the provisions of the Act, 2003, rules and regulations made thereunder other than the above and, therefore, CGP/CPP is not absolved from obligation to be discharged under the impugned regulations. In addition to the above, as per sub-section (2) of section 9, a person constructing, maintaining, operating CGP/CPP shall have also right to open access for the purposes of carrying electricity from his captive generating plant to the destination of his use and such open access shall be subject to availability of adequate transmission facility and such availability of transmission facility shall be determined by the Central Transmission Utility or the State Transmission Utility as the case may be and, thus, CGP/CPP has to follow directions, orders, regulations, rules framed under provisions of the Act of 2003 for carrying out the purposes of the Act.

20 Inter-alia, if definition of 'captive generating plant' under Section 2(8) is seen, it means a power plant set up by any person to generate electricity primarily for his use and includes a

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power plant set up by any co-operative society or association of person for generating electricity primarily for use of members of such cooperative society or association. Therefore, it is not that power plant set up by any person to generate electricity is exclusively for his own use. In a given case, electricity generated by CPP can be used for a purpose other than captive use in case of excess production of electricity. Thus, harmonious reading of Sections 86(1)(e), 2(12), 2(8) and9 of the Act, with the decision of the Apex Court in Tata Power Company Limited (supra), and the decision of a Division Bench of the High Court of Judicature for Rajasthan at Jaipur, Bench Jaipur, in the case of Ambuja Cements Limited (supra), would mean that CPP is exempted from licence regime, but not from any other regulatory measures envisaged by the Electricity Act 2003,Rules and Regulations framed thereunder to carry out the provisions of the Act, 2003.

20.1 There is no discriminatory treatment to CPP nor promotion of co-generation and generation from renewable sources of energy can be equated or put on par with CPP and the classification is reasonable to that extent, namely, promoting co-generation and generation from renewable sources of energy for which RE obligation is cast upon the CPP, and is based on intelligible differentia and have rational with the objects sought to be achieved, namely, to protect environment and to reduce global warming, etc. coupled with survival and growth of units producing

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electricity from renewable sources of energy.

Therefore, CPP may be a distinct entity enjoying certain benefits and privileges inter-alia non-subjecting it to licensing control of the authority or commissions, but, under an obligation to follow various directions issued by the Electricity Regulatory Commission in consonance with the Act of 2003, Rules and Regulations framed thereunder.

21 That a careful perusal of National Electricity Policy and Plan, Tariff Policy and National action Plan on Climate Change and provisions of Act, 2003, Rules and Regulations there under empowers the State Electricity Regularity Commission [SERC] to prescribe a certain percentage of total power purchased by the Grid from renewable based source and also preferential Tariff that may be followed for renewal based power. As held earlier, and followed in the case of Ambuja Cement [supra] SERC is a creature of statute under Part X under Section 82 of the act, 2003 and empowered to frame regulations under Section 181 which may be consistent with the Act and to carry out provisions of the Act.

21.1 If Section 86(1)(e) is analyzed in the context of overall Scheme of the Act, 2003, Rules, Regulations in juxtaposition to National Electricity Plan and Policy, Tariff Policy, it is about functions to be discharged by SERC.

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Section 86(1)(e) is;

-to protect

-co-generation and generation of electricity from renewable source of energy

-by providing **suitable measures** [such measures have to be consistent and with a view to carry out provisions of the Act]

-for, viz. connectivity with the grid

-**sale** of electricity to any person

-also to specify

-for **purchase** of electricity from `**such sources**' meaning thereby renewable sources of energy on which co-generation and generation of energy is based

-for fixing percentage of total consumption of electricity in the area of distribution licensee is to be ascertained and calculated towards renewable purchase obligations. While undertaking exercise of calculating the total percentage of consumption in the area of distributive licencee, if consumption of electricity by CGP / CPP is excluded then it would not reflect correct data for SERC to take measures under Section 86(1)(e). Only because data pertaining to consumption of CGP is included in total consumption CGP does not become consumer so defined under the Act, 2003.

22 That contention of Mr. S.N.Soparkar that co-generation plant of petitioners of Special Civil Application No.791 of 2011 that it is based on fossil fuel and is non-conventional in view of decision in

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the case of Lloyds Metal & Energy Ltd. [supra] of APTEL, though appears to be attractive on first blush but non-conventional energy cannot be equated always with renewable source of energy. That co-generation is a process simultaneously producing two or more forms of useful energy though never defines type of input or source of fuel to be used, but co-generation provided under Section 86(1)(e) of the Act, 2003 is not co-generation stand alone, but it is co-generation and generation of electricity from renewable sources of energy. Thus, a source or input of energy may be non-conventional in the sense that CGP or co-generation following innovative or advanced technology, which may be eco-friendly and reducing carbon credit, but only on that ground is not not the same renewable source of energy like hydro, wind, solar, biomass, bagasse, etc. That non-conventional energy always and for all purposes cannot be equated with non-renewable sources of energy.

22.1 That the judgment dated 26.04.2010 of the APEL in Appeal No.57 of 2009 in the matter of Century Rayon Ltd. vs. Maharashtra Electricity Regulatory Commissioner & Ors. fell into consideration in Appeal No.53 of 2012 and by order dated 29.12.2011 interim relief to enable sale of electricity from co-generation plant based on industrial waste heat generated by the sponge iron plant with the use of fossil fuel [coal] and directions to be issued to the distribution licensee came to be rejected, but the issue that whether the distribution licensee would be

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fastened with the obligation to purchase a percentage of its source from co-generation irrespective of fuel use being important issue came to be re-examined by the Full Bench and accordingly, upon an exercise undertaken about finality of the judgment dated 26.04.2010 in Appeal No.57 of 2009, it appears that the Full Bench of Appellate Tribunal for Electricity [Appellate Jurisdiction] in the case of Lloyds Metal & Energy Ltd. vs. Maharashtra State Electricity Distribution Company Limited in Appeal No.53 of 2012 considered the order dated 29.12.2011 rendered by the Division Bench of APTEL in Appeal No.57 of 2009 in the matter of Century Rayon Ltd. vs. Maharashtra Electricity Regulatory Commission and others and framed the following question:

> "Whether the Distribution Licensees could be fastened with the obligation to purchase a percentage of its consumption from co-generation irrespective of the fuel used under Section 86(1) (e) of the Act 2003".

The Full Bench of APTEL vide order dated 02.12.2013 passed in Appeal No.53 of 2012, held in para 39, as under:

> "39. Summary of our findings:
>
> Upon conjoint reading of the provisions of the Electricity Act, the National Electricity Policy,

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Tariff Policy and the intent of the legislature while passing the Electricity Act as reflected in the Report of the sanding Committee on Energy presented to Lok Sabha on 19.12.2002, we have come to the conclusion that a distribution company cannot be fastened with the obligation to pursue a percentage of its consumption from fossil fuel based co-generation under Section 86(1)(e) of the Electricity Act, 2003. Such purchase obligation 86(1)(e) can be fastened only from electricity generated from renewal sources of energy. **However, the State Commission can promote fossil fuel based co-generation by other measures such as facilitating sale of surplus electricity available at such co-generation plants in the interest of promoting energy efficiency and grid security, etc."**

Thus, judgment dated 26.04.2010 in Century Rayon [supra] [Appeal No.57 of 209]; judgment dated 17.04.2013 in IA 262 of 2012 in RP (DFR) No.1311 of 2012 in Appeal NO.57 of 2009 filed by Gujarat Electricity Regulatory Commission; judgment dated 30.01.2013 in Appeal No.54 of 2012 filed by M/s. Emami Paper Mills; judgment dated 31.01.2013 in Appeal no.59 of 2012 filed by M/s. Vedanta Aluminium Ltd. [VA]; and judgment dated 10.04.2013 in Appeal NO.125 of 2012 filed by M/s. Hindalco Industries Limited, all delivered by the APTEL have no significance and force of law in view of judgment dated 02.12.2013 rendered by the Full Bench of the APTEL in Appeal No. 53 of

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2012.

That submissions about non-applicability of law laid down in Ambuja Cement [supra] rendered by a Division Bench of Rajasthan High Court, is also devoid of merit inasmuch as substantially the issue before Division Bench of Rajasthan High Court was about inclusion of CGP / CPP as obligated entity to purchase electricity from generating unit based on non-renewal source of energy.

23 At the cost of repetition, in exercise of powers under Section 3 for framing regulations for procurement and protection of energy from renewable sources, it is clear that an elaborate exercise is undertaken by the GERC defining the area of supply, distribution licensee, obligated entity and renewable sources of energy along with other definitions. It has also considered the quantum of RPO by defining purchase of electricity in kWh from renewable energy sources at a specified minimum percentage of their total consumption during a year and limiting such obligation upon the CPPs having installed capacity of 5 MW and above. Thus, all the objections are also considered by assigning reasons. The Commission has also considered various provisions of the Act and the functions to be discharged being a regulatory body only with a view to carry out the provisions of the Act of 2003 and the Rules made thereunder.

24 The GERC did keep in mind all the

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representations submitted by the objectors before determining renewable purchase obligation [RPO] and, while doing so, the GERC also provided production capacity of electricity of CPPs and only those CPPs, who produce more than 5 MV of electricity, are brought within the purview of the RPO and, therefore, it would not hit or create imbalance in the functioning of the CPPs. The Commission also applied all the criteria including technical parameters and functioning capacity of CPP vis-à-vis interest of power generating plant in renewable source of energy and their survival in consonance with National Electricity Plan and Tariff Policy. That, Section 86(1)(e) of the Act is not only for promoting co-generation stand alone system, but, it is for promotion of co-generation and generation from renewable source of energy. In this context, if the definition contained in Section 2(12) of the Act is seen, it is clear that 'co-generation' means a process which simultaneously produces two or more forms of useful energy (including electricity). In the above process, excess energy is harnessed by a particular process and electricity is generated.

25 Since the procedure is duly followed by the Commission while framing the Regulations, namely, renewable purchase obligation or renewable energy certificate, it cannot be said that such an exercise by the Commission is, in any manner, unjust, unreasonable, arbitrary, discriminatory or contrary to

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the provisions of the Electricity Act, 2003 or violative of Articles 14, 19 and 300A of the Constitution of India. As regards challenge to the authority and jurisdiction of the GERC to frame such regulations impugned in these petitions, I have already taken a view that the law laid down by a Division Bench of the High Court of Judicature for Rajasthan at Jaipur, Bench Jaipur, in the case of Ambuja Cements Limited (supra), in the context of the identical contentions raised by the parties therein, is applicable in the facts of the present cases also.

26 In the result, all these writ petitions stand dismissed with no order as to costs. Notice issued in each of the petition stand discharged.

27 Civil Applications filed by Indian Wind Energy Association for impleading as party raising contentions justifying impugned regulations, it is not in dispute that the challenge in all these writ petitions is to legality and validity of regulations and powers and jurisdiction of respondent GERC and further adjudicating such issues effectively, I am of the view that applicant(s) are neither proper nor necessary party and accordingly not to be imp leaded as party respondents and Civil Applications filed by Indian Wind Energy Association are hereby rejected. Similarly, Civil Applications filed by respondent Commissioner to join Union of India and other Central authorities are also de-void of merit and are hereby rejected.

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(ANANT S.DAVE, J.)

At this state, learned counsels for the petitioners requested to stay the implementation, execution and operation of the impugned Regulations for a reasonable period.

Considering the overall facts and circumstances of the case, I am inclined to grant status quo as on today qua the impugned Regulations in each of the writ petitions till 23.04.2015.

(ANANT S.DAVE, J.)

*pvv

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IN THE HIGH COURT OF GUJARAT AT AHMEDABAD

LETTERS PATENT APPEAL NO. 847 of 2015
In SPECIAL CIVIL APPLICATION NO. 936 of 2011
With
LETTERS PATENT APPEAL NO. 598 of 2015
In
SPECIAL CIVIL APPLICATION NO. 171 of 2011
TO
LETTERS PATENT APPEAL NO. 601 of 2015
In
SPECIAL CIVIL APPLICATION NO. 597 of 2011
With
LETTERS PATENT APPEAL NO. 828 of 2015
In
SPECIAL CIVIL APPLICATION NO. 10471 of 2013
TO
LETTERS PATENT APPEAL NO. 829 of 2015
In
SPECIAL CIVIL APPLICATION NO. 7084 of 2011
With
LETTERS PATENT APPEAL NO. 832 of 2015
In
SPECIAL CIVIL APPLICATION NO. 791 of 2011
With
CIVIL APPLICATION NO. 4995 of 2015
In
LETTERS PATENT APPEAL NO. 847 of 2015
With
CIVIL APPLICATION NO. 4315 of 2015
In
LETTERS PATENT APPEAL NO. 598 of 2015
With
CIVIL APPLICATION NO. 4334 of 2015
In
LETTERS PATENT APPEAL NO. 599 of 2015
With
CIVIL APPLICATION NO. 4336 of 2015

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In

LETTERS PATENT APPEAL NO. 600 of 2015

With

CIVIL APPLICATION NO. 4338 of 2015

In

LETTERS PATENT APPEAL NO. 601 of 2015

With

CIVIL APPLICATION NO. 4779 of 2015

In

LETTERS PATENT APPEAL NO. 829 of 2015

With

CIVIL APPLICATION NO. 4778 of 2015

In

LETTERS PATENT APPEAL NO. 828 of 2015

With

CIVIL APPLICATION NO. 4804 of 2015

In

LETTERS PATENT APPEAL NO. 832 of 2015

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ARVIND LIMITED(FORMERLY KNOWN THE ARVIND MILL S LIMITED....Appellant(s)

Versus

GUJARAT ELECTRICITY REGULATION COMMISSION....Respondent(s)

==========

Appearance in LPA Nos. 847, 598 to 601 of 2015 with C.A. Nos. 4995, 4315, 4334, 4336, 4338 of 2015:

MR SN SOPARKAR, SENIOR ADVOCATE WITH MR SANDEEP SINGHI, ADVOCATE FOR SINGHI & CO, ADVOCATE for the Appellant(s) No. 1

MR KAMAL TRIVEDI, SENIOR COUNSEL WITH MR BD KARIA, ADVOCATE FOR BHARGAV KARIA & ASSO, ADVOCATE for the Respondent(s) No. 1

Appearance in LPA Nos. 828 & 829 of 2015 with C.A. Nos. 4779 & 4778 of 2015:

MR MIHIR JOSHI, SENIOR ADVOCATE WITH MR GAURAV MATHUR, ADVOCATE for the Appellant(s) No. 1

MR KAMAL TRIVEDI, SENIOR COUNSEL WITH MR BD KARIA, ADVOCATE FOR BHARGAV KARIA & ASSO, ADVOCATE for the Respondent(s) No. 1

Appearance in LPA No. 832 of 2015 with C.A. No. 4804 of 2015:

MR RASESH SANJANWALA, SENIOR ADVOCATE WITH MR DILIP

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KANOJIYA, ADVOCATE for the Appellant(s) No. 1
MR KAMAL TRIVEDI, SENIOR COUNSEL WITH MR BD KARIA, ADVOCATE FOR BHARGAV KARIA & ASSO, ADVOCATE for the Respondent(s) No. 1

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CORAM: **HONOURABLE MR.JUSTICE KS JHAVERI**
and
HONOURABLE MR.JUSTICE A.G.URAIZEE

Date : 05/05/2015

ORAL ORDER
(PER : HONOURABLE MR.JUSTICE KS JHAVERI)

ORDER IN LETTERS PATENT APPEALS

At the request of learned counsels appearing for the parties, matters are peremptorily fixed for hearing on 11.08.2015. To be listed immediately after admission matters.

ORDER IN CIVIL APPLICATIONS

1. We have heard learned counsel appearing for the parties at length.

2. These applications have been filed praying for stay of the impugned CAV judgement and order dated 12.03.2015 passed by the learned Single Judge in Special Civil Application No. 936 of 2011 and other cognate matters pending the appeals.

3. Mr. Soparkar, learned Senior Counsel appearing for the has drawn the attention of this Court to the provisions of The Electricity Act, 2003 (hereinafter referred to as 'the Act')

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more particularly Sections 2(8), 2(12) , 2(15) and the definition of non-conventional source. He has also drawn the attention of this Court to Sections 9, 68 and 86 of the Act and submitted that the impugned judgement and order passed by the learned Single Judge may be stayed by this Court as the same proceeds on erroneous reading and interpretation of the provisions of the Act, Regulations framed thereunder, National Electricity Policy as well as the Tariff Policy and the various orders passed by the Appellate Court. Sections 2(8), 2(12) , 2(15) are reproduced hereunder:

> "2(8) "Captive generating plant" means a power plant set up by any person to generate electricity primarily for his own use and includes a power plant set up by any co-operative society or association of persons for generating electricity primarily for use of members of such cooperative society or association;
>
> (12) "Cogeneration" means a process which simultaneously produces two or more forms of useful energy (including electricity);
>
> (15) "consumer" means any person who is supplied with electricity for his own use by a licensee or the Government or by any other person engaged in the business of supplying electricity to the public under this Act or any other law for the time being in force and includes any person whose premises are for the time being connected for the purpose of receiving electricity with the works of a licensee, the Government or such other person, as the case may be"

3.1 Mr. Soparkar submitted that the fundamental issue concerning the applicability of the GERC (Procurement of Energy from Renewable Sources) Regulation 2010 (hereinafter referred to as 'the Regulation') raised by the applicants has not been considered and dealt with by the

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learned Single Judge. He submitted that on a fair reading of Regulation 2.1(k) which defines obligated entity read with Regulation No. 3, it is clear that the regulations would apply to persons consuming electricity generated from 'conventional captive generation plant' having capacity of 5MW and above. He submitted that the use of word 'conventional' would exclude the applicants from the purview of the Regulation as the applicants have set up a co-generating captive power plant which is a non conventional power plant.

3.2 Mr. Soparkar submitted that the provisions of Section 86(1)(e) clearly sets out the apparent legislative intent to promote co-generation along with the promotion of generation of electricity from renewable sources of energy. The meaning of the term co-generation has to be understood as defined in Section 2(12) of the Act. He submitted that the respondent Commission clearly erred in interpreting section 86 by reading the word 'co-generation' along with generation of electricity from renewable sources of energy and suggesting that what is being promoted is co-generation from renewable sources of energy.

3.3 Mr. Soparkar further submitted that the learned Single Judge also failed to appreciate the National Electricity Policy in paragraphs 5.2.26 and 5.12.3 which encourages co-generation. He submitted that similarly the tariff policy dated 06.01.2006 in clauses 6.3 and 6.4 also encourages co-generation. He submitted that in addition to the National policy as well as Tariff policy the applicants had produced several documents including the objections filed before the Commission which clearly recognized co-generation as a

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technology to be promoted.

3.4 Mr. Soparkar further submitted that while other Regulatory Commissions have issued regulations fastening Renwable Purchase Obligation (RPO) on captive consumers, the said regulations do not cover co-generating units. He submitted that section 86(1)(e) covers distribution licensees and the total consumption by the consumers who are sold power by the distribution licensees in their area of supply.

3.5 Mr. Soparkar submitted that the learned Single Judge has erred in relying upon the decision of the Appellate Tribunal in **Appeal No. 57 of 2009 dated 26.04.2010 in the case of Century Rayon vs. Maharashtra Electricity Regulatory Commission, Maharashtra Energy Development Agency and Maharashtra State Electricity Distribution Co. Ltd.** He submitted that the Tribunal in the said matter was considering the question whether a distribution licensee should be obligated to purchase the percentage of its consumption from co-generation irrespective of the fuel used under Section 86(1)(e) of the Act. He submitted that the said question is distinct from the question arising in the present matters as to whether co-generating CPPs which ought to be promoted should be obligated to compulsorily purchase power from renewable sources of energy. In this regard he has relied upon paragraphs 16, 25, 26, 27 and 45 which are reproduced hereunder:

> "16. In the above context, the contention that the sale of electricity to any person is to be read in the context of the sale by the co-generator or the generator of electricity from the renewable source of energy does not merit consideration. The

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Appellant is a co-generator. It produces energy more efficiently as compared to conventional power plants which is to be treated at par with the electricity from the renewable source of generation. When such being the case, the SSR Page 11 of 37 Judgment in Appeal No. 57 of 2009 fastening of obligation on the co-generator to procure electricity from renewable energy producer would defeat the object of section 86(1) (e). These two categories of generators namely: (i) Co-generators and (ii) generators of electricity through renewable sources of energy are required to sell the electricity to any person as may be directed by the State Commission. Any obligation for purchase of electricity from these two sources can be imposed only on the distribution licensee and not on the captive consumers who are generating electricity through co-generation irrespective of the fuel used.

25. It cannot be disputed that the energy efficiency of the co- generation plant is almost double than the normal power plants because normal power plants release residual energy SSR Page 17 of 37 Judgment in Appeal No. 57 of 2009 in the atmosphere, whereas the co-generation plant utilizes the energy to the maximum possible. It is established, as mentioned earlier, that the energy efficiency of the normal power plant is about 50 to 60% whereas the energy efficiency of the co-generation plant is about 80-85%.

26. Internationally, the Governments have been promoting co-generation of energy so that the precious fuel is not wasted and the environment is protected. Even the municipalities/local authorities have been encouraging the simultaneous use of the residual wastes. It is for this reason that the Electricity Act 2003 has cast obligation on the State Commissions to promote co-generation as well as the generation of electricity through renewable energy sources.

27. This aspect can be viewed from yet another angle also. As mentioned earlier, we are called upon to decide the question as to whether co-generation projects based on fossil fuel are not

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entitled to be treated at par with the eligible SSR Page 18 of 37 Judgment in Appeal No. 57 of 2009 renewable energy sources for renewable projects obligation. To answer this question we have to see the scheme of the Electricity Act as well as the National Electricity Policy and National Tariff Policy. Under the Act there are three categories of sources of energy each being accorded with a different treatment namely -

(i) Conventional Power Plants such as Thermal, Hydro and Nuclear Power Plants.

(ii) Renewal source of energy.

(iii) Non-conventional plants including co-generation plants.

45. Summary of our conclusions is given below:-

(I) The plain reading of Section 86(1)(e) does not show that the expression 'co-generation' means SSR Page 33 of 37 Judgment in Appeal No. 57 of 2009 cogeneration from renewable sources alone. The meaning of the term 'co- generation' has to be understood as defined in definition Section 2 (12) of the Act.

(II) As per Section 86(1)(e), there are two categories of `generators namely (1) co-generators (2) Generators of electricity through renewable sources of energy. It is clear from this Section that both these categories must be promoted by the State Commission by directing the distribution licensees to purchase electricity from both of these categories.

(III) The fastening of the obligation on the co-generator to procure electricity from renewable energy procures would defeat the object of Section 86 (1)(e).

(IV) The clear meaning of the words contained in Section 86(1)(e) is that both are different and both are required to be promoted and as such the fastening of liability on SSR Page 34 of 37 Judgment in Appeal No. 57 of 2009 one in preference to the other is totally contrary to the legislative interest.

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(V) Under the scheme of the Act, both renewable source of energy and cogeneration power plant, are equally entitled to be promoted by State Commission through the suitable methods and suitable directions, in view of the fact that cogeneration plants, who provide many number of benefits to environment as well as to the public at large, are to be entitled to be treated at par with the other renewable energy sources.

(VI) The intention of the legislature is to clearly promote cogeneration in this industry generally irrespective of the nature of the fuel used for such cogeneration and not cogeneration or generation from renewable energy sources alone. "

4. Mr. Mihir Joshi, learned Senior Counsel supporting the arguments advanced by Mr. Soparkar submitted that the applicants are operation the CPP in co-generation mode wherein steam is produced which runs turbines (to generate electricity) and is also used in the production process. He submitted that in case RPO is imposed and power is to be purchased then CPP generation will have to be backed down and this will directly affect the availability of steam leading to reduction in production and for fulfilling requirement of steam, additional fossil fuel will have to be burnt.

4.1 Mr. Joshi further submitted that under the RPO regulations, GERC is to fix a quantum (as a percentage of total consumption of electricity consumed in the area of a distribution licensee). He submitted that this quantum is fixed. The distribution licensees are already procuring such power and selling it to consumers including applicants who have contract demand. He submitted that it is not a case where renewable energy is not being procured at all but the only question is whether private parties can be made liable to

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procure this power.

4.2 Mr. Joshi further submitted that CPPs are set up pursuant to impetus being offered by the Government on incurring huge cost including recurring cost. He submitted that the applicants today have sufficient power and the regulations result in the applicants having to enter into contracts with private generators of renewable power. He submitted that since GERC is not authorised to fix tariff in light of proviso to Section 86(1)(e) for bilateral transactions, there is no certainty as to at what cost the generators will sell power.

4.3 Mr. Joshi submitted that GERC vide its judgement dated 16.01.2015 in Petition No. 1437 of 2014 has recorded that some renewable generators are offering to sell at a price higher than the preferential tariff even to the distribution licensees. He has drawn the attention of this Court to paragraph 20.6 of the said judgement in this regard. He submitted that this will cause grave prejudice since the applicants will be in non-compliance of unwillingness of renewable energy generators to agree on a price.

4.4 Mr. Joshi contended that GERC in its judgement dated 16.02.2015 in Petition No. 1437 and 1442 of 2014 found that sufficient renewable power is not available and has curtailed the obligation of the distribution licensees in the State of Gujarat. He submitted that in case renewable power is not available, the applicants will fail in fulfilling their obligation since procurement of power is the only obligation. He submitted that the regulations however recognise that

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Renewable Energy Certificates (RECs) are valid instruments for discharging RPO and it is unfair to ask the applicants to purchase RECs when renewable power is actually not available. He submitted that RECs are a double benefit to the generator who gets cost of power as well as REC and the applicants will have to generate power to the tune of their RPO and incur cost and will have to make a second payment for the RECs for the same quantum of power which is grossly unfair more so when GERC in paragraph 20.15 of judgement dated 16.01.2015 in Petition No. 1437 of 2014 has found that REC is an additional burden and only aids the commercial interest of renewable generators.

5. Mr. Kamal Trivedi, learned Senior Advocate appearing with Mr. B.D. Karia, learned advocate for Bhargav Karia & Associates submitted that Gujarat Electricity Regulatory Commission (Procurement of Energy from Renewable Sources) Regulation, 2010 ('the Regulations' for short) framed in the exercise of the powers conferred under Section 61, 66, 86(1)(e) and 181 of the Electricity Act, 2003 ('the Act' for short) are statutory in nature and as per the judgment of the Apex Court in the case of **Bhavesh D. Parish & Ors. Vs. Union of India reported in (2000) 5 SCC 471**, there is always a presumption in favour of validity of any legislation, unless the same is set aside after final hearing and therefore, no interim relief can be granted for staying the legislation. In view of this, the appellants do not deserve any interim relief, more particularly in light of following observations of the Apex court in the aforesaid judgment.

> "30 ....Merely because a statute comes up for examination and some arguable point is raised,

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which persuades the courts to consider controversy, the legislative will should not normally be put under suspension pending such consideration. It is now well settled that there is always a presumption in favour of constitutional validity of any legislation, unless the same is set aside after final hearing and, therefore, the tendency to grant stay of legislation relating to economic reforms, at the interim stage, cannot be understood.... "

5.1 Sections 61 and 66 of the Act are also reproduced hereunder:

Section 61. (Tariff regulations):
The Appropriate Commission shall, subject to the provisions of this Act, specify the terms and conditions for the determination of tariff, and in doing so, shall be guided by the following, namely:-
(a) the principles and methodologies specified by the Central Commission for determination of the tariff applicable to generating companies and transmission licensees;
(b) the generation, transmission, distribution and supply of electricity are conducted on commercial principles;
(c) the factors which would encourage competition, efficiency, economical use of the resources, good performance and optimum investments;
(d) safeguarding of consumers' interest and at the same time, recovery of the cost of electricity in a reasonable manner;
(e) the principles rewarding efficiency in performance;
(f) multi year tariff principles; 1[(g) that the tariff progressively reflects the cost of supply of electricity and also, reduces cross-subsidies in the manner specified by the Appropriate Commission;]
(h) the promotion of co-generation and generation of electricity from renewable sources of energy;
(i) the National Electricity Policy and tariff policy:

Provided that the terms and conditions for determination of tariff under the Electricity (Supply) Act, 1948, the Electricity Regulatory

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> Commission Act, 1998 and the enactments specified in the Schedule as they stood immediately before the appointed date, shall continue to apply for a period of one year or until the terms and conditions for tariff are specified under this section, whichever is earlier.
>
> **Section 66. (Development of market):**
> The Appropriate Commission shall endeavour to promote the development of a market (including trading) in power in such manner as may be specified and shall be guided by the National Electricity Policy referred to in section 3 in this regard.

5.2 Mr. Trivedi submitted that in fact, validity of the Regulations has been examined in great detail by the learned single Judge in the judgment under challenge wherein, it has been found that the respondent commission has duly considered all the objections and applied all the criteria in consonance with the National Action Plan and Tariff Policy and has ultimately found nothing objectionable in the Regulations. In this view of the matter, unless the appeals are finally heard and judgment of the learned single Judge under challenge is set aside, no question arises of granting any interim relief in the matter.

5.3 Mr. Trivedi submitted that apart from what is mentioned above, objections of the appellants in the matter of less availability of renewable sources of energy, higher prices being fixed by the persons selling such renewable sources of energy etc., Regulation 4.2 of the Regulations clearly enables the obligated entity to approach the commission, keeping in view the supply constraints or other factors beyond the control, with a request to revise the percentage targets per

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year. Similarly, Regulation 9.1 enables the obligated entity to approach the commission to carry forward the compliance requirement to the next year, in case of non-availability of power from renewable energy sources. At the same time, Regulation 5 enables obligated entity to purchase renewable energy certificates against the discharge of mandatory obligations. In view of this, there is a sufficient elbow room for the obligated party to take care of any of its genuine difficulties in discharge of its Renewable Purchase Obligation ('RPO' for short), and hence, no interim relief against the execution, implementation and operation of the regulation can be granted.

5.4 Mr. Trivedi contended that a combined reading of section 2(3) read with section 2(12) read with section 61 and section 86(1)(e) of the Act makes it very clear that the word 'and' between the words 'Co-generation' and 'generation' in section 86(1)(e), is conjunctive, and not disjunctive and hence both co-generation and generation, from the renewal sources of energy requires promotion. If the said co-generation and generation of electrical energy is from non-conventional i.e. renewable sources of energy i.e. wind, solar, hydro, bio-mass, no RPO is to be discharged, however, if in co-generation or generation of electrical energy or generation from captive power plants, conventional sources are utilized i.e. Coal, Oil, Gas, fossil fuel, then in that case, RPO is required to be discharged.

5.5 Mr. Trivedi submitted that in view of the above, merely because some of the appellants are engaged in co-generation of electrical energy from conventional sources, even though

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they generate renewal energy as by-product, they cannot be exempted from discharge of the RPO. Similarly, captive power plant not connected with the grid and independent by itself is also covered under the Regulation when the generator consumes electricity produced by such captive power plants, inasmuch as RPO under the Regulation is on consumption of electricity.

5.6 Mr. Trivedi submitted that apart from what is mentioned above, merely, because in some of the States, co-generation is exempt from RPO, the same cannot ipso facto invalidate similar provisions contained in the Regulations in question. Hon'ble Rajasthan High Court has dealt with this aspect in extenso and the learned single Judge has also taken note of the same. This apart learned single Judge has dealt with all the aspects of the matter in paras 20, 22.1 and 23 of the judgment under challenge.

5.7 Mr. Trivedi submitted that in view of National Action Plan as well as National Electricity Policy more particularly clause 5.12 co-generation and generation of electricity from non-conventional sources are required to be promoted by the Commissions by providing suitable measures, etc. and that non-conventional sources of energy being the most environment friendly, there is an urgent need to promote generation of electricity based on such sources of energy. Thus, it is the demand of the nation that conventional sources are preserved from being wasted and non-conventional sources of energy are used even for taking care of global warming. Thus, it would be in the interest of the Society at large that the appellants are directed to comply with the

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regulations that may be brought in force instead of granting interim relief against operation of the same.

6. At the outset it shall be relevant to peruse section 86(1) (e) and the same is reproduced under:

> "Section 86. (Functions of State Commission): --- (1) The State Commission shall discharge the following functions, namely: -
> ...
> (e) promote co-generation and generation of electricity from renewable sources of energy by providing suitable measures for connectivity with the grid and sale of electricity to any person, and also specify, for purchase of electricity from such sources, a percentage of the total consumption of electricity in the area of a distribution licensee;
> ..."

7. As as a result of hearing and perusal of records we are of the view that the statutory regulations are framed by statutory authority after inviting objections from concerned industry and therefore the same has statutory force. The GERC seems to have considered the objections raised by all the objectors while framing the regulations with regard to applicability of the RPO to CPP consumers No doubt the same has not yet been given effect from 2011 but now it has been upheld by the learned Single Judge.

7.1 Moreover, in view of the observations made by the Apex Court in the case of **Bhavesh D. Parish (supra),** it will not be appropriate to stay the impugned order by the learned Single Judge. The Apex Court has categorically held that merely because a statute comes up for examination and some arguable point is raised, which persuades the courts to

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consider controversy, the legislative will should not normally be put under suspension pending such consideration. It has also observed that there is always a presumption in favour of constitutional validity of any legislation, unless the same is set aside after final hearing and, therefore, the tendency to grant stay of legislation relating to economic reforms, at the interim stage, cannot be understood.

7.2 However, keeping in mind the interest of both the sides in these applications, it is directed that the implementation of the Regulations shall be subject to the result of the appeals. We are of the opinion that they do not fall within the definition of conventional energy as contemplated under the provisions. Prima facie what we envisage is saving natural resources and not from by product or any other product which is derived from processes coming under co-generation and that the emphasis in section 86(1)(e) is to promote non conventional and renewable sources of energy and not to promote use of fossil fuels. The observations made by this Court in these applications are prima facie and the same shall be considered in detail while hearing the appeals on merits as at this stage any observations made on the merit of the matters will prejudice the case of both the sides.

8. Therefore, instead of granting stay of the impugned judgement and order it shall be in the interest of justice to observe that the said regulations shall though come into force they shall be subject to the final decision given in the appeals. Applications are disposed of accordingly. Rule is discharged accordingly.

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(K.S.JHAVERI, J.)

(A.G.URAIZEE,J)

divya

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Annexure K
Collectively

No.23/3/2016-R&R
Government of India
Ministry of Power

Shram Shakti Bhawan, New Delhi,
Dated, the 22nd July, 2016

ORDER

Subject: Guidelines for long term RPO growth trajectory of Renewable Purchase Obligations (RPOs) for non-solar as well for solar - reg.

1.0 In exercise of the powers conferred under section 3(3) of Electricity Act, 2003, the Central Government notified the revised Tariff Policy which was published vide Gazette of India, Extraordinary, Part-I, Section-1 dated 28.1.2016.

2.0 Para 6.4 (1) of the policy provides that pursuant to provisions of section 86(1)(e) of the Act, the Appropriate Commission shall fix a minimum percentage of the total consumption of electricity in the area of a distribution licensee for purchase of energy from renewable energy sources, taking into account availability of such resources and its impact on retail tariffs. Cost of purchase of renewable energy shall be taken into account while determining tariff by SERCs. Long term growth trajectory of Renewable Purchase Obligations (RPOs) will be prescribed by the Ministry of Power in consultation with MNRE.

Provided that cogeneration from sources other than renewable sources shall not be excluded from the applicability of RPOs.

3.0 Further, Para 6.4 (1)(i) also provides that within the percentage so made applicable, to start with, the SERCs shall also reserve a minimum percentage for purchase of solar energy from the date of notification of this policy which shall be such that it reaches 8% of total consumption of energy, excluding Hydro Power, by March 2022 or as notified by the Central Government from time to time.

4.0 Now, in view of the above provisions and in order to achieve the target of 1,75,000 MW of renewable capacity by March, 2022, the Ministry of Power in consultation with

Ministry of New and Renewable Energy, notifies the Long term growth trajectory of Renewable Purchase Obligations (RPOs) for Non-solar as well solar, uniformly for all States/Union Territories, initially for three years from 2016-17 to 2018-19 as under-

Long term trajectory	2016-17	2017-18	2018-19
Non-Solar	8.75%	9.50%	10.25%
Solar	2.75%	**4.75%**	6.75%
Total	11.50%	14.2**5%**	17.00%

The obligations will be on total consumption of electricity by an obligated entity, excluding consumption met from hydro sources of power.

5.0 Further, in exercise of power conferred under the Electricity Act, 2003, SERCs may consider to notify RPO for their respective States in the line with aforesaid uniform RPO trajectory.

6.0 These Guidelines are issued with the approval of Minister of State (I/C) for Power, Coal, New and Renewable Energy and Mines.

(Jyoti Arora)
Joint Secretary to the Govt. of India
Tele No. 2371 0389

To,

1. Principal Secretary/Secretary (Power/Energy), State Governments/UTs
2. Secretary, State Electricity Regulatory Commissions/Joint Electricity Regulatory Commissions

Copy to:

1. Secretary, MNRE, CGO Complex, New Delhi
2. Chairperson, CEA, Sewa Bhawan, RK Puram, New Delhi
3. Secretary, CERC/FOR, Chanderlok Building, Janpath, New Delhi

Copy also for information to:

1. All Joint Secretaries, Ministry of Power
2. PS to MOS(I/C) for Power, Coal, NRE & Mines
3. PPS to Secy.(P), PPS to AS(BPP), PPS to AS(SP), PPS to JS(RR)

No.23/03/2016-R&R
Government of India
Ministry of Power
***

Shram Shakti Bhawan, New Delhi,
Dated, the 14th June, 2018

ORDER

Subject: Long term growth trajectory of Renewable Purchase Obligations (RPOs) for Solar and Non-solar for a period of three years i.e. 2019-20 to 2021-22 - regarding.

In exercise of the powers conferred under Para 6.4(1) of the Tariff Policy notified on 28.1.2016 and in order to achieve the target of 1,75,000 MW of renewable capacity by March, 2022, the Ministry of Power after consultation with Ministry of New and Renewable Energy vide Order dated 22nd July, 2016 had notified the Long term growth trajectory of Renewable Purchase Obligations (RPOs) for Non-solar as well solar, uniformly for all States/Union Territories, initially for three years from 2016-17 to 2018-19 as under:-

Long term RPO trajectory	2016-17	2017-18	2018-19
Non-Solar	8.75%	9.50%	10.25%
Solar	2.75%	4.75%	6.75%
Total	**11.50%**	**14.25%**	**17.00%**

The obligations were on total consumption of electricity by an obligated entity, excluding consumption met from hydro sources of power.

2.0 In continuation to the earlier Order dated 22nd July, 2016, the Ministry of Power in consultation with Ministry of New & Renewable Energy notifies the Long term growth trajectory of Renewable Purchase Obligations (RPOs) for Solar as well Non-solar, uniformly for all States/Union Territories, for further three years period from 2019-20 to 2021-22 as under-

Long term RPO trajectory	2019-20	2020-21	2021-22
Non-Solar	**10.25%**	**10.25%**	**10.50%**
Solar	**7.25%**	**8.75%**	**10.50%**
Total	**17.50%**	**19.00%**	**21.00%**

The Renewable Purchase Obligations shall be on total consumption of electricity by an obligated entity, excluding consumption met from hydro sources of power.

.....2/-

Provided that on achievement of Solar RPO compliance to the extent of 85% and above, remaining shortfall if any, can be met by excess Non-Solar energy purchased beyond specified Non-Solar RPO for that particular year.

Provided further that on achievement of Non-Solar RPO compliance to the extent of 85% and above, remaining shortfall if any, can be met by excess Solar energy purchased beyond specified Solar RPO for that particular year.

3.0 Further, in exercise of power conferred under the Electricity Act, 2003, SERCs may consider to notify RPO for their respective States in the line with aforesaid uniform RPO trajectory.

4.0 This issues with the approval of Minister of State (I/C) for Power and NRE.

14/6/18

(Ghanshyam Prasad)
Chief Engineer (R&R)
Tele No. 23710389

To,
1. Principal Secretary/Secretary (Power Energy), State Governments/UTs
2. Secretary, State Electricity Regulatory Commissions/Joint Electricity Regulatory Commissions

Copy to:

1. Secretary, MNRE, CGO Complex, New Delhi
2. Chairperson, CEA, Sewa Bhawan, RK Puram, New Delhi
3. Secretary, CERC/FOR, Chanderlok Building, Janpath, New Delhi

Copy also for information to:

1. All Joint Secretaries/ EA, Ministry of Power
2. PS to MOS(I/C) for Power, Coal, NRE & Mines
3. PPS to Secretary (Power),PPA to AS(RR), PS to CE(R&R), PS to Director (R&R)

No. 30/04/2018-R&R
Government of India
Ministry of Power

Shram Shakti Bhawan, Rafi Marg,
New Delhi, 1st February, 2019

To

1. Chairperson, CEA, Sewa Bhawan, R.K. Puram, New Delhi.
2. Secretary (Energy/Power), All State Govts/UTs.
3. Secretary, CERC/FOR, Chanderlok Building, Janpath, New Delhi
4. Secretary, All SERCs
5. CMD, All CPSUs under the administrative control of Ministry of Power
5. President, FICCI, Tansen Marg, New Delhi.
6. President, ASSOCHAM, New Delhi
7. Indian Captive Power Producers Association
8. DG, APP, New Delhi.

Subject: Clarification on Orders related to Renewable Purchase Obligation.

Sir,

I am directed to refer to the Ministry of Power's Order of even number dated 22nd July, 2016 and 14th June, 2018 regarding long term growth trajectory of Renewable Purchase Obligation (RPO) for Solar and Non-solar for the period 2016-19 and 2019-22 respectively.

2. The request of various stakeholders regarding capping of RPO for Captive Power Plants (CPP) has been examined in consultation with Ministry of New and Renewable Energy and it is clarified that RPO of the CPP may be pegged at the RPO level applicable in the year in which the CPP was commissioned. As and when the company adds to the capacity of the CPP, it will have to provide for additional RPO as obligated in the year in which new capacity is commissioned. There should not be an increase in RPO of CPP without any additional fossil fuel capacity being added.

3. This issues with the approval of Hon'ble MoS(I/C) for Power and NRE.

Yours faithfully,

(D. Chattopadhyay)
Under Secretary to the Govt. of India
Tel: 2373 0265

Copy to: Shri P.C. Maithani, Adviser, MNRE, New Delhi.

16/1/2018 - EFM
Ministry of New and Renewable Energy

Block 14 CGO Complex,
Lodhi Road New Delhi-110003
26 April 2019

Office Memorandum

Subject: Clarification Order of the Ministry of Power related to Renewable Purchase Obligation (RPO)- reg

This refers to this Ministry's OM of even number dated 26 December 2018 and the Ministry of Power's Clarification Order no 30/04/2018-R&R dated 1 February 2019 on the subject cited above.

2. On further examination and interaction with various stakeholders, including State Nodal Agencies for Renewable Energy, it has been observed that about 25 GW capacity Captive Power Plants (CPPs) out of the total CPPs of around 45 GW capacity have been set up prior to 2007-08 when most of the States had no RPOs. The Ministry of Power's Clarification Order of 1 February 2019, in effect, exempts all these CPPs from RPOs.

3. It may further be mentioned that CPPs have been importing/exporting electricity from/to the grid, as per the requirement and cost-competitive considerations. Under RPO, the CPPs will have to either buy or generate renewable power according to the RPO for the particular year. Increasing RPO trajectory will necessitate either increasing power export to the grid, cutting down import from grid. As such, under the prevailing renewables costs and trends thereof, increasing RPO trajectory may not put CPPs in financially disadvantageous position across the CPP landscape. However, increasing RPO may be disadvantageous to certain categories of CPPs (say CPPs in Aluminum industry) on technical grounds.

4. In view of the above, it is suggested that the Ministry of Power may consider issuing Clarification Order in supersession to the order referred to in paragraph 1.0 above of 1 February 2019. The Clarification Order may propose that while considering RPOs for CPPs, the SERCs may permit deviation from the RPO trajectory as notified by the Ministry Power only in the cases where:- i) achieving RPO trajectory will put the industry deploying CPP in a financially disadvantageous position; or ii) increasing renewable power consumption is not technically feasible for operations of the industry deploying CPPs. The above may act as guiding principle for SERCs in determining applicability of RPOs for CPPs.

(Tarun Singh)
Scientist-C

The Chief Engineer (R&R)
Ministry of Power
Rafi Marg, Shram Shakti Bhawan
New Delhi-110001

No. 30/04/2018-R&R
Government of India
Ministry of Power
***

Shram Shakti Bhawan, Rafi Marg,
New Delhi, 1st October, 2019

To

1. Chairperson, CEA, Sewa Bhawan, R.K. Puram, New Delhi.
2. Secretary (Energy/Power), All State Govts/UTs.
3. Secretary, CERC/FOR, Chanderlok Building, Janpath, New Delhi.
4. Secretary, All SERCs
5. CMD, All CPSUs under the administrative control of Ministry of Power.
6. President, FICCI, Tansen Marg, New Delhi.
7. President, ASSOCHAM, New Delhi
8. Indian Captive Power Producers Association
9. DG, APP, New Delhi.

Subject: Clarification on Orders related to Renewable Purchase Obligation.

Sir,

I am directed to refer to the Ministry of Power's Order of even number dated 22nd July, 2016 and 14th June, 2018 regarding long term growth trajectory of Renewable Purchase Obligation (RPO) for Solar and Non-solar for the period 2016-19 and 2019-22 respectively.

2. A clarification was issued by Ministry of Power vide letter dated 1st February, 2019 regarding capping of RPO for Captive Power Plants (CPP) (copy enclosed).

3. Based on the concern raised by various stakeholders and after due consultation with MNRE, CEA and CERC it is further clarified that:

i) For CPPs commissioned before 1.04.2016, RPO should be at the level as mandated by the appropriate Commission for the year 2015-16. For CPPs commissioned from 1.04.2016 onwards, the RPO level as mandated by the appropriate Commission or Ministry of Power, whichever is higher, for the year of commissioning of the CPP shall be applicable.

ii) In case of any augmentation in the capacity, the RPO for augmented capacity shall be the RPO applicable for the year in which the CPP has been augmented.

iii) In case, for meeting the RPO obligation, CPP has surplus power than its consumption requirement, such a CPP may sell its surplus power to the DISCOMs under the prevailing arrangements or in the power exchange.

4. This issues with the approval of Hon'ble MoS(I/C) for Power and NRE.

Yours faithfully,

Encl: As above

(D. Chattopadhyay)
Under Secretary to the Govt. of India
Tel: 2373 0265

Copy to: Shri P.C. Maithani, Adviser, MNRE, New Delhi.

GUJARAT ELECTRICITY REGULATORY COMMISSION
GANDHIAGAR

Draft Gujarat Electricity Regulatory Commission (Procurement of Energy from Renewable Sources) (Third Amendment) Regulations, 2020

Draft Notification No.....of 2020

In exercise of the powers conferred under sections 61, 66, 86 and 181 of the Electricity Act 2003 (Act No.36 of 2003) and all powers enabling it in that behalf, and after previous publication, the Gujarat Electricity Regulatory Commission hereby makes the following Regulations, to amend Gujarat Electricity Regulatory Commission (Procurement of Energy from Renewable Sources) Regulations, 2010 (hereinafter referred to as "The Principal Regulations") namely:

1. **Short Title, Extent and Commencement**

   i. These regulations shall be called the Gujarat Electricity Regulatory Commission (Procurement of Energy from Renewable Sources) (Third Amendment) Regulations, 2020.
   ii. These Regulations extend to the whole of the State of Gujarat.

2. These regulations shall come into force with effect from the date of their publication in the Official Gazette.

3. **Amendment in Regulation 2.1(aa) of the Principal Regulations to be read with First Amendment:**

   Regulation 2.1(aa) of the Principal Regulations to be read with First Amendment shall be deleted.

4. **Amendment in Regulation 2.1(p) of the Principal Regulations:**

   Regulation 2.1(p) of the Principal Regulations shall be substituted as under:

   "(p) 'Renewable energy sources' in this context means non- conventional, renewable electricity generating sources such as mini/ micro hydel, wind, solar, biomass, Biogas and bagasse based co-generation, urban/municipal waste, or such other sources, (which are generally inexhaustible and can be replenished in a short period of time)

as approved by the Ministry of New and Renewable Energy, Government of India or by the State of Gujarat;"

5. **Amendment in Regulation 4.1 of the Principal Regulations to be read with First and Second Amendments:**

Para 1 and 2 of Principal Regulation 4.1 read with First and Second Amendments shall be substituted as under:

Para: 1

Each distribution licensee shall purchase electricity (in kWh) from renewable energy sources, at a defined minimum percentage of the total consumption of its consumers including T&D losses, excluding consumption met from hydro sources of power other than mini hydel sources of power during the year. Similarly, Captive and Open Access user(s) / consumer(s) shall purchase electricity (in kWh) from renewable energy sources, at a defined minimum percentage of his/her total consumption, excluding consumption met from hydro sources of power other than mini hydel sources of power during the year.

Provided that in case of Captive User of a Captive Generating Plant commissioned before 1st April, 2016, the composite RPO target with respect to the energy procured from such Captive Generating Plant shall be *as decided by the Commission for the Year 2015-16;*

Provided further that in case of Captive Generating Plant commissioned on or after 1st April, 2016, the composite RPO target shall be equal to the target applicable for the year in which project is commissioned;

Provided further that in case of any augmentation of the Captive Generating Plant, the RPO target for augmented capacity shall be equal to the RPO target applicable for the year in which such augmented capacity has been commissioned;

Para: 2

If the above mentioned minimum quantum of power purchase either from Solar or Wind or Others (including Biomass, Bagasse, Biogas, Hydro and MSW) is not available in a particular year of FY 2017-18 to 2021-22, then in such cases, additional renewable energy available either from Solar or Wind or Others shall be utilised for fulfilment of RPO in accordance with Column 5.

6. **Amendment in Proviso of the Regulation 5.1 of the Principal Regulations to be read with First and Second Amendments:**

Proviso of the Regulation 5.1 of the Principal Regulations to be read with First and Second Amendments shall be substituted as under:

Provided that in the event of the obligated entity fulfilling the renewable purchase obligation by purchase of certificates, the obligation to purchase electricity from generation based on renewable energy other than solar can be fulfilled by purchase of non-solar certificates and the obligation to purchase electricity from generation based on solar as renewable energy source can be fulfilled by purchase of solar certificates only. If solar certificates are not available in a particular year, then in such cases, additional non-solar certificates shall be purchased for fulfilment of the RPO in accordance with the Regulation 4.

7. Amendment in Regulation 5.4 of the Principal Regulations to be read with First Amendment:

Regulation 5.4 of the Principal Regulations to be read with First Amendment shall be deleted.

8. Amendment in Regulation 5.5 of the Principal Regulations read with First Amendment:

Regulation 5.5 of the Principal Regulations read with First Amendment shall be renumbered as Regulation 5.4 and substituted as under:

5.4 In case of renewable energy generator set up under the REC scheme notified by the Central Electricity Regulatory Commission supplying power for captive use or sale to third party, the distribution licensee shall compensate to such RE generator at the rate as determined by the Commission from time to time for the surplus energy available after giving set off for the consumption by such captive consumer or the third party.

9. Amendment in Regulation 8.3 of the Principal Regulations read with First and Second Amendments:

Regulation 8.3 of the Principal Regulations read with First and Second Amendments shall be substituted as under:

8.3 Captive and Open Access Consumer(s)/ User(s) shall purchase renewable energy as stated in the Regulation 4 as above. If the Captive user(s) and Open Access consumer(s) are unable to fulfil the criteria, the shortfall of the targeted quantum would attract payment of regulatory charge as per Regulation 9.

10.Amendment in Regulation 11 of the Principal Regulations :

Regulation 11 of the Principal Regulations shall be deleted.

Sd/-
[Roopwant Singh, IAS]
Secretary
Gujarat Electricity Regulatory Commission
Gandhinagar, Gujarat

Date: 17.07.2020
Place: Gandhinagar.

19/2/2019-BPD
Ministry of New & Renewable Energy

Block No. 14, CGO Complex,
Lodi Road, New Delhi- 110003
Dated: 26 September 2019

NOTIFICATION

Subject: Clarification regarding power generated from co-firing of biomass in thermal power plants as renewable energy

In continuation to "Policy for Biomass utilisation for Power Generation through co-firing in Pulverised Coal fired Boilers" notified by the Ministry of Power on 17 November 2017 (www.cea.nic.in/reports/others/thermal/tetd/policy_biomass_utilization.pdf), and an advisory for utilizing biomass in coal based thermal power plants by the Central Electricity Authority (CEA) on 24 November 2017 (www.cea.nic.in/reports/others/thermal/tetd/Biomass%20Utilization%20Advisory.pdf), it is clarified that power generated from co-firing of biomass in the thermal power plants is renewable energy and is eligible for meeting non-solar Renewable Purchase Obligation (RPO).

2. The Central Electricity Regulatory Commission (CERC) has been requested to formulate and notify a procedure/methodology for quantifying the energy produced from biomass in biomass co-fired thermal power plants in a reliable and accurate manner. It has further been suggested that the procedure/methodology so determined may have built-in transparency and accountability, including putting an obligation on thermal power generators to publish the quantum of biomass used and energy generated from biomass co-firing in the public domain. Further, procedure/methodology notified by CERC would form the basis for respective State Electricity Regulatory Commissions (SERCs) and other relevant agencies for computing the energy produced from biomass in biomass co-fired thermal power plants, and also for determination of tariff, wherever applicable.

Dipesh Pherwani

(Dipesh Pherwani)
Scientist-B

To
1. Secretary, Ministry of Power.
2. Chairperson, CERC / all SERCs
3. Chairperson, Central Electricity Authority

Copy to Director (NIC), MNRE for uploading the notification on the Ministry's website

CENTRAL ELECTRICITY REGULATORY COMMISSION
(NEW DELHI)

Suo Motu Petition No. 12/SM/2019

Coram:
Shri P.K.Pujari, Chairperson
Shri I.S.Jha, Member

Date of Hearing : 17.12.2019
Date of Order : 18.02.2020

ORDER

In the matter of

Proposed Methodology for Estimation of Electricity Generated from Biomass in Biomass Co-fired Thermal Power Plants.

The Central Electricity Regulatory Commission (hereinafter referred to as 'the Commission') has recognized the use of biomass in biomass co-fired coal based thermal power plants under sub-clause (k) of clause (2) of the Regulation 19 and clause (4) of Regulation 43 of the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 (hereinafter referred to as the 2019 Tariff Regulations). These Regulations notified on 7th March, 2019, introduced the regulatory framework for allowing use of biomass in coal based thermal power plants.

2. The Commission initiated the process of specifying methodology for estimation of electricity generated from biomass in biomass co-fired coal based thermal power plants and accordingly, proposed a draft methodology in this regard. While proposing this methodology, the Commission had considered the following references.

a) Reference of Ministry of Power, Government of India, No. 11/86/2017-Th11 dated 17th Nov'2017 with regard to the "Policy for Biomass Utilization for Power Generation through Co-firing in Pulverized Coal Fired Boilers".

b) Advisory dated 24.11.2017 of Central Electricity Authority (CEA) to thermal power plants for utilizing biomass in coal based thermal power plants.

c) Clarification of Ministry of New and Renewable Energy ("the MNRE"), Government of India issued vide reference dated 26.9.2019 stating that the power generated from co-firing of biomass in coal based thermal power plants is renewable energy and is eligible for meeting non-solar Renewable Purchase Obligation (RPO).

3. Salient aspects of the proposed methodology were as under.

a) Proposed methodology can be applied to biomass co-fired coal based thermal plants whose tariff is determined by "Appropriate Commission" under Section 62 as well as thermal plants whose tariff is adopted by the "Appropriate Commission" under section 63 of the Electricity Act, 2003;

b) Energy generated from biomass can be worked out based on the actual consumption of biomass and coal rather than on normative operational parameters of Station Heat Rate and Auxiliary Power Consumption;

c) Principle of proportion can be the basis to work out the energy generated from biomass. The energy output is estimated in proportion to the heat input from biomass out of total heat input from biomass and coal;

d) Heat input can be worked out based on consumption and quality (GCV) of the coal and biomass;

e) Consumption of coal and biomass can be worked out based on opening balance, receipt and closing balance of coal and biomass.

4. The proposed methodology was put in public domain and comments/suggestions of various stakeholders were invited vide order dated 26.11.2019 in this Suo Motu petition. Subsequently, public hearing on the draft methodology was held on 17.12.2019 for soliciting views of stakeholders.

Submission of the Stakeholders during Public Hearing

5. The Captive Power Producers Association has requested that the proposed methodology should also be made applicable to captive power plants. They have further submitted that for co-generation power plant, there is a need for a methodology factoring in use of steam for purposes other than generation of electricity. The Association has submitted two alternative methods for consideration of the Commission.

6. Representative of NTPC Ltd submitted that in the proposed methodology, electricity generated from biomass has been proposed to be estimated based on electricity generated at the Generator Terminal (GT). The energy meter installed at Generator Terminal is normally not used for billing purpose and hence, estimates based on Generator Terminal may not be acceptable to distribution licensees.

7. The comments/suggestions/objections of the stakeholders on the proposed methodology have been examined by the Commission.

Applicability of the Methodology

8. As per Para 7 of the order dated 26.11.2019 in this Suo-Moto Petition, the applicability of the methodology was proposed as under:

> "7. The suggested methodology to estimate the energy generated from co-firing of biomass has been framed on the actual consumption of biomass and coal rather than on normative operational parameters of Station Heat Rate and Auxiliary Power Consumption. Such a methodology, which does not use normative operational parameters, can be applied both to thermal plants whose tariff is determined by "Appropriate Commission" under Section 62 as well as thermal plants whose tariff is adopted by the "Appropriate Commission" under section 63 of the Electricity Act, 2003."

9. The Commission had proposed to restrict the application of the methodology only to thermal plants under section 62 or section 63 of the Electricity Act, 2003 since the Commission regulates tariff of centrally owned generating stations and the generating stations having composite scheme for sale or purchase of electricity in more than one state under Section 79(1)(a) and 79(1)(b) of the Act. The methodology was not proposed to cover captive or cogeneration plants. The Captive Power Producers Association has submitted that since captive power plants and co-generation power plants are also eligible under MNRE letter dated 26.9.2019 for the purpose of renewable purchase obligation, the methodology should cover captive power plants and co-generation power plants.

10. We have perused the references of MNRE dated 26.9.2019. The MNRE has clarified that the power generated from co-firing of biomass in coal based thermal power plants is renewable energy and is eligible for meeting non-solar Renewable Purchase Obligations (RPOs).

11. We observe that biomass can also be used in thermal captive power plants similar to thermal generation station. We, therefore, are of the view that the methodology shall also be applicable to the captive power plant using co-firing of biomass. The methodology specified in this order will therefore, be applicable to the captive power plant also that co-fires biomass.

12. While in case of captive power plant, the entire heat generated from coal and biomass is used to generate power, in case of co-generation plant, only part of the heat is used to generate power. But, the underlying principle remains applicable i.e. the proportion of heat input from biomass to total heat input for power generation. Accordingly, the methodology specified in this order shall also be applicable for co-generation power plant.

Gross Calorific Value (GCV) measurement & Fuel Stock

13. The Captive Power Producers Association has submitted that GCV measurement point and methodology may be indicated so as to avoid any disputes on measurement of values. In this regard, it is observed that the GCV measurement point is already specified under the 2019 Tariff Regulations. The relevant extract is reproduced below, which shall be adopted by the captive power plants and co-generation power plants.

> "(31) 'GCV as Received' means the GCV of coal as measured at the unloading point of the thermal generating station through collection, preparation and testing of samples from the loaded wagons, trucks, ropeways, Merry-Go-Round (MGR), belt conveyors and ships in accordance with the IS 436 (Part-1/ Section 1)- 1964:
>
> Provided that the measurement of coal shall be carried out through sampling by third party to be appointed by the generating companies in accordance with the guidelines, if any, issued by Central Government:

Provided further that samples of coal shall be collected either manually or through hydraulic augur or through any other method considered suitable keeping in view the safety of personnel and equipment:

Provided also that the generating companies may adopt any advance technology for collection, preparation and testing of samples for measurement of GCV in a fair and transparent manner".

14. The format specified by the Commission in the 2019 Tariff Regulations captures the requirement of data applicable to the thermal power plants. For captive power plants and co-generation power plants, appropriate format may be developed by the respective State Electricity Regulatory Commission or certifying agency of the State.

Special Energy Meter

15. NTPC Ltd has submitted that measurement at the Special Energy Meter (SEM) installed by them at Generator Terminal (GT) may not be acceptable to the system operator and distribution licensees. In this regard, it is observed that the Auxiliary Energy Consumption (AEC) is worked out on the basis of SEM on Generator Terminal and these are similar to SEMs installed by CTU. Therefore, we do not foresee any difficulty in using SEMs installed on Generator Terminal by the generators. However, the Regional Power Committee, in constitution with respective Regional Load Dispatch Centre or State Load Dispatch Centre as the case may be, shall ensure that the SEMs installed by the generator should be got calibrated from time to time for energy accounting. The Captive Power Plant and Co-generation Power Plant shall ensure appropriate metering arrangement at generator terminal.

16. The methodology for estimating the energy generated from bio-mass in biomass co-fired coal based thermal power plants, including captive power plants and co-generation plants has been specified in Annexure I and is a part of this order.

Sd/-	***Sd/-***
(I. S. Jha)	**(P. K. Pujari)**
Member	**Chairperson**

Annexure-I

Methodology for estimation of electricity generated from biomass in biomass co-fired coal based thermal power plants, including captive and co-generation power plants co-firing bio-mass.

The methodology specified hereunder is to be followed by ISGS, RPCs for estimating electricity generated from biomass in biomass co-firing coal based thermal power plants, including captive and co-generation power plants co-firing bio-mass.

Step-1:

2. The electricity generated from biomass shall be estimated at Generator Terminal on monthly basis in accordance with the following formulae:

$$Eb(G) = [(Qb \times Gb) / ((Qc \times Gc) + (Qb \times Gb))] \times E(GT)$$

Where,

Eb(G) = Electrical energy generated by bio-mass at Generator terminal during the month (kWh);

Qb = Quantity of bio-mass consumed during the month (kg)

Gb = Weighted average Gross Calorific Value (GCV) of bio-mass consumed during month (kCal/kg)

E(GT) = Gross electrical energy generated at Generator Terminal during the month (kWh)

Qc = Quantity of coal burnt during the month (kg)

Gc = Weighted average GCV of coal burnt during the month (kCal/kg)

3. The product (Qb x Gb) represents heat (in Kcal) input through bio-mass during the month and shall be estimated on monthly basis by applying following formulae:

Qb x Gb (kCal) = {opening balance of bio-mass (kg) X weighted average GCV of opening balance of bio-mass (kCal/kg)}

+ {quantity of bio-mass received during the month (kg) X weighted average GCV of bio-mass received during the month (kcal/kg)}

- {closing stock of bio-mass (kg) X weighted average GCV of the closing balance of bio-mass (kCal/kg)}

4. The product (Qc x Gc) represents heat (in Kcal) input through coal during the month (kcal) and shall be estimated on monthly basis by applying the following formulae:

Qc x Gc (kCal) = {opening balance of coal (kg)X weighed average GCV of opening balance of coal (kCal/kg)}

+ {quantity of coal received during the month (kg) X weighted average GCV of coal received during the month (kCal/kg)}

– {closing stock of coal (kg) X weighted average GCV of the closing balance of coal (kCal/kg)}

Step-2:

5. The ex-bus electrical energy generated by using bio-mass shall be estimated on monthly basis by applying following formulae:

Eb (ex-bus) = Eb(G) {1- [(E(GT)- ESO)/ E(GT)] }

Where,

Eb (ex-bus) = Electrical energy generated by bio-mass ex-bus during the month (kWh);

Eb(G) = Electrical energy generated by bio-mass at Generator terminal during the month arrived at Step-1(kWh)

E(GT)	=	Total electrical energy generated at generator terminal during the month (kWh) ;
ESO	=	Total Energy Sent Out (ex-bus) during the month (kWh);

6. The generating company shall provide information to the beneficiaries and publish them in the following manner:

a) The generating company shall maintain separate fuel accounts for coal and bio-mass, with opening balance, fuel received during the month and closing balance in kg. The generating company shall also maintain separate GCV (in kCal/kg) accounts for coal and bio-mass, with weighted average GCV of the opening balance, weighted average GCV of the fuel received during the month and weighted average GCV of the closing balance at the end of the month;

b) These monthly accounts of fuel and GCV, duly signed by the authorised official of the generating company shall be published on its website along with the bills towards purchase of coal and bio-mass.

c) These monthly fuel and GCV accounts shall be made available to authorized representative/s of beneficiaries and RLDC/SLDC on demand. Any authorised representative of beneficiaries shall be allowed to witness the GCV testing of bio-mass.

d) Generating company shall keep beneficiaries informed about the co-firing of bio-mass with coal. Authorised representatives of the beneficiaries shall be allowed inspection during the period when bio-mass is being co-fired.

e) The generating company shall publish the quantum of bio-mass fired and the energy generated from bio-mass based on the formulae specified above on its website.

CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI

Petition No. 5/SM/2020

Date of Order: 31st March, 2020

Coram:
Shri P.K. Pujari, Chairperson
Shri I.S. Jha, Member

IN THE MATTER OF

Determination of Forbearance and Floor Price for the REC framework.

ORDER

A. BACKGROUND

1. In exercise of the powers conferred under sections 66 and 178 of the Electricity Act, 2003 (hereinafter referred to as the "Act"), the Commission has notified the Central Electricity Regulatory Commission (Terms and Conditions for recognition and issuance of Renewable Energy Certificate for Renewable Energy Generation) Regulations, 2010 (hereafter referred to as the "REC Regulations").

2. As per the first proviso to clause (1) of Regulation 9 of the REC Regulations, the Commission may in consultation with the Central Agency (Power System Operation Corporation Limited) and Forum of Regulators from time to time provide for floor price and forbearance price separately for Solar and Non-solar Renewable Energy Certificates (RECs).

3. Further, Clause (2) of Regulation 9 of the REC Regulations provides for the guiding principles for determining the forbearance price and floor price for RECs. The relevant provision of the REC Regulations is extracted as under:

*"9. **Pricing of Certificate:***

(1) The price of Certificate shall be as discovered in the Power Exchange:

Provided that the Commission may, in consultation with the Central Agency and Forum of Regulators from time to time provide for the floor price and forbearance price separately for solar and non-solar Certificates.

*(2) **The Commission while determining the floor price and forbearance price shall be guided inter- alia by the following principles:***

(a) Variation in cost of generation of different renewable energy technologies falling under solar and non-solar category, across States in the country;

(b) Variation in the Pooled Cost of Purchase across States in the country;

(c) Expected electricity generation from renewable energy sources including:-

i. expected renewable energy capacity under preferential tariff

ii. expected renewable energy capacity under mechanism of certificates;

(d) Renewable Purchase obligation targets set by State Commissions"

4. In pursuance of the powers vested under proviso to the clause (1) of Regulation 9 of the REC Regulations, the Commission issued an Order dated 1st June, 2010 for *'Determination of Forbearance and Floor Price for the REC framework'* (Suo Motu Petition No. 99/2010) and prescribed forbearance price and floor price for RECs as under:

	Non-Solar REC (Rs./ MWh)	Solar REC (Rs./ MWh)
Forbearance Price	3,900	17,000
Floor Price	1,500	12,000

5. Above determined forbearance price and floor price were valid for the period up to 31.03.2012.

6. Thereafter, the Commission vide suo-motu Order (No. 142/2011) dated 23.08.2011 determined the following forbearance price and floor price for the period from 01.04.2012 to 31.03.2017:

	Non-Solar REC (Rs./ MWh)	Solar REC (Rs./ MWh)
Forbearance Price	3,300	13,400
Floor Price	1,500	9,300

7. Subsequently, based on review of solar PV tariff, the Commission vide suo-motu Order (No. SM/016/2014 dated 30.12.2014) re-determined the following forbearance price and floor price for Solar REC for the remaining period of the period i.e. up to 31.03.2017. The forbearance price and floor price for Non-solar REC were left unchanged.

	Solar REC (Rs./ MWh)
Forbearance Price	5,800
Floor Price	3,500

8. After end of the control period 2012-17 of the Central Electricity Regulatory Commission (Terms and Conditions for Tariff Determination from Renewable Energy Sources) Regulations, 2012 (hereinafter referred to as the 2012 RE Tariff Regulations), the Commission vide suo-motu Order in Petition No. 02/SM/2017 dated 30.03.2017 (hereinafter referred as the 2017 REC Price Order) determined the following forbearance price and floor price for Solar and Non-solar RECs applicable from 01.04.2017 onwards:

	Solar REC (Rs./ MWh)	Non-Solar REC (Rs./MWh)
Forbearance Price	2,400	3,000
Floor Price	1,000	1,000

9. In the said Order, the Commission had also directed the staff of the Commission as under:

"26. This approach for floor price is considered necessary given the current state of demand supply of REC market. The Commission, however, directs the staff to examine the need of determining the floor price of REC and whether going forward the floor price can be removed."

B. LEGAL PROCEEDINGS ON THE 2017 REC PRICE ORDER

10. Indian Wind Energy Association (IWEA) and Green Energy Association (GEA) filed Appeal No. 105 of 2017 and Appeal No. 95 of 2017 respectively before the Appellate Tribunal for Electricity (APTEL) challenging the 2017 REC Price Order. However, vide Order dated 25th April 2017, APTEL declined to stay the said 2017 REC Price Order. Relevant extracts of the Order of APTEL are quoted as under:

"...
Having heard learned counsel for the parties, prima facie, we are of the opinion that the prayers for the stay of the impugned order or suspension of sale of all RECs till the disposal of the present appeal, cannot be granted. Prima facie, we appreciate the contention of Mr. Nayyar that the Appellants have no vested rights de-hors the statutory regulations. The ***Central Commission's order prima facie appears to be in line with the statutory regulations. Any order of stay or suspension of sale of all RECs would not be proper because it will not be in the general interest of the industry.*** *Applications are disposed of. Needless to say that this order will abide by the final order that will be passed in these appeals." (emphasis added)*

11. IWEA and GEA filed Civil Appeal No. 6083 of 2017 and Civil Appeal No. 6334 of 2017 respectively before the Hon'ble Supreme Court challenging the aforesaid order of APTEL. By an Order dated 8th May 2017, the Hon'ble Supreme Court stayed the 2017 REC Price Order. Relevant extracts of the Order are quoted as under:

"Heard the learned Senior counsel appearing for the appellants in both the Civil Appeals and the learned counsel appearing for the Commission.
Let notice be issued in the matters, returnable after eight weeks.
In the meantime, there shall be stay of the order of the Central Electricity Regulatory Commission."

In compliance of order of the Hon'ble Supreme Court, the Commission vide letter dated 24th May, 2017, issued directions to Central Agency and Power Exchanges to suspend trading of Solar and Non-solar RECs until the stay was vacated by the Hon'ble Supreme Court.

12. Later, an I.A. No. 42496/2017 was filed by M/s Global Energy Pvt. Ltd. in Civil Appeal No. 6083 of 2017 that was filed by IWEA before the Hon'ble Supreme Court. The Hon'ble Supreme Court disposed of the I.A. No. 42496/2017 and Civil Appeal No. 6083 of 2017 by Order dated 14th July 2017. Relevant extracts of the Order are quoted as under:

> *"5) That being the case, we now substitute our order dated 08.05.2017 by granting prayer (c) instead of staying the Appellate Tribunal's order."*
>
> *Wherein prayer (c) made by the appellants was:*
>
> *"(c) In the alternative, direct the Respondents to ensure that any obligated entity purchasing RECs at the floor price determined vide the order dated 30.03.2017 shall deposit the difference between the earlier floor price and the present Floor Price with the Respondent No.1, Central Commission during the pendency of the Appeal No. 105 of 2017 before the Appellate Tribunal;"*

13. In compliance with the aforesaid directions of the Hon'ble Supreme Court, the Commission vide letter dated 20th July 2017 directed the Central Agency and Power Exchanges as under:

> *"Obligated Entities/Power Exchanges any obligated entity purchasing RECs at the floor price determined vide the said the Commission's Order dated 30.3.2017 shall deposit the difference between floor price prevalent earlier (i.e. Rs 1500/Mwh) and floor price determined vide Order dated 30.03.2017 (i.e. Rs 1000/Mwh) with the Commission.*
> ...
> *Deposit of the differential amount shall be subject to the outcome of the Appeal No. 105 of 2017 by the Appellate Tribunal for Electricity and further orders of the Commission in this regard.*
> *Trading in Solar RECs shall remain suspended until further orders, since stay order dated 08.05.2017 in Civil Appeal No. 6334 of 2017 filed by Green Energy Association in case of Solar REC is still in operation."*

14. Further, an I.A. No. 82970/2017 was filed by the Commission in Civil Appeal 6334 of 2017. The Hon'ble Supreme Court disposed of the I.A. and Civil Appeal No. 6334 of 2017 by Order dated 20th September 2017. Relevant extracts of the Order are quoted as under:

> *"The limited prayer sought in the present I.A. No. 82970 of 2017 is that our Order dated 08.05.2017 be clarified only to a limited extent, namely that the respondent be allowed*

to extend RECs until 31.03.2018. Accordingly, we modify our order to this limited extent.
The civil appeal also stands disposed of. This order to continue until the Appellate Tribunal finally decides the appeal."

15. Later, by Order dated 12th April 2018, APTEL dismissed the Appeal No. 95 of 2017, Appeal No. 105 of 2017 and Appeal No. 173 of 2017 *inter alia* observing that the 2017 REC Price Order does not suffer any legal infirmity and ambiguity. The relevant extract of the Order is quoted as under:

"...

Keeping all the facts associated with the case in view, we are of the firm opinion that the impugned order passed by the Central Commission does not suffer from any legal infirmity or ambiguity.
In view of the above, we are of the considered opinion that issues raised in the present Appeals bearing Nos. 95 of 2017, 105 of 2017 & 173 of 2017 are devoid of merit.
Hence, these appeals are dismissed."

16. Consequent upon dismissal of the Appeals by APTEL, the Commission issued directions vide letter dated 23rd April 2018 to Central Agency and Power Exchanges as under:

"In view of the Hon'ble APTEL 's Order dated 12.04.2018 in above mentioned Appeal is read with the Hon'ble Supreme Court Orders dated 20.9.2017 in I.A. No. 82970 of 2017 in Civil Appeal No. 6334 of 2017 and Order dated 14.7.2017 in Civil Appeal No. 6083 of 2017 with I.A. Nos. 42490 and 42496 of 2017, the Commission has decided as under:-
(a) Trading of RECs (Solar and Non-Solar) shall be carried out henceforth in accordance with the Commission's Order dated 30.03.2017 in Petition No. 2/SM/2017.
(b) Deposit of the differential amount of Rs .500/- per REC with the Commission shall be discontinued."

17. Again, IWEA filed Civil Appeal No. 4801 of 2018 before the Hon'ble Supreme Court. By Order dated 14th May 2018, the Hon'ble Supreme Court admitted the Civil Appeal and directed as under:

"Appeal admitted.
Interim orders dated 08.05.2017 and 14.07.2017 to continue
However, we clarify that this interim order will not apply to RECs issued on or after 01.04.2017."

18. Pursuant to this Order of the Hon'ble Supreme Court, the Commission, vide letter dated 28th May 2018 issued the following directions:

> *"...*
>
> *• Trading in Non-Solar REC issued prior to 1.4.2017 shall be carried out at the floor price of Rs.1500/MWh. The obligated entities/ Power Exchanges shall deposit Rs.500/- i.e. the difference between the floor price prevailing earlier, i.e. Rs.1500/MWh and the floor price as determined vide order dated 30.3.2017 in Petition No. 2/SM/2017 (i.e. Rs.1000/MWh) with the Commission in the Account number notified vide letter dated 23rd August, 2017. The issue related to GST on Rs.500/- deposited with CERC shall continue to be governed in line with letter No. L-1/230/2017/CERC dated 26.2.2018 of CERC.*
>
> *• Arrangement as mentioned in (b) above shall be subject to the outcome of the Civil Appeal No. 4801/2018 in the Supreme Court.*
>
> *• Non-Solar RECs issued on or after 1.4.2017 shall continue to be traded in accordance with the floor price (i.e. Rs.1000/MWh) determined in the order dated 30.3.2017 in 2/SM/2017."*

19. Non-solar RECs issued before and after 01.04.2017 are being traded accordingly since May 2018.

C. PROPOSAL

20. During the period between April 2017 and March 2020, the renewable energy landscape in the country has undergone a massive change. The renewable energy tariff of solar and wind projects has declined substantially between April 2017 and March 2020. Further, demand and supply of renewable energy has undergone changes. In addition to solar projects, wind energy projects are also being awarded on the basis of competitive bidding conducted at National and State level. There has been a decline in the tariff discovered through competitive bidding for both solar and wind projects. In view of the prevalent market conditions, REC prices necessitate a review in order to balance the interests of eligible and obligated entities.

21. Accordingly, in pursuance of the guiding principles for determining the forbearance price and floor price for Solar and Non-solar RECs enshrined in Clause

(2) of Regulation 9 of the REC Regulations, forbearance price and floor price of REC have been reviewed. The detailed computations are at Annexure-1 and Annexure-2.

22. The Commission now proposes the following forbearance price and floor price for Solar and Non-Solar RECs under the REC Regulations with effect from a date to be notified by the Commission subsequently as per the proposal enclosed as Appendix–1.

	Solar REC (Rs./ MWh)	Non-Solar REC (Rs./MWh)
Forbearance Price	1,000	1,000
Floor Price	0	0

23. It is also proposed that the forbearance price and floor price shall be applicable to RECs issued after 01.04.2017. For Solar RECs issued before 01.04.2017, the eligible entities shall have an option to adopt the above forbearance price and floor price or to continue with the Order dated 30.03.2017 in Petition No. 02/SM/2017. For Non-solar RECs issued prior to 01.04.2017, the trading shall take place in accordance with Commission's letter dated 28.05.2018 which shall be subject to the final decision of the Hon'ble Supreme Court in Civil Appeal No. 4801/2018.

24. Comments/ suggestions of the stakeholders on the above proposal are invited by 20.04.2020 before the Commission takes a final decision.

Sd/-

(I. S. Jha)
Member

Sd/-

(P. K. Pujari)
Chairperson

Appendix–1

Proposal for Determination of Forbearance Price and Floor Price of RECs

1. Need for review of Forbearance Price and Floor Price of RECs

A. The current forbearance price and floor price of Non-solar and Solar RECs as determined by the Commission vide Order dated 30.3.2017 are as under:

	Non-Solar REC (Rs./ MWh)	Solar REC (Rs./ MWh)
Forbearance Price	3,000	2,400
Floor Price	1,000	1,000

The above forbearance price and floor price of Non-solar RECs were based on generic tariff for non-solar RE Technologies for FY 2016-17 notified by SERCs or the tariff order prevalent at the time of notification of the Order. On the other hand, forbearance price and floor price of Solar RECs were based on solar PV tariff discovered through competitive bidding route and published by MNRE up to February 2017.

B. The recent trend of the results of competitive bidding for solar projects reveal that the average bid tariff discovered in auctions during the period from January 2019 to March 2020[1] is Rs 2.74 /kWh.

Name of Projects and Bidding Agency	Year	Capacity offered (MW)	Highest Bid won (Rs./KWh)	Lowest Bid won (Rs./KWh)	Weighted Avg. Price (Rs./KWh)
UPNEDA 500 MW Solar Tender	2019	72	3.05	3.02	3.03
Odisha 200MW Solar Tender	2019	75	2.79	2.79	2.79
SECI 750 MW (Rajasthan) Solar Tender	2019	620	2.49	2.48	2.48
SECI 1200 MW ISTS Connected Solar Phase-III	2019	1200	2.55	2.61	2.59
SECI 250 MW Maharashtra Dondaicha Solar Park	2019	250	2.87	2.91	2.89
SECI 1200 MW ISTS Connected	2019	1200	2.54	2.55	2.54

[1] Details upto 20.3.2020

Name of Projects and Bidding Agency	Year	Capacity offered (MW)	Highest Bid won (Rs./KWh)	Lowest Bid won (Rs./KWh)	Weighted Avg. Price (Rs./KWh)
(ISTS-IV)					
SECI 750 MW Rajasthan	2019	680	2.5	2.5	2.5
GUVNL 250 MW Dholera Solar Park (Phase V)	2019	250	2.75	2.75	2.75
GUVNL 500 MW Raghanesda Solar Park -Phase III-R	2019	500	2.65	2.7	2.67
GUVNL 500 MW Phase-IV	2019	500	2.55	2.68	2.66
MSEDCL 1000 MW Tender	2019	1000	2.74	2.75	2.75
Rajasthan Tranche-II 750-MW solar tender	2019	680	2.5	2.5	2.50
SECI :1.2 GW ISTS-VI	Oct, 2019	960	2.71	2.71	2.71
MSEDCL 500 MW ISTS Phase IV	Dec, 2019	500	2.9	2.89	2.90
UPNEDA 500 MW Solar Tender	Jan, 2020	232	3.25	3.25	3.25
SECI 7 GW ISTS Solar Projects linked with 2 GW Solar Module Manufacturing Facility	Jan, 2020	5000	2.92	2.92	2.92
SECI: ISTS T-VII -1.2 GW RE Peak Power Supply	Jan, 2020	1620	2.7	2.7	2.70
NHPC: ISTS T-1-2 GW Solar Projects	Jan, 2020	3780	2.78	2.78	2.78
UPNEDA 500 MW Solar Tender:184 GW	Feb, 2020	184	3.18	3.17	3.18
SECI 1.2 GW ISTS Tranche VIII	Feb, 2020	1200	2.51	2.5	2.51
GUVNL: Phase-VIII 500 MW Solar Projects	Mar, 2020	430	2.65	2.65	2.65
MSEDCL: Phase -V 500 MW Intra State Solar Projects	Mar, 2020	350	2.9	2.9	2.90
GUVNL: Phase-VIII 350 MW of Solar Projects	Mar, 2020	350	2.64	2.61	2.63
AVERAGE					2.74

(Source: Infraline database and Infra live)

C. The tariffs for wind projects have also declined considerably after 2017. The recent trends of the results of competitive bidding as observed by the Commission reveal that the average bid tariff discovered in auctions for wind projects is Rs 2.51 per kWh during 2018-19 and Rs 2.85 per kWh during 2019-20.

2018-19

Name of Projects and Bidding Agency	Year	Capacity offered (MW)	Highest Bid won (Rs./KWh)	Lowest Bid won (Rs./KWh)	Weighted Avg. Price (Rs./KWh)
GUVNL :500 MW	Jan, 2018	500	2.45	2.43	2.44
SECI	Feb, 2018	2199.8	2.45	2.44	2.44
MSEDCL: 500 MW	Jun, 2018	500.1	2.87	2.85	2.86
MSEDCL	Sep,2018	87	2.52	2.51	2.51
AVERAGE					**2.51**

2019-20

Name of Projects and Bidding Agency	Year	Capacity offered (MW)	Highest Bid won (Rs./KWh)	Lowest Bid won (Rs./KWh)	Weighted Avg. Price (Rs./KWh)
SECI: 1800 MW ISTS T-VIII	2019	439.5	2.84	2.83	2.84
SECI: 1800 MW ISTS T-VII	2019	480	2.83	2.79	2.81
GUVNL:1000 MW PHASE 11-R	2019	744.2	2.95	2.8	2.88
SECI: 1200 MW	2019	1200	2.83	2.82	2.83
SECI: 1200 MW T-VI	2019	2525	2.85	2.85	2.85
AVERAGE					**2.85**

(Source: Infra live)

D. Aforesaid developments indicate that the tariff of solar and wind projects have declined considerably due to prevalent market forces and change in project cost. These developments underscore the need to review forbearance price and floor price for the RECs.

2. **Capacity Share of Various RE Technologies in REC framework:** The REC framework has been in force for about ten years. As on 27.03.2020, total 989 projects (Solar and Non-solar technologies) have been registered under REC

framework. The share of each non-solar RE technology in the REC framework has been analysed for the purpose of determination of the forbearance price and floor price of Non-solar RECs. It is expected that the projects coming up for registration under REC framework shall be on similar lines. The detailed break-up of the capacity and number of projects registered as on 27.3.2020 are as under:

Non-solar Technology	No. of Projects	Capacity (MW)	%age Capacity share
Small Hydro	37	250.48	6.81%
Biomass	40	420.19	11.43%
Biofuel Cogeneration	54	378.08	10.29%
Wind	479	2627.27	71.47%
Total Capacity	**610**	**3676.02**	

Source: REC Registry (https://www.recregistryindia.nic.in)

3. Key Parameters for computation of forbearance price and floor price: -

3.1 *Cost of generation/ RE tariff:* Costs of generation/ RE tariff for different technologies have varied over a large range during 2017-2020. RECs are a market instrument and a source of revenue for projects registered under the REC framework. Hence, alignment of REC prices with the market is required. Various SERCs have prescribed generic tariff for non-solar RE technologies and wind projects have been awarded based on competitive bidding during this period. These reflect the market scenario prevailing in different States and have been considered to determine the Non-solar REC forbearance price and floor price. The average bid tariff discovered (during January 2017 and March 2020) has been considered to determine the Solar REC forbearance price and floor price.

3.2 *Average Power Purchase Cost (APPC)*: APPC is the weighted average pooled price at which the distribution licensee has purchased electricity including cost of self-generation, if any, in the previous year from all the energy suppliers, long-term and short-term, but excluding those based on renewable energy sources (without transmission charges) in the State during the financial year 2018-19.

3.3 *Minimum Project Viability Requirement:* The project viability approach covers the cost required to meet the viability parameters including O&M, Interest on Loan,

Interest on Working Capital and Depreciation (and fuel expenses in case of biomass and co-generation projects). Based on review of generic tariff orders, the Commission has observed that the viability parameters as outlined above constitute 70% of the total levellised tariff.

3.4 *Forbearance Price:* The forbearance price has been derived based on the highest difference between cost of generation of RE technologies/ RE tariff and the average power purchase cost of 2018-19 for the respective States.

3.5 *Floor Price:* The floor price has been determined keeping in view the basic minimum requirements for ensuring the viability of RE projects set up to meet the RE targets. This viability requirement has been observed as approx. 70% of the levellised tariff prescribed for each non-solar RE technology or 70% of average bid discovered tariff for solar auctions.

4. Principles for computation of forbearance price and floor price: -

In pursuance of the guidelines specified in the Regulation 9(2) of the REC Regulations, the forbearance price and floor price for Solar and Non-solar REC have been evolved based on the following assumptions:

4.1 Computation of Forbearance Price and Floor Price for Non-Solar REC

The Commission has followed a two-way approach for determination of forbearance price and floor price of Non-solar RECs. The approach included the following scenarios.

Scenario 1: Determine Forbearance Price and Floor Price using APPC and SERC notified tariff for all non-solar RE technologies (detailed computation may be perused at Annexure-1A).

Scenario 1 (based on Tariff Orders by SERCs) (In Rs/kWh)				
	SHP*	Biomass*	Bagasse	Wind*
Technology Specific Forbearance Price	3.07	4.38	3.45	1.95
Technology Specific Floor Price	1.30	1.86	1.56	0.51

* Considered average of the various categories of tariff notified by SERCs, if any

Total Projects registered under REC mechanism (as on 27.3.2020) Source: REC Registry					
Technology	**No. of Projects**	**Capacity**	**%age Capacity share**	**Weighted Average Forbearance Price (Rs/kWh)**	**Weighted Average Floor Price (Rs/kWh)**
Small Hydro	37	250.48	6.81%	0.21	0.09
Biomass	40	420.19	11.43%	0.50	0.21
Biofuel Cogeneration	54	378.08	10.29%	0.35	0.16
Wind	479	2627.27	71.47%	1.39	0.37
Total Capacity	**610**	**3676.02**		**2.45**	**0.83**

It is evident from the above table that sum of weightage average forbearance price based on the highest difference between SERC notified tariff and APPC and relative share of technologies in the projects registered in REC framework is Rs 2.45/kWh.

Similarly, sum of weightage average floor price based on the highest difference between Minimum Project Viability and APPC and relative share of technologies in the projects registered in REC framework is Rs 0.83/kWh.

Scenario 2: Determine Forbearance Price and Floor Price using APPC and SERC notified tariff for all non-solar RE technologies including bid discovered tariff for Wind Projects during the period 2018-2020. Detailed computation may be perused as Annexure-1B.

Scenario 2 (based on Tariff Orders by SERCs and Bid Discovered tariff for Wind) (in Rs/kWh)				
	SHP*	**Biomass***	**Bagasse**	**Wind (Bids)**
Technology Specific Forbearance Price	3.07	4.38	3.45	-0.15
Technology Specific Floor Price	1.30	1.86	1.56	-0.95

* Considered average of the various categories of tariff notified by SERCs if any

Total Projects registered under REC mechanism (as on 27.03.2020) Source: REC Registry					
Technology	**No. of Projects**	**Capacity**	**%age Capacity share**	**Weighted Average Forbearance Price (Rs/kWh)**	**Weighted Average Floor Price (Rs/kWh)**
Small Hydro	37	250.48	6.81%	0.21	0.09
Biomass	40	420.19	11.43%	0.50	0.21
Biofuel Cogeneration	54	378.08	10.29%	0.35	0.16
Wind	479	2627.27	71.47%	-0.11	-0.68
Total Capacity	**610**	**3676.02**		**0.95**	**-0.22**

It is evident from the above table that the sum of weighted average forbearance price based on the highest difference between SERC notified tariff/ bid discovered tariff and APPC and relative share of technologies in the projects registered in REC framework is Rs 0.95 per kWh.

Similarly, sum of weighted average floor price based on the highest difference between Minimum Project Viability and APPC and relative share of technologies in the projects registered in REC framework is Rs -0.22 per kWh.

4.1.1 Forbearance price for Non-solar REC

i. The highest difference between the costs of generation/ RE Tariff as specified by various SERCs including a scenario with bid discovered tariff for Wind Projects and the State-wise APPC is computed as Technology Specific Forbearance Price for each non-solar RE technology. The Technology Specific Forbearance Price is mapped with the capacity share of each technology in the REC framework and weighted average Technology Specific Forbearance Price for each technology is determined. Considering the prevailing market conditions of awarding wind projects through competitive bidding, Scenario 2 has been considered for determination of Forbearance Price. The sum of the weighted average Technology Specific Forbearance Price for all non-solar RE technologies in unit price has been rounded off to the nearest ten's, to arrive at the forbearance price of Rs 1,000/MWh.

ii. Highest difference as forbearance price includes all the technologies and is based on the representative share of each technology in the registered project capacity. The forbearance price is considered necessary to take care of the risks involved for RE generators in opting for REC mechanism.

4.1.2 Floor Price for Non-solar REC

i. Floor price is determined based on the difference between the project viability requirement and APPC determined for different RE Technologies across states. The highest difference for each technology is the Technology Specific Floor Price for each non-solar RE technology. This Technology specific Floor Price is mapped with the respective capacity share of the technology to

arrive at the weighted average Technology Specific Floor Price for each technology.

ii. This approach for floor price is considered necessary given the current state of demand-supply of REC market. The Commission in its Order dated 30.03.2017, had directed the staff to examine the need of determining the floor price of REC and whether going forward the floor price can be removed. Based on the aforesaid analysis, it is evident that the market has matured and to encourage sale of RECs and promote trade, floor price is no longer required. Accordingly, the Commission has considered Scenario 2 and proposes to remove the floor price.

iii. Therefore, considering results of above analysis and relative share of the technologies therein, the Commission proposes following forbearance price and floor price for Non-solar RECs.

	Non-Solar REC (Rs./ MWh)
Forbearance Price	1,000
Floor Price	0

4.2 Computation of Forbearance price and Floor Price for Solar REC

4.2.1 The Commission has followed a three-pronged approach for determination of forbearance and floor price of Solar RECs. The approach includes the following scenarios.

Scenario 1: Determine Forbearance and Floor Price using APPC for all States and Union Territories (UTs) in India during the year 2018-19 and Bid Discovered Tariff for the year 2017 Detailed computation may be perused as Annexure – 2A.

Scenario 1 - Calculation for All States	
Avg. Bid Tariff - Rs. 3.18/kWh	Avg. Bid Tariff Based MPV - Rs. 2.23/kWh
Forbearance Price: Rs 0.90/kWh	Floor Price: Rs -0.05/kWh

It is evident from the above table that the forbearance price based on the highest difference between bid discovered tariff and APPC is Rs 0.90 /kWh.

Floor price based on the highest difference between Minimum Project Viability and APPC is Rs -0.05 /kWh.

Scenario 2: Determine Forbearance Price and Floor Price using APPC for all States and Union Territories (UTs) in India during the year 2018-19 and Bid Discovered Tariff for the year 2018. Detailed computation may be perused as Annexure-2B.

Scenario 2 - Calculation for All States	
Avg. Bid Tariff - Rs. 2.89/kWh	Avg. **Bid Tariff Based MPV - Rs. 2.02** /kWh
Forbearance Price: Rs 0.61/kWh	Floor Price: Rs -0.26/kWh

It is evident from the above table that the forbearance price based on the highest difference between bid discovered tariff and APPC is Rs 0.61/kWh. Floor price based on the highest difference between Minimum Project Viability and APPC is Rs -0.26 /kWh.

Scenario 3: Determine Forbearance Price and Floor Price using APPC for all States and Union Territories (UTs) in India during the year 2018-19 and bid discovered tariff for the year 2019 upto March, 2020[2] (detailed computation may be perused at Annexure-2C).

Scenario 3 - Calculation for All States	
Avg. Bid Tariff - Rs. 2.74/kWh	Avg. **Bid Tariff Based MPV - Rs.** 1.92/kWh
Forbearance Price: Rs 0.46/kWh	Floor Price: Rs -0.36/kWh

It is evident from the above table that the forbearance price based on the highest difference between bid discovered tariff and APPC is Rs 0.46 per kWh. Floor price based on the highest difference between Minimum Project Viability and APPC is Rs -0.36 per /kWh.

4.2.2 Forbearance price for Solar REC

i. From analysis of the three scenarios as above, it is evident that the forbearance price is be in the range of Rs 0.46/kWh and Rs 0.90/kWh. Given that forbearance prices are ceiling prices, the Commission proposes the forbearance price as Rs 1,000 per MWh (by rounding off to the nearest ten's).

[2] Till 20.3.2020

ii. This approach is considered appropriate as it reflects the current market dynamics and the prices discovered through bidding processes.

4.2.3 Floor price for Solar REC

i. The floor price of solar RECs has been calculated based on the project viability approach. The project viability approach covers the cost required to meet viability parameters including O&M, interest on loan, interest on working capital and depreciation.

ii. The highest difference between the minimum requirements for project viability i.e. 70% of the average bid discovered tariff and respective state APPC of 2018-19 has been considered as floor price.

iii. In all the above three scenarios in para 4.2.1, the floor price ranges between Rs -0.05 and Rs -0.36 per kWh. Accordingly, the Commission proposes floor price as zero.

iv. Considering the results of the above analysis, the Commission proposes the following forbearance price and floor price for Solar RECs.

	Solar REC (Rs./ MWh)
Forbearance Price	1,000
Floor Price	0

5. Proposal

Based on the above principles, the following forbearance price and floor price are prescribed for RECs:

	Non-Solar REC (Rs./ MWh)	Solar REC (Rs./ MWh)
Forbearance Price	1,000	1,000
Floor Price	0	0

The above forbearance price and floor price shall be effective from the date of notification of this Order and shall remain valid until further orders of the Commission.

ANNEXURE-1A (FORBEARANCE PRICE AND FLOOR PRICE OF NON-SOLAR REC – BASED ON SERC TARIFF ORDERS)

(Small Hydro Power)					
State	APPC (2018-19) as estimated based on SERC Tariff Orders for 2018-19 (Rs/kWh)	SERC Tariff for (Average Tariff) based on SERC Orders(Rs/kWh)	Difference b/w Tariff and APPC (Rs/kWh)	Project Viability Tariff based on SERC Orders(Rs/kWh)	Difference b/w Project Viability Tariff and APPC (Rs/kWh)
Gujarat **	3.98	3.98	0.00	2.79	-1.20
Himachal Pradesh	2.29	3.61	1.33	2.53	0.24
Karnataka	3.50	3.95	0.45	2.77	-0.74
Madhya Pradesh	2.83	5.9	3.07	4.13	1.30
Maharashtra	3.69	5.02	1.33	3.51	-0.18
Punjab	4.01	5.56	1.55	3.89	-0.12
Technology Specific Forbearance Price (Small Hydro Power)				3.07	
Technology Specific Floor Price (Small Hydro Power)				1.30	

(Wind Energy)					
State	APPC (2018-19) as estimated based on SERC Tariff Orders for 2018-19 (Rs/kWh)	SERC Tariff (Average Tariff) based on SERC Orders(Rs/kWh)	Difference b/w Tariff and APPC (Rs/kWh)	Project Viability Tariff based on SERC Orders (Rs/kWh)	Difference b/w Project Viability Tariff and APPC (Rs/kWh)
Andhra Pradesh	3.83	4.76	0.93	3.33	-0.50
Gujarat **	3.98	4.72	0.74	3.30	-0.68
Karnataka	3.50	3.26	-0.24	2.28	-1.22
Madhya Pradesh	2.83	4.78	1.95	3.25	0.51
Maharashtra	3.69	2.52	-1.17	1.76	-1.93
Rajasthan	3.47	5.39	1.92	3.77	0.31
Tamil Nadu #	3.73	2.86	-0.87	2.00	-1.73
Technology Specific Forbearance Price (Wind Energy)				1.95	
Technology Specific Floor Price (Wind Energy)				0.51	

(Biomass)					
State	APPC (2018-19) as estimated based on SERC Tariff Orders for 2018-19 (Rs/kWh)	SERC Tariff (Average Tariff) based on SERC Orders (Rs/kWh)	Difference b/w Tariff and APPC (Rs/kWh)	Project Viability Tariff based on SERC Orders (Rs/kWh)	Difference b/w Project Viability Tariff and APPC (Rs/kWh)
Gujarat **	3.98	5.95	1.96	4.16	0.18
Karnataka	3.50	5.45	1.95	3.82	0.31
Madhya Pradesh	2.83	6.58	3.75	4.61	1.77
Maharashtra	3.69	7.83	4.14	5.48	1.79
Punjab	4.01	8.39	4.38	5.87	1.86
Rajasthan	3.47	7.12	3.65	4.98	1.52
Tamil Nadu #	3.73	6.11	2.38	4.28	0.55
Technology Specific Forbearance Price (Biomass)				4.38	
Technology Specific Floor Price (Biomass)				1.86	

(Bagasse/Cogeneration)					
State	APPC (2018-19) as estimated based on SERC Tariff Orders for 2018-19 (Rs/kWh)	SERC Tariff (Average Tariff) based on SERC Orders (Rs/kWh)	Difference b/w Tariff and APPC (Rs/kWh)	Project Viability Tariff based on SERC Orders (Rs/kWh)	Difference b/w Project Viability Tariff and APPC (Rs/kWh)
Gujarat **	3.98	5.90	1.92	4.13	0.15
Karnataka	3.50	3.59	0.09	2.51	-0.99
Madhya Pradesh	2.83	6.28	3.45	4.40	1.56
Maharashtra	3.69	4.99	1.30	3.49	-0.20
Punjab	4.01	6.48	2.47	4.54	0.52
Rajasthan	3.47	5.53	2.06	3.87	0.40
Tamil Nadu #	3.73	5.53	1.80	3.87	0.14
Technology Specific Forbearance Price (Bagasse / Cogeneration)				3.45	
Technology Specific Floor Price (Bagasse / Cogeneration)				1.56	

APPC Data
** Gujarat - Approved Power Purchase and Cost for 2018-19 from MYT Order for Control Period FY 2016-17 to FY 2019-20 considered
# Tamil Nadu - Approved Power Purchase and Cost for 2018-19 from Order dated 11th August 2017 considered

Determination of Forbearance Price and Floor Price for Non-solar REC

Non-solar Technology	No. of Projects*	Capacity*	%age Capacity share	Technology Specific Forbearance Price (Rs/kWh)	Weighted Average Forbearance Price (Rs/kWh)	Technology Specific Floor Price (Rs/kWh)	Weighted Average Floor Price (Rs/kWh)
Small Hydro	37	250.48	6.81%	3.07	0.21	1.30	0.09
Biomass	40	420.19	11.43%	4.38	0.50	1.86	0.21
Biofuel Cogeneration	54	378.08	10.29%	3.45	0.35	1.56	0.16
Wind	479	2627.27	71.47%	1.95	1.39	0.51	0.37
Total Capacity	**610**	**3676.016**			**2.45**		**0.83**

* Source: REC Registry

ANNEXURE-1B (FORBEARANCE PRICE AND FLOOR PRICEOF NON-SOLAR REC– BASED ON SERC TARIFF ORDERS AND BID DISCOVERED TARIFF FOR WIND PROJECTS)

(Small Hydro Power)					
State	APPC (2018-19) as estimated based on SERC Tariff Orders for 2018-19 (Rs/kWh)	SERC Tariff for (Average Tariff) based on SERC Orders (Rs/kWh)	Difference b/w Tariff and APPC (Rs/kWh)	Project Viability Tariff based on SERC Orders (Rs/kWh)	Difference b/w Project Viability Tariff and APPC (Rs/kWh)
Gujarat **	3.98	3.98	0.00	2.79	-1.20
Himachal Pradesh	2.29	3.61	1.33	2.53	0.24
Karnataka	3.50	3.95	0.45	2.77	-0.74
Madhya Pradesh	2.83	5.9	3.07	4.13	1.30
Maharashtra	3.69	5.02	1.33	3.51	-0.18
Punjab	4.01	5.56	1.55	3.89	-0.12
Technology Specific Forbearance Price (Small Hydro Power)				**3.07**	
Technology Specific Floor Price (Small Hydro Power)				**1.30**	

(Wind Energy – Competitive Bids)					
State	APPC (2018-19) as estimated based on SERC Tariff Orders for 2018-19 (Rs/kWh)	Bid discovered Tariff (Rs/kWh) μ	Difference b/w Tariff and APPC (Rs/kWh)	Project Viability Tariff based on Bid discovered Tariff (Rs/kWh)	Difference b/w Project Viability Tariff and APPC (Rs/kWh)
Andhra Pradesh	3.83	2.68	-1.15	1.88	-1.95
Gujarat **	3.98	2.68	-1.30	1.88	-2.10
Karnataka	3.5	2.68	-0.82	1.88	-1.62
Madhya Pradesh	2.83	2.68	-0.15	1.88	-0.95
Maharashtra	3.69	2.68	-1.01	1.88	-1.81
Rajasthan	3.47	2.68	-0.79	1.88	-1.59
Tamil Nadu #	3.73	2.68	-1.05	1.88	-1.85
Technology Specific Forbearance Price (Wind Energy)				**-0.15**	
Technology Specific Floor Price (Wind Energy)				**-0.95**	

μ- Bid discovered tariff for wind projects auctioned during the period 2018-19 has been in the range of Rs 2.44-2.86 per kWh. Weighted average of the bid discovered tariff during the period 2018-19 has been computed as Rs 2.51 per kWh. Bid discovered tariff for wind projects auctioned during the period 2019-20 has been in the range of Rs 2.81 – 2.88 per kWh. Weighted average of the bid discovered tariff during the period 2019-20 has been computed as Rs 2.85 per kWh. Later average of the weighted averages of 2018-19 and 2019-20 as computed above has been considered.

(Biomass)					
State	APPC (2018-19) as estimated based on SERC Tariff Orders for 2018-19 (Rs/kWh)	SERC Tariff (Average Tariff) based on SERC Orders (Rs/kWh)	Difference b/w Tariff and APPC (Rs/kWh)	Project Viability Tariff based on SERC Orders (Rs/kWh)	Difference b/w Project Viability Tariff and APPC (Rs/kWh)
Gujarat **	3.98	5.95	1.96	4.16	0.18
Karnataka	3.50	5.45	1.95	3.82	0.31
Madhya Pradesh	2.83	6.58	3.75	4.61	1.77
Maharashtra	3.69	7.83	4.14	5.48	1.79
Punjab	4.01	8.39	4.38	5.87	1.86
Rajasthan	3.47	7.12	3.65	4.98	1.52
Tamil Nadu #	3.73	6.11	2.38	4.28	0.55
Technology Specific Forbearance Price (Biomass)				**4.38**	
Technology Specific Floor Price (Biomass)				**1.86**	

(Bagasse/Cogeneration)					
State	APPC (2018-19) as estimated based on SERC Tariff Orders for 2018-19 (Rs/kWh)	SERC Tariff (Average Tariff) based on SERC Orders (Rs/kWh)	Difference b/w Tariff and APPC (Rs/kWh)	Project Viability Tariff based on SERC Orders (Rs/kWh)	Difference b/w Project Viability Tariff and APPC (Rs/kWh)
Gujarat **	3.98	5.90	1.92	4.13	0.15
Karnataka	3.50	3.59	0.09	2.51	-0.99
Madhya Pradesh	2.83	6.28	3.45	4.40	1.56
Maharashtra	3.69	4.99	1.30	3.49	-0.20
Punjab	4.01	6.48	2.47	4.54	0.52
Rajasthan	3.47	5.53	2.06	3.87	0.40
Tamil Nadu #	3.73	5.53	1.80	3.87	0.14
Technology Specific Forbearance Price (Bagasse / Cogeneration)				**3.45**	
Technology Specific Floor Price (Bagasse / Cogeneration)				**1.56**	

APPC Data
** Gujarat - Approved Power Purchase and Cost for 2018-19 from MYT Order for Control Period FY 2016-17 to FY 2019-20 considered
# Tamil Nadu - Approved Power Purchase and Cost for 2018-19 from Order dated 11th August 2017 considered

Determination of Forbearance Price and Floor Price for Non-solar REC

Non-solar Technology	No. of Projects*	Capacity*	%age Capacity share	Technology Specific Forbearance Price (Rs/kWh)	Weighted Average Forbearance Price (Rs/kWh)	Technology Specific Floor Price (Rs/kWh)	Weighted Average Floor Price (Rs/kWh)
Small Hydro	37	250.48	6.81%	3.07	0.21	1.30	0.09
Biomass	40	420.19	11.43%	4.38	0.50	1.86	0.21
Biofuel Cogeneration	54	378.08	10.29%	3.45	0.35	1.56	0.16
Wind	479	2627.27	71.47%	-0.15	-0.11	-0.95	-0.62
Total Capacity	610	3676.016			0.95		-0.22

* Source: REC Registry

ANNEXURE-2A (FORBEARANCE PRICE AND FLOOR PRICE OF SOLAR REC- FOR ALL STATES BASED ON AVERAGE BID TARIFF FOR THE PERIOD JAN 2017– DEC 2017

State	APPC (2018-19) as estimated based on SERC Tariff Orders for 2018-19 (Rs/kWh)	Bid Discovered Tariff for Solar Project (Rs/kWh)[µ]	Difference b/w Bid Discovered Tariff and APPC (Rs/kWh)	Project Viability Tariff (Rs/kWh) based on Bid Discovered Tariff	Difference b/w Project Viability Tariff and APPC (Rs/kWh)
Andaman & Nicobar*	11.47	3.18	-8.29	2.23	-9.24
Andhra Pradesh	3.83	3.18	-0.65	2.23	-1.60
Arunachal Pradesh	2.62	3.18	0.56	2.23	-0.40
Assam	3.65	3.18	-0.47	2.23	-1.43
Bihar	4.12	3.18	-0.94	2.23	-1.89
Chandigarh	3.37	3.18	-0.19	2.23	-1.15
Chhattisgarh	2.9	3.18	0.28	2.23	-0.68
Dadra & Nagar Haveli	3.64	3.18	-0.46	2.23	-1.41
Daman & Diu	3.17	3.18	0.01	2.23	-0.94
Delhi	3.9	3.18	-0.72	2.23	-1.67
Goa	2.68	3.18	0.50	2.23	-0.45
Gujarat **	3.98	3.18	-0.80	2.23	-1.76
Haryana	3.72	3.18	-0.54	2.23	-1.49
Himachal Pradesh	2.29	3.18	0.89	2.23	-0.06
Jammu & Kashmir ^	2.88	3.18	0.30	2.23	-0.65
Jharkhand ^^	3.99	3.18	-0.81	2.23	-1.76
Karnataka	3.5	3.18	-0.32	2.23	-1.28
Kerala $	2.95	3.18	0.23	2.23	-0.72
Lakshadweep $$	12.14	3.18	-8.96	2.23	-9.92
Madhya Pradesh	2.83	3.18	0.35	2.23	-0.61
Maharashtra	3.69	3.18	-0.51	2.23	-1.46
Manipur	3.55	3.18	-0.37	2.23	-1.33
Meghalaya	3.33	3.18	-0.15	2.23	-1.11
Mizoram	3.32	3.18	-0.14	2.23	-1.10

Nagaland	3.86	3.18	-0.68	2.23	-1.63
Orissa	2.77	3.18	0.41	2.23	-0.54
Puducherry	3.49	3.18	-0.31	2.23	-1.27
Punjab	4.01	3.18	-0.83	2.23	-1.79
Rajasthan	3.47	3.18	-0.29	2.23	-1.24
Sikkim	2.28	3.18	0.90	2.23	-0.05
Tamil Nadu #	3.73	3.18	-0.55	2.23	-1.50
Telangana	3.92	3.18	-0.74	2.23	-1.70
Tripura ##	2.8	3.18	0.38	2.23	-0.58
Uttar Pradesh	3.73	3.18	-0.55	2.23	-1.51
Uttarakhand	3.3	3.18	-0.12	2.23	-1.08
West Bengal ###	3.55	3.18	-0.37	2.23	-1.33
Forbearance Price (Solar)				**0.90**	
Floor Price (Solar)				**-0.05**	

µ- The bid discovered tariff for solar projects auctioned during the period Jan 2017 – Dec 2017 has been in the range of Rs 2.44 – 5.64 per kWh. Weighted average of the bid discovered tariff for each auction during the period Jan 2017 – Dec 2017 has been calculated. Thereafter an average of the weighted average bid tariff of respective auctions as computed above has been considered.

APPC Data
*** Andaman & Nicobar Islands - Approved Power Purchase and Cost for 2018-19 from MYT Order for FY 2016-17 to FY 2018-19 dated 6th Apr 2016 considered**
**** Gujarat - Approved Power Purchase and Cost for 2018-19 from MYT Order for Control Period FY 2016-17 to FY 2019-20 considered**
^ Jammu & Kashmir - Approved Power Purchase and Cost for 2018-19 from MYT Order for FY 2016-17 to FY 2020-21 dated 7th Oct 2016 considered
^^ Jharkhand - Approved Power Purchase and Cost for 2018-19 for JBVNL from Order dated 28th Feb 2019 considered
Approved Power Purchase and Cost for 2017-18 for JUSCO & TSL from respective Orders considered
$ Kerala - Tariff Order issued in 2017-18 considered
$$ Lakshadweep - Approved Power Purchase and Cost for 2018-19 from MYT Order for FY 2016-17 to FY 2018-19 dated 31st March 2016 considered
 # Tamil Nadu - Approved Power Purchase and Cost for 2018-19 from Order dated 11th August 2017 considered
Tripura - Tariff Order issued in 2014-15 considered
West Bengal - Tariff Order issued for WBSEDCL and CESC for FY2017-18 considered. For DVC and DPL, latest available Tariff Orders considered

ANNEXURE-2B (FORBEARANCE PRICE AND FLOOR PRICEOF SOLAR REC- FOR ALL STATES BASED ON AVERAGE BID TARIFF FOR THE PERIOD JAN 2018 – DEC 2018

State	APPC (2018-19) as estimated based on SERC Tariff Orders for 2018-19 (Rs/kWh)	Bid Discovered Tariff for Solar Project (Rs/kWh) μ	Difference b/w Bid Discovered Tariff and APPC (Rs/kWh)	Project Viability Tariff (Rs/kWh) based on Bid Discovered Tariff	Difference b/w Project Viability Tariff and APPC (Rs/kWh)
Andaman & Nicobar *	11.47	2.89	-8.58	2.02	-9.45
Andhra Pradesh	3.83	2.89	-0.94	2.02	-1.80
Arunachal Pradesh	2.62	2.89	0.27	2.02	-0.60
Assam	3.65	2.89	-0.76	2.02	-1.63
Bihar	4.12	2.89	-1.23	2.02	-2.09
Chandigarh	3.37	2.89	-0.48	2.02	-1.35
Chhattisgarh	2.9	2.89	-0.01	2.02	-0.88
Dadra & Nagar Haveli	3.64	2.89	-0.75	2.02	-1.61
Daman & Diu	3.17	2.89	-0.28	2.02	-1.14
Delhi	3.9	2.89	-1.01	2.02	-1.88
Goa	2.68	2.89	0.21	2.02	-0.66
Gujarat **	3.98	2.89	-1.09	2.02	-1.96
Haryana	3.72	2.89	-0.83	2.02	-1.70
Himachal Pradesh	2.29	2.89	0.60	2.02	-0.26
Jammu & Kashmir ^	2.88	2.89	0.01	2.02	-0.86
Jharkhand ^^	3.99	2.89	-1.10	2.02	-1.97
Karnataka	3.5	2.89	-0.61	2.02	-1.48
Kerala $	2.95	2.89	-0.06	2.02	-0.92
Lakshadweep $$	12.14	2.89	-9.25	2.02	-10.12
Madhya Pradesh	2.83	2.89	0.06	2.02	-0.81
Maharashtra	3.69	2.89	-0.80	2.02	-1.67
Manipur	3.55	2.89	-0.66	2.02	-1.53
Meghalaya	3.33	2.89	-0.44	2.02	-1.31
Mizoram	3.32	2.89	-0.43	2.02	-1.30
Nagaland	3.86	2.89	-0.97	2.02	-1.83

Orissa	2.77	2.89	0.12	2.02	-0.74
Puducherry	3.49	2.89	-0.60	2.02	-1.47
Punjab	4.01	2.89	-1.12	2.02	-1.99
Rajasthan	3.47	2.89	-0.58	2.02	-1.44
Sikkim	**2.28**	2.89	**0.61**	2.02	**-0.26**
Tamil Nadu #	3.73	2.89	-0.84	2.02	-1.70
Telangana	3.92	2.89	-1.03	2.02	-1.90
Tripura ##	2.8	2.89	0.09	2.02	-0.78
Uttar Pradesh	3.73	2.89	-0.84	2.02	-1.71
Uttarakhand	3.3	2.89	-0.41	2.02	-1.28
West Bengal ###	3.55	2.89	-0.66	2.02	-1.53
Forbearance Price (Solar)				**0.61**	
Floor Price (Solar)				**-0.26**	

µ- The bid discovered tariff for solar projects auctioned during the period Jan 2018 – Dec 2018 has been in the range of Rs 2.44 – 3.55 per kWh Weighted average of the bid discovered tariff for each auction during the period Jan 2018 – Dec 2018 has been calculated. Thereafter, an average of the weighted average bid tariff of respective auctions as computed above has been considered.

APPC Data
*** Andaman & Nicobar Islands - Approved Power Purchase and Cost for 2018-19 from MYT Order for FY 2016-17 to FY 2018-19 dated 6th Apr 2016 considered**
**** Gujarat - Approved Power Purchase and Cost for 2018-19 from MYT Order for Control Period FY 2016-17 to FY 2019-20 considered**
^ Jammu & Kashmir - Approved Power Purchase and Cost for 2018-19 from MYT Order for FY 2016-17 to FY 2020-21 dated 7th Oct 2016 considered
^^ Jharkhand - Approved Power Purchase and Cost for 2018-19 for JBVNL from Order dated 28th Feb 2019 considered
Approved Power Purchase and Cost for 2017-18 for JUSCO & TSL from respective Orders considered
$ Kerala - Tariff Order issued in 2017-18 considered
$$ Lakshadweep - Approved Power Purchase and Cost for 2018-19 from MYT Order for FY 2016-17 to FY 2018-19 dated 31st March 2016 considered
 # Tamil Nadu - Approved Power Purchase and Cost for 2018-19 from Order dated 11th August 2017 considered
Tripura - Tariff Order issued in 2014-15 considered
West Bengal - Tariff Order issued for WBSEDCL and CESC for FY2017-18 considered. For DVC and DPL, latest available Tariff Orders considered

ANNEXURE-2C (FORBEARANCE PRICE AND FLOOR PRICEOF SOLAR REC- FOR ALL STATES BASED ON AVERAGE BID TARIFF FOR THE PERIOD JAN 2019 – MARCH 2020)

State	APPC (2018-19) as estimated based on SERC Tariff Orders for 2018-19 (Rs/kWh)	Bid Discovered Tariff for Solar Project (Rs/kWh)[µ]	Difference b/w Bid Discovered Tariff and APPC (Rs/kWh)	Project Viability Tariff (Rs/kWh) based on Bid Discovered Tariff	Difference b/w Project Viability Tariff and APPC (Rs/kWh)
Andaman & Nicobar *	11.47	2.74	-8.73	1.92	-9.55
Andhra Pradesh	3.83	2.74	-1.09	1.92	-1.91
Arunachal Pradesh	2.62	2.74	0.12	1.92	-0.71
Assam	3.65	2.74	-0.91	1.92	-1.74
Bihar	4.12	2.74	-1.38	1.92	-2.20
Chandigarh	3.37	2.74	-0.63	1.92	-1.46
Chhattisgarh	2.9	2.74	-0.16	1.92	-0.99
Dadra & Nagar Haveli	3.64	2.74	-0.90	1.92	-1.72
Daman & Diu	3.17	2.74	-0.43	1.92	-1.25
Delhi	3.9	2.74	-1.16	1.92	-1.98
Goa	2.68	2.74	0.06	1.92	-0.76
Gujarat **	3.98	2.74	-1.24	1.92	-2.06
Haryana	3.72	2.74	-0.98	1.92	-1.80
Himachal Pradesh	2.29	2.74	0.45	1.92	-0.37
Jammu & Kashmir ^	2.88	2.74	-0.14	1.92	-0.96
Jharkhand ^^	3.99	2.74	-1.25	1.92	-2.07
Karnataka	3.5	2.74	-0.76	1.92	-1.58
Kerala $	2.95	2.74	-0.21	1.92	-1.03
Lakshadweep $$	12.14	2.74	-9.40	1.92	-10.23
Madhya Pradesh	2.83	2.74	-0.09	1.92	-0.92
Maharashtra	3.69	2.74	-0.95	1.92	-1.77
Manipur	3.55	2.74	-0.81	1.92	-1.63
Meghalaya	3.33	2.74	-0.59	1.92	-1.42
Mizoram	3.32	2.74	-0.58	1.92	-1.41
Nagaland	3.86	2.74	-1.12	1.92	-1.94

Orissa	2.77	2.74	-0.03	1.92	-0.85
Puducherry	3.49	2.74	-0.75	1.92	-1.58
Punjab	4.01	2.74	-1.27	1.92	-2.09
Rajasthan	3.47	2.74	-0.73	1.92	-1.55
Sikkim	**2.28**	2.74	**0.46**	1.92	**-0.36**
Tamil Nadu #	3.73	2.74	-0.99	1.92	-1.81
Telangana	3.92	2.74	-1.18	1.92	-2.01
Tripura ##	2.8	2.74	-0.06	1.92	-0.88
Uttar Pradesh	3.73	2.74	-0.99	1.92	-1.81
Uttarakhand	3.3	2.74	-0.56	1.92	-1.38
West Bengal ###	3.55	2.74	-0.81	1.92	-1.64
	Forbearance Price (Solar)			**0.46**	
	Floor Price (Solar)			**-0.36**	

µ- The bid discovered tariff for solar projects auctioned during the period Jan 2019 – March 2020 has been in the range of Rs 2.48 – 3.25 per kWh. Weighted average of the bid discovered tariff for each auction during the period Jan 2019 – March 2020 has been calculated. Thereafter an average of the weighted average bid tariff of respective auctions as computed above has been considered.

APPC Data

*** Andaman & Nicobar Islands - Approved Power Purchase and Cost for 2018-19 from MYT Order for FY 2016-17 to FY 2018-19 dated 6th Apr 2016 considered**

**** Gujarat - Approved Power Purchase and Cost for 2018-19 from MYT Order for Control Period FY 2016-17 to FY 2019-20 considered**

^ Jammu & Kashmir - Approved Power Purchase and Cost for 2018-19 from MYT Order for FY 2016-17 to FY 2020-21 dated 7th Oct 2016 considered

^^ Jharkhand - Approved Power Purchase and Cost for 2018-19 for JBVNL from Order dated 28th Feb 2019 considered

Approved Power Purchase and Cost for 2017-18 for JUSCO & TSL from respective Orders considered

$ Kerala - Tariff Order issued in 2017-18 considered

$$ Lakshadweep - Approved Power Purchase and Cost for 2018-19 from MYT Order for FY 2016-17 to FY 2018-19 dated 31st March 2016 considered

 # Tamil Nadu - Approved Power Purchase and Cost for 2018-19 from Order dated 11th August 2017 considered

Tripura - Tariff Order issued in 2014-15 considered

West Bengal - Tariff Order issued for WBSEDCL and CESC for FY2017-18 considered. For DVC and DPL, latest available Tariff Orders considered.

केन्द्रीय विद्युत विनियामक आयोग
CENTRAL ELECTRICITY REGULATORY COMMISSION

नईदिल्ली
NEW DELHI

याचिका संख्या. / Petition No.: 05/SM/2020

कोरम/Coram:

श्री पी. के. पुजारी, अध्यक्ष/ Shri P. K. Pujari, Chairperson
श्री आई. एस. झा, सदस्य/ Shri. I.S. Jha, Member
श्री अरुण गोयल, सदस्य/ Shri. Arun Goyal, Member

आदेश दिनांक/ Date of Order: 17th June, 2020

IN THE MATTER OF:
Determination of Forbearance and Floor Price for the REC framework

ORDER

A. BACKGROUND

1. In exercise of the powers conferred under sections 66 and 178 of the Electricity Act, 2003 (hereinafter referred to as the "Act"), the Commission has notified the Central Electricity Regulatory Commission (Terms and Conditions for recognition and issuance of Renewable Energy Certificate for Renewable Energy Generation) Regulations, 2010 (hereinafter referred to as the "REC Regulations").

2. As per the first proviso to clause (1) of Regulation 9 of the REC Regulations, the Commission may, in consultation with the Central Agency (Power System Operation Corporation Limited) and Forum of Regulators from time to time provide for floor price

and forbearance price separately for Solar and Non-solar Renewable Energy Certificates (RECs).

3. Further, Clause (2) of Regulation 9 of the REC Regulations provides for the guiding principles for determining the forbearance price and floor price for RECs. The relevant provision of the REC Regulations is extracted as under:

> *"9. **Pricing of Certificate:***
>
> *(1) The price of Certificate shall be as discovered in the Power Exchange:*
>
> *Provided that the Commission may, in consultation with the Central Agency and Forum of Regulators from time to time provide for the floor price and forbearance price separately for solar and non-solar Certificates.*
>
> ***(2) The Commission while determining the floor price and forbearance price shall be guided inter- alia by the following principles:***
>
> *(a) Variation in cost of generation of different renewable energy technologies falling under solar and non-solar category, across States in the country;*
>
> *(b) Variation in the Pooled Cost of Purchase across States in the country;*
>
> *(c) Expected electricity generation from renewable energy sources including:-*
>
> *(i) expected renewable energy capacity under preferential tariff*
>
> *(ii) expected renewable energy capacity under mechanism of certificates;*
>
> *(d) Renewable Purchase obligation targets set by State Commissions"*

4. In pursuance of the powers vested under proviso to the clause (1) of Regulation 9 of the REC Regulations, the Commission issued an Order dated 1st June, 2010 for '*Determination of Forbearance and Floor Price for the REC framework*' (Suo Motu Petition No. 99/2010) and prescribed forbearance price and floor price for RECs as under:

	Non-Solar REC (Rs./ MWh)	Solar REC (Rs./ MWh)
Forbearance Price	3,900	17,000
Floor Price	1,500	12,000

5. Above determined forbearance price and floor price were valid for the period up to 31.03.2012.

6. Thereafter, the Commission vide Order dated 23.08.2011 in suo-motu Petition No. 142/2011 determined the following forbearance price and floor price for the period from 01.04.2012 to 31.03.2017:

	Non-Solar REC (Rs./ MWh)	Solar REC (Rs./ MWh)
Forbearance Price	3,300	13,400
Floor Price	1,500	9,300

7. Subsequently, based on review of solar PV tariff, the Commission vide Order dated 30.12.2014 in suo-motu Petition No. SM/016/2014 re-determined the following forbearance price and floor price for Solar REC for the period from date of order and up to 31.03.2017. The forbearance price and floor price for Non-solar REC were left unchanged in that Order.

	Solar REC (Rs./ MWh)
Forbearance Price	5,800
Floor Price	3,500

8. After end of the control period 2012-17 of the Central Electricity Regulatory Commission (Terms and Conditions for Tariff Determination from Renewable Energy Sources) Regulations, 2012, the Commission vide Order in suo-motu Petition No.

02/SM/2017 dated 30.03.2017 (hereinafter referred as the 2017 REC Price Order) determined the following forbearance price and floor price for Solar and Non-solar RECs applicable from 01.04.2017 onwards:

	Solar REC (Rs./ MWh)	Non-Solar REC (Rs./MWh)
Forbearance Price	2,400	3,000
Floor Price	1,000	1,000

B. LEGAL PROCEEDINGS IN THE 2017 REC PRICE ORDER

9. Indian Wind Power Association-NRC (IWPA-NRC) and Green Energy Association (GEA) filed Appeal No. 105 of 2017 and Appeal No. 95 of 2017 respectively before the Appellate Tribunal for Electricity (APTEL) challenging the 2017 REC Price Order. However, vide Order dated 25th April 2017, APTEL declined to stay the said 2017 REC Price Order. Relevant extracts of the Order of APTEL are quoted as under:

> *"...*
> *Having heard learned counsel for the parties, prima facie, we are of the opinion that the prayers for the stay of the impugned order or suspension of sale of all RECs till the disposal of the present appeal, cannot be granted. Prima facie, we appreciate the contention of Mr. Nayyar that the Appellants have no vested rights de-hors the statutory regulations. The* ***Central Commission's order prima facie appears to be in line with the statutory regulations. Any order of stay or suspension of sale of all RECs would not be proper because it will not be in the general interest of the industry.*** *Applications are disposed of. Needless to say that this order will abide by the final order that will be passed in these appeals." (emphasis added)*

10. IWPA-NRC and GEA filed Civil Appeal No. 6083 of 2017 and Civil Appeal No. 6334 of 2017 respectively before the Hon'ble Supreme Court challenging the aforesaid order of APTEL. By an Order dated 8th May 2017, the Hon'ble Supreme Court stayed the 2017 REC Price Order. Relevant extracts of the Order are quoted as under:

> *"Heard the learned Senior counsel appearing for the appellants in both the Civil Appeals and the learned counsel appearing for the Commission.*

Let notice be issued in the matters, returnable after eight weeks.
In the meantime, there shall be stay of the order of the Central Electricity Regulatory Commission."

In compliance with the order of the Hon'ble Supreme Court, the Commission vide letter dated 24th May, 2017, issued directions to Central Agency and Power Exchanges to suspend trading of Solar and Non-solar RECs until the stay was vacated by the Hon'ble Supreme Court.

11. Later, an I.A. No. 42496/2017 was filed by M/s Global Energy Pvt. Ltd. in Civil Appeal No. 6083 of 2017 (which was filed by IWPA-NRC before the Hon'ble Supreme Court). The Hon'ble Supreme Court disposed off the I.A. No. 42496/2017 and Civil Appeal No. 6083 of 2017 by Order dated 14th July 2017. Relevant extracts of the Order are quoted as under:

"5) That being the case, we now substitute our order dated 08.05.2017 by granting prayer (c) instead of staying the Appellate Tribunal's order."

Wherein prayer (c) made by the appellants was:

"(c) In the alternative, direct the Respondents to ensure that any obligated entity purchasing RECs at the floor price determined vide the order dated 30.03.2017 shall deposit the difference between the earlier floor price and the present Floor Price with the Respondent No.1, Central Commission during the pendency of the Appeal No. 105 of 2017 before the Appellate Tribunal;"

12. In compliance with the aforesaid directions of the Hon'ble Supreme Court, the Commission vide letter dated 20th July 2017 directed the Central Agency and Power Exchanges as under:

"Obligated Entities/Power Exchanges any obligated entity purchasing RECs at the floor price determined vide the said the Commission's Order dated 30.3.2017 shall deposit the difference between floor price prevalent earlier (i.e. Rs 1500/Mwh) and floor price determined vide Order dated 30.03.2017 (i.e. Rs 1000/Mwh) with the Commission.
...

Deposit of the differential amount shall be subject to the outcome of the Appeal No. 105 of 2017 by the Appellate Tribunal for Electricity and further orders of the Commission in this regard.
Trading in Solar RECs shall remain suspended until further orders, since stay order dated 08.05.2017 in Civil Appeal No. 6334 of 2017 filed by Green Energy Association in case of Solar REC is still in operation."

13. Further, an I.A. No. 82970/2017 was filed by the Commission in Civil Appeal 6334 of 2017. The Hon'ble Supreme Court disposed off the I.A. and Civil Appeal No. 6334 of 2017 by Order dated 20th September 2017. Relevant extracts of the Order are quoted as under:

"The limited prayer sought in the present I.A. No. 82970 of 2017 is that our Order dated 08.05.2017 be clarified only to a limited extent, namely that the respondent be allowed to extend RECs until 31.03.2018. Accordingly, we modify our order to this limited extent.
The civil appeal also stands disposed of. This order to continue until the Appellate Tribunal finally decides the appeal."

14. Later, by Order dated 12th April 2018, APTEL dismissed the Appeal No. 95 of 2017, Appeal No. 105 of 2017 and Appeal No. 173 of 2017 *inter alia* observing that the 2017 REC Price Order does not suffer any legal infirmity and ambiguity. The relevant extract of the Order is quoted as under:

"...

Keeping all the facts associated with the case in view, we are of the firm opinion that the impugned order passed by the Central Commission does not suffer from any legal infirmity or ambiguity.
In view of the above, we are of the considered opinion that issues raised in the present Appeals bearing Nos. 95 of 2017, 105 of 2017 & 173 of 2017 are devoid of merit.
Hence, these appeals are dismissed."

15. Consequent upon dismissal of the Appeals by APTEL, the Commission issued directions vide letter dated 23rd April 2018 to the Central Agency and the Power Exchanges as under:

"In view of the Hon'ble APTEL 's Order dated 12.04.2018 in above mentioned Appeal is read with the Hon'ble Supreme Court Orders dated 20.9.2017 in I.A. No. 82970 of 2017 in Civil Appeal No. 6334 of 2017 and Order dated 14.7.2017 in Civil Appeal No. 6083 of 2017 with I.A. Nos. 42490 and 42496 of 2017, the Commission has decided as under:-
(a) Trading of RECs (Solar and Non-Solar) shall be carried out henceforth in accordance with the Commission's Order dated 30.03.2017 in Petition No. 2/SM/2017.
(b) Deposit of the differential amount of Rs .500/- per REC with the Commission shall be discontinued."

16. Again, IWPA-NRC filed Civil Appeal No. 4801 of 2018 before the Hon'ble Supreme Court. By Order dated 14th May 2018, the Hon'ble Supreme Court admitted the Civil Appeal and directed as under:

"Appeal admitted.
Interim orders dated 08.05.2017 and 14.07.2017 to continue
However, we clarify that this interim order will not apply to RECs issued on or after 01.04.2017."

17. Pursuant to the above Order of the Hon'ble Supreme Court, the Commission, vide letter dated 28th May 2018 issued the following directions:

"...

- *Trading in Non-Solar REC issued prior to 1.4.2017 shall be carried out at the floor price of Rs.1500/MWh. The obligated entities/ Power Exchanges shall deposit Rs.500/-i.e. the difference between the floor price prevailing earlier, i.e. Rs.1500/MWh and the floor price as determined vide order dated 30.3.2017 in Petition No. 2/SM/2017 (i.e. Rs.1000/MWh) with the Commission in the Account number notified vide letter dated 23rd August, 2017. The issue related to GST on Rs.500/- deposited with CERC shall continue to be governed in line with letter No. L-1/230/2017/CERC dated 26.2.2018 of CERC.*
- *Arrangement as mentioned in (b) above shall be subject to the outcome of the Civil Appeal No. 4801/2018 in the Supreme Court.*
- *Non-Solar RECs issued on or after 1.4.2017 shall continue to be traded in accordance with the floor price (i.e. Rs.1000/MWh) determined in the order dated 30.3.2017 in 2/SM/2017."*

18. RECs are being traded accordingly since May 2018.

C. FORBEARANCE PRICE AND FLOOR PRICE OF SOLAR AND NON-SOLAR RECs

19. During the period between April 2017 and March 2020, the renewable energy landscape in the country has undergone a massive change. The tariff of solar and wind renewable energy projects has declined substantially during this period. Further, demand and supply of renewable energy has also undergone changes. In addition to solar projects, wind energy projects are also being awarded on the basis of competitive bidding conducted at National and State level. In view of the prevalent market conditions, floor price and forbearance price necessitated a review in order to balance the interests of eligible REC entities who are issued RECs and obligated entities who are required to purchase RECs for meeting RPOs.

20. Accordingly, in pursuance to the guiding principles for determining the forbearance price and floor price for Solar and Non-solar RECs enshrined in Clause (2) of Regulation 9 of the REC Regulations, forbearance price and floor price of RECs have been reviewed.

21. The Commission proposed the following forbearance price and floor price for RECs vide Order dated 31.03.2020 in this Petition:

	Solar REC (Rs./ MWh)	Non-Solar REC (Rs./ MWh)
Forbearance Price	1,000	1,000
Floor Price	0	0

22. On the above proposal, comments/ suggestions of the stakeholders were invited by 20.04.2020.

23. Stakeholders such as **Trbex Impex Pvt Ltd, Gujarat Ambuja Export, Vippy Industries, Seattle Powers Solution Pvt Ltd, LEE VEDLA- Tuhina Enterprises, Harsh Renewable Energy, Adhya Renewable Enery, Hindustan Platinum Pvt Ltd, Bonaterra Greenhouse LLP, Flow Devices System, Kreate Energy, Fortum India Pvt. Ltd., Tuhina Enterprises, Ujaas Energy Limited, Vikram Urethane Pvt. Ltd., IPF Vikram India Limited, Gupta sons, Star Delta Transformers Ltd, Sapphire Pro Ventures Pvt Ltd, SRS Engineers, Sharma Industries, MB Power Ltd, DharampalPremchand Ltd, Systematics Enterprises Pvt Ltd** sought extension for submission of their comments due to nationwide lockdown due to Covid-19 pandemic.

24. At the request of the stakeholders, Commission extended the date of submission of comments initially till 30.04.2020 vide Public Notice dated 14.04.2020. Later, at the request of stakeholders to extend time due to continuing lockdown situation, the Commission again extended the timeline for submission of comments till 08.05.2020 vide Public notice dated 30.04.2020. 235 stakeholders submitted their comments/ suggestions. The list of these stakeholders is attached as Annexure-A.:

D. CONSIDERATION OF VIEWS OF THE STAKEHOLDERS AND ANALYSIS AND FINDINGS OF THE COMMISSION ON IMPORTANT ISSUES

25. **Comments received supporting reduction in the floor price and forbearance price:**

Stakeholders Comments:

- Stakeholders such as **Maharashtra Electricity Regulatory Commission, Tamil Nadu Electricity Regulatory Commission, Ministry of New & Renewable Energy (Government of India), ASSOCHAM, DNH Power Distribution, BSES Rajdhani Power Ltd, Confederation of Captive Power Plants Odisha, Dalmia Cement (Bharat) Ltd., Nava Bharat Ventures Ltd, Ambuja Cements, ACC Cement, Grasim Industries Limited, ONGC Hazira Plant, Southern Gujarat Chamber of Commerce & Industry, Alkali Manufacturers Association of India** have supported the revision in forbearance price and floor price of RECs.
- **Cement Manufacturers Association, Welspun Group, RSPL Ltd, Chemplast Sanmar Ltd, GHCL Ltd., Tata Chemicals Ltd., Atul Ltd., Ultratech Cement, Grasim Industries-Birla Cellulosic, Tamilnadu Petro products Limited, AIA Engineering Ltd, Shell Energy India, Gujarat Chamber of Commerce & Industry and Alkali Manufacturers Association of India, DCM Shriram Limited, Arcelor Mittal Nippon Steel India Ltd, Finolex Industries Ltd, Meghmani Finechem Ltd, Hazira Area Industries Association,Vedanta Ltd., Shree Cement Ltd., Saurashtra Chamber of Commerce & Industry and Sanghi Industries Ltd.** have requested to further reduce the REC forbearance price to Rs 500 for both solar and non-solar categories.

26. **Comments received requesting reconsideration of reduction in floor price and forbearance price:**

Stakeholders Comments:

- Stakeholders such as **OIL India Ltd, NHPC, APP, FICCI, Basant Wind farms Pvt. Ltd., KarurSree Rama Trading Private Limited, Amirthaa Green Infra Private Limited, InWEA, Dhariwal Industries Pvt Ltd,Shri Tradco India Pvt Ltd, Bonafide Himachalies Hydro Power Developer Association, Sai Engineering Foundation, IWTMA, Prodigy Hydro Power Private Limited, BC Umpathy, Bharat Power Inc., Statkraft, Enel Green Power India Pvt. Ltd., Fasttrack Packers Pvt Ltd, ITC Limited, JVS Export, Sargam Retails Pvt Ltd, IPPAI, Manikaran Power Ltd.,**

Agrawal Minerals (Goa) Pvt Ltd, Gangadhar Narsingdas Aggarwal Gurudnyanankit Energy Pvt. Ltd, Parekh Medisales Pvt. Ltd, Enrich Energy Ltd, Manikanchan Solar Park, Vikram Tea Processors Pvt Ltd, H & L Energy Solutions, Triveni Sangam Holdings & Trading Co, Saidpur Jute Co. Ltd, Daksh Infrastructure Pvt Ltd, Chaphalkar Brothers, ICC Realty (India) Pvt Ltd, Navlakha Translines, TS Wind Developers, S70 (Satara_Windmill) - Advik Renewable Energy Pvt. Ltd., CK10 (Nandurbar_Windmill) - Advik Renewable Energy Pvt. Ltd., J112 (Dhule_Windmill) - Advik Renewable Energy Pvt. Ltd., PVSP16 (Solapur_Solar) – Advik HI-Tech Pvt. Ltd., JM Industries, Siporex India Pvt Ltd, Medilink Services, Olam Sugar, Hemant Group, Ferromar Shipping Pvt. Ltd, Bora Agro Foods, Enrich Energy Pvt Ltd, Pooja Renewable Energy Ltd., Govindram Shobharam & Co., Saraswati Industries, H & L Energy Solutions, Navalakha Translines, TS Wind Power Developers, Persistent System Ltd, Shri Tradco India Pvt Ltd, BC Umpathy, Malpani Tea Corporation, Jathar Textiles Pvt.Ltd., Bajaj Finserv Ltd., Balkrishna Sizing Industries, M/S Bhanudas G. Raibage, Sri Amareshwara Industries, Sri Laxmi Industries, S.K Shivaraj Engineers & Infra Ventures, SK Veerabhadrappa & Co and Shivashri Techno Homes Pvt Ltd, Pragati Agencies, GMR Generation Assets, MESCOM, Power Company of Karnataka Ltd, Inox Wind, Gujarat Fluorochemicals Ltd, Hero Future Energies, Ashok Iron Works (P) Ltd, Bora Agro Foods, Rana Sugars, SISMA TN, Shri Someswara Prasad KM have requested to retain the existing forbearance price and floor price of RECs. Few of these stakeholders such as **Winsol Engineers and JJ PV Solar Pvt Ltd** have also sought that forbearance price and floor price as was applicable even before the 2017 REC Price Order, should be adopted.

- **NTPC** has requested to retain the prevailing forbearance price of Rs.2400/MWh and Rs.3000/MWh for Solar and Non-Solar RECs stating that the same is comparable to solar/ non-solar (wind) tariff respectively. The RE (solar/ wind) tariff is presently being discovered in the range of Rs.2.65/ kWh – Rs.3.00/kWh. With the availability of cheaper REC at forbearance price of Rs.1/kWh, non-RE rich States/ other open

access obligated entities would prefer to go for buying RECs instead of entering into PPAs with SPDs for supply of renewable power to fulfil their RPO obligations. This would hamper the RE capacity addition in the country which may not be the intent of the order for forbearance price/ floor price revision.

- **NHPC** has requested to retain the prices of RECs at the existing level [i.e. floor price of Rs 1000/MWh and forbearance price of Rs 3000 per MWh (Non-Solar)/ Rs 2400 per MWh (Solar)] in case of RE Projects set up under REC Mechanism prior to 31.03.2020 to avoid financial losses and to secure the interest of RE Generators.
- **Statkraft India Pvt Ltd** has requested to retain the present floor price and forbearance prices for the Solar and Non-Solar RECs.

27. **Comments received requesting removal/ reduction of forbearance price:**

Stakeholders Comments

- **POSOCO** has submitted that removal of floor price (making it zero) is a welcome move though reducing the forbearance price for both Solar & Non-solar RECs to Rs. 1000/- per MWh may result in lesser participation of RE Generators in the REC Mechanism.
- **IEX** has submitted that the proposal for further reduction in forbearance price to Rs. 1000/MWh for Solar and Non-Solar RECs would restrict the interplay of market forces and may result in distorted market signals and dead weight loss. IEX has also requested to remove the forbearance price. The determination of prices for RECs should be left to the pure play of market forces instead of specifying the forbearance price and floor price. They have also suggested to constitute a single REC market for Solar and Non-Solar RECs for compliance of RPOs.
- **Power Exchange India Ltd.** has suggested to completely remove the forbearance price and floor price from the REC mechanism and the obligated entities and suggested that RE generators should be allowed to submit their bids/offers based on the demand supply dynamics prevalent in the market. They have further sought clarification on the following issues:

i) Whether the Power Exchange has to run separate sessions applicable for transacting in each price band for Solar RECs.

ii) Whether REC Registry would provide confirmation of quantity available with each eligible entity that submitted its offer during respective session.

- **Centre for Energy Regulation, IIT Kanpur** has suggested that as the proposed floor price for solar/non-solar RECs is zero, reference to floor price as a part of REC framework under the principal REC Regulations can also be deleted. As the floor price and forbearance price for both solar and non-solar technologies are proposed to be uniform, it is an appropriate time to merge solar and non-solar REC markets to develop a single REC market.
- **Cement Manufacturers Association** has submitted that fungibility for RPO compliances between solar and non-solar RECs should be provided in view of open market.
- **Ultratech Cement Ltd., Amines & Plasticizers Ltd, Apar Industries and Pradeep Metals Ltd.** have submitted that CERC should allow 100% fungibility between solar and non-solar RPOs.
- **Kanchanjunga Power Co Ltd. and Renew Power** have submitted that REC price should be determined by market forces.
- **Green Energy Association** proposed that if the Commission wants to completely remove the security of the floor price, then forbearance price should also be removed. The Commission in that case can let the RECs trade at market price.
- **Adani Green Energy Ltd.** has suggested that CERC should do away with notifying the forbearance price and let market forces decide the REC prices. Removal of forbearance or tariff cap will promote higher participation as has been seen in the recent RE bids in which removal of tariff cap in the bids have increased the participation. Similar practice is also followed in the international Carbon Credit markets like CER, VERs, IREC etc wherein no floor or forbearance prices are notified.
- **NTPC, NVVN and PTC India** have suggested to remove the concept of forbearance price for RECs in view of growth of power market and RE Power, so that market can

take care of demand-supply aberrations and facilitate participation of ISTS-connected RE Generators in REC Market.

- **Statkraft India Pvt. Ltd.** has suggested that RECs should be allowed to be resold as long as the same has not been used for meeting RPO of an obligated entity. RECs should also be allowed to be traded bilaterally as well as on the power exchanges. However, clearing of bilateral trades should be through the exchange (in addition to the trades on the exchange) in order to ensure proper traceability and recording of all trades and not disturb the existing process.
- **UPPCL and ONGC Hazira** have requested to reduce Solar REC forbearance price to Rs. 460/MWh and with no rounding off.
- **Southern Gujarat Chamber of Commerce & Industry and Tata Steel BSI** have submitted that forbearance price of Solar needs to be Rs. 460/ MWh on the basis of the highest difference between the APPC rates of all States & UTs in India during 2018-19 and bid-discovered tariff for 2019-2020 or alternately Rs. 650/MWh on the basis of average forbearance price for last 3 years. They further submitted that forbearance price of Non-Solar RECs is to be Rs. 500/MWh on the basis of the highest difference between the APPC rates of all States & UTs in India during 2019-20 and bid-discovered tariff of wind energy for 2019-2020.
- **Cement Manufacturers Association, Welspun Group, RSPL Ltd, Chemplast Sanmar Ltd, GHCL Ltd., Tata Chemicals Ltd., Atul Ltd., Ultratech Cement, Grasim Industries-Birla Cellulosic, Tamilnadu Petro products Limited, AIA Engineering Ltd, Shell Energy India, Gujarat Chamber of Commerce & Industry and Alkali Manufacturers Association of India, DCM Shriram Limited, Arcelor Mittal Nippon Steel India Ltd, Finolex Industries Ltd, Meghmani Finechem Ltd, Hazira Area Industries Association, Vedanta Ltd., Shree Cement Ltd., Saurashtra Chamber of Commerce & Industry and Sanghi Industries Ltd.** have requested to further reduce the REC forbearance price to Rs 500 for both solar and non-solar categories. They have submitted that if the latest APPC prices are considered, the forbearance price for Non-Solar RECS should further reduce. For Solar RECs, the highest of the three scenarios at Rs 900 per MWh has been

considered. All the scenarios have basis of competitive bidding. Thus, forbearance price of Rs. 460 per MWh based on year 2019 would be reasonable and appropriate to be considered as it reflects prevailing prices. Alternatively, average of forbearance prices of three scenarios should be considered, which would be Rs.650 per MWh.

- **IPPAI and RPG Power Trading** have requested for the removal of forbearance price.
- **Indo Rama synthetics, Apar Industries, Amines & Plasticizers Ltd, JSW Steel Coated Products Ltd, ONGC Uran and Pradeep Metals Ltd., Association of Power Producers (APP), FICCI, Chamber of Commerce and Industry – Kutch** have suggested that there is room for further reduction of forbearance price. For Solar REC Prices, the scenario with RE price of 2017 has been considered. Instead, it was suggested that , average of last three year's solar prices should be considered to arrive at the Solar REC prices.
- **Nirma Ltd** has requested to reduce forbearance price to Rs 250/- per REC.

Analysis and Decision:

28. The Commission has noted the views expressed by the stakeholders and observes that the stakeholders have submitted range of comments that – a) support the proposed floor price and forbearance price; b) request for further reduction of the forbearance price; c) suggest retention of the existing floor price and forbearance price; and d) suggest complete removal of forbearance price. The Commission is of the view that the proposed floor price and forbearance price have been arrived at based on the principles specified in the REC Regulations. Consideration of any suggestion which involves change in the provisions of the REC Regulations is beyond the scope of the present order. Many of these comments relate to the principles of determination of floor price and forbearance price. These have been dealt in detail in subsequent sections.

29. **Comments regarding matter being sub-judice in Hon'ble Supreme Court:**

Stakeholders Comments

- **IWPA (NRC), InWEA, Dhariwal Industries Pvt Ltd, Shri Tradco India Pvt Ltd and BC Umpathy** have submitted that the methodology of reducing the floor and forbearance price of the already issued RECs is pending before the Hon'ble Supreme Court and hence, the same approach should be applied again and it should be clarified by the Commission that the present suo-motu order will only be applicable on the RECs issued on or after the issuance of the order.
- **Agarwal Packaging Pvt Ltd, Chiranjilal Spinners Pvt Ltd, LNJ Bhilwara, Fab Colors, Shivajothi Spinning Mills, Pristine Developers (P) Ltd, Poysha Power Generation Pvt Ltd, DJ Malpani, Giriraj Enterprises, SRG Apparels Pvt Ltd, Etica Developers Pvt Ltd, PSGD Engineering LLP, Ponni Sugars (Erode) Ltd and Gomathy International, Gamma Green Power, Orient Green Power Company, Kanoria Chemical Industries Ltd, IPPAI, Indian Wind Power Association, Green Energy Association** have submitted that the Commission should not consider any revision during the pendency of Civil Appeal Diary No. 22737 of 2018 tagged with Civil Appeal No. 4801 of 2018 before the Hon'ble Supreme Court.
- **Green Energy Association** submitted that currently multiple appeals are pending before the Hon'ble Supreme Court against this Commission's Order dated 30.03.2017 on methodology adopted by this Commission in determination of REC prices and discontinuation of vintage multiplier. The same methodology has also been used in the instant order by the Commission for price determination of RECs.
- **U. P. Sugar Mills Cogen Association (UPSMCA)** has submitted that the Hon'ble Supreme Court vide its order dated 14.05.2018 passed in C.A. No. 4801/2018 has stayed the operation of order dated 30.03.2017 passed by this Commission. These appeals are currently pending before the Hon'ble Supreme Court. UPSMCA also sought to ascertain whether the present proposal is in the nature of a review of the previous order, and can be maintained, since the earlier order has been confirmed in appeal. The matter before the Hon'ble Supreme Court is pending and is inextricably

linked to the issues involved in the present proposal. Therefore, the decision of this Commission would have a bearing upon the matters pending before the Hon'ble Supreme Court. Such a course is legally impermissible and that the Commission should await the decision of Hon'ble Supreme Court in pending civil appeals, or at the very least, seek prior permission from the Hon'ble Supreme Court before proceeding with deciding on the present proposal.

- **U.P. Sugar Mills Cogen Association (UPSMCA)** has also submitted that the proposal fails to adhere to and uphold the mandate of the Act to promote RE sources. It is lopsided in favour of distribution companies and ignores the viability concerns of RE generators. The Commission cannot, under the garb of market regulation under Section 66, arrogate to itself, the power of tariff determination with respect to any component of electricity, which it does not have under Section 62 of the Act. Hence, to this extent also, the determination of floor price and forbearance price of RECs by the Commission is in derogation of the provisions of the Act.

Analysis and Decision:

30. The Commission has in the Order dated 31.03.2020 dealt with the various legal proceedings with regard to floor price and forbearance price of solar and non-solar RECs determined by the Commission vide order dated 30.03.2017 in Petition No.2/SM/2017. The Hon'ble Supreme Court in its order dated 14.05.2018 in Civil Appeal No.4801 of 2018 had issued the following interim directions in case of non-Solar RECs:

> *"Appeal admitted.*
> *Interim orders dated 08.05.2017 and 14.07.2017 to continue*
> *However, we clarify that this interim order will not apply to RECs issued on or after 01.04.2017."*

31. As per the above directions, the interim orders dated 08.05.2017 and 14.05.2018 are applicable in cases of non-Solar RECs issued prior to 01.04.2017. In case of non-Solar RECs issued on or after 01.04.2017, the interim directions of the Hon'ble

Supreme Court are not applicable. Therefore, the interim directions of the Hon'ble Supreme Court dated 08.05.2017 and 14.05.2018 in the pending appeals are not applicable to the floor and forbearance prices of non-solar RECs which are sought to be determined through the present proceedings. In case of Solar RECs, no interim direction has been issued by the Supreme Court. Thus, the pending appeals and interim directions issued by the Hon'ble Supreme Court do not create any legal embargo for the Commission to specify the floor and forbearance price in respect of the RECs issued on or after 01.04.2017.

32. As per Regulation 9(1) of REC Regulations, the Commission may fix the floor and forbearance price for Solar and Non-solar RECs from time to time. The Commission has done so on several occasions earlier and the same has been elaborated in earlier part of this Order. While fixing floor price and forbearance price, the Commission is of the view that such prices must reflect the current market situation. The Commission in the order dated 31.3.2020 had highlighted the declining trends in the tariff of wind and solar projects. This has necessitated review of floor and forbearance prices for RECs.

33. The Commission has decided that the revised floor price and forbearance price would be applicable to non-solar RECs issued on or after 01.04.2017, in compliance to the Order dated 14.05.2018 passed by the Hon'ble Supreme Court. There is, however, no interim direction with regard to the floor and forbearance price of solar RECs. Accordingly, the Commission does not find any legal infirmity in determining floor price and forbearance price of RECs.

34. **Comments on the methodology for computation of floor price and forbearance price:**

Stakeholders Comments

- **Delhi Electricity Regulatory Commission (DERC)** has stated that the Commission while computing forbearance price and floor price has not considered parameters like actual availability of renewable energy, actual availability of RECs and delay in SCOD of RE Plants whose PPAs have been signed. DERC has requested to consider these parameters for determination of floor price and forbearance price of RECs as these factors play a critical role in meeting RPO for States like Delhi which do not have much RE potential. Without consideration of these parameters for determination of forbearance price and floor price, the current exercise may prove futile.
- **Karnataka Electricity Regulatory Commission (KERC)** has submitted that while computing the average bid price, CERC has first computed the average of maximum and minimum bid price under each bid and then, the average of this average of all bids is considered, which is not correct. KERC suggested that for each year, the weighted average of all bids put together should be considered. KERC has also stated that since in computations of floor price and forbearance price, APPC of FY19 is considered, the bid price should also be considered for FY19 only so that the comparison is for the same year.
- **Punjab Energy Development Agency** has highlighted that solar and wind projects have almost the same PLF, almost same tariff, neither have variable cost and both generate infirm power. The weighted average tariff for wind energy for the year 2019-20 has been worked out as Rs. 2.85/unit and that for solar projects, it is Rs. 2.74/unit in the Order of the Commission dated 31.03.2020 which is also almost same for wind and solar projects. Therefore, solar and wind should be covered in one category. PEDA has also submitted that SECI and NTPC tenders for solar and wind power give wide range of benefits to the developers and these are factored in the ceiling price given in the tender. Fixing floor price and forbearance price on the basis of such tariff

of wind energy projects and making the same applicable to Small Hydro Plants (SHPs) and biomass projects located in far flung/ rural areas having no proper access and risky power evacuation system is not justified. PEDA further highlighted that capacity of SHP, biomass and cogeneration projects, registered under REC Mechanism has decreased between last Order (30.03.2017) on floor price and forbearance price and that proposed in Order dated 31.03.2020. With further reduction in floor price and forbearance price, non-Solar non-wind renewable projects who have already registered for REC mechanism will no longer be viable with stable or decreasing APPC. With the proposed floor price and forbearance price, REC projects will have no incentive to remain in REC mechanism and will also discourage new entrants.

- **IEX** has submitted that there is significant difference between the scale of projects installed under REC mechanism and those under competitive bidding route. The Commission may appreciate the fact that the sizing of the project play an important role in its pricing due to principle of economy of scale. Apart from the costs, the risks also vary across the market. In this backdrop, it may not be apt to determine floor price and forbearance price based on projects whose tariff has been discovered through competitive bidding prices.
- **PXIL** has suggested that Commission should also assess the inclusion of other parameters in the methodology such as replacement cost of generation from coal vis-à-vis renewable energy sources, clean energy cess levied on electricity generated from coal based power plants, cost incurred by existing coal based plants in retrofitting by installation of FGD, scrubbers etc. for meeting the environmental norms, life cycle cost of coal mining and implied carbon prices etc. PXIL further added that inclusion of above parameters in the methodology for determining the forbearance price and floor price would help in ascribing the true cost of 'Green attributes' to the energy injected by renewable energy plants into the grid and encourage future investments in market based REC mechanism. PXIL submitted that since REC is a market-based mechanism, the discovered price should be dependent on market determined principles of demand and supply similar to the physical

segment for Day Ahead Market. PXIL has requested to have a relook at the need of forbearance price and floor prices for RECs and to evaluate the possibility of completely doing away with it.

- **All India Renewable Energy Protection Association and PHD Chamber of Commerce & Industry** have submitted that the gap in the cost of generation for different RE technologies has widened with time. Therefore, it is essential that a uniform parameter is adopted for assigning price band of RECs. Under scenario 1, as provided in detail in Annexure 1-A in Order dated 31.03.2020, the difference between wind energy and SHP is given as follows:

Non-Solar Technology	Forbearance Price (Rs/Unit)	Floor Price (Rs/Unit)
SHP	3.07	1.30
Wind	1.95	0.51

Since the method under 'Scenario 1' takes into account the factors of APPC and SERC tariffs, and applies them uniformly, the weighted average forbearance price of Rs 2.45 per unit and weighted average floor price of Rs 0.83 per unit. However, in Scenario 2, the prices have become very low due to adoption of competitive bid prices for wind. The cost of generation of SHPs is increasing whereas the cost of generation of wind energy is reducing over time. Wind power tariffs through reverse bidding process have been discovered in only three States, viz. Gujarat, Maharashtra and Tamil Nadu which are RE-rich States on account of abundance of wind power. The remaining four States, viz. Andhra Pradesh, Karnataka, Madhya Pradesh and Rajasthan, have not seen reverse bidding in 2018-19 and 2019-20 and the SERC tariffs are prevalent in these States for wind energy. They have submitted that a few bids (mentioned in tabulation for wind bids) have been cancelled/ scrapped. They have also submitted reference computations for Non-Solar REC Price on PLF basis.

- **U.P. Sugar Mills Cogen Association (UPSMCA)** has submitted that there has to be good, verifiable and justiciable grounds to invoke powers to fix floor price and

forbearance price to intervene under Regulations 9(1) of the REC Regulations. The existence of a jurisdictional fact and fulfilment of jurisdictional precondition is *sine qua non* for the exercise of this power. It has further submitted that proviso to Regulation 9(1) does not postulate the circumstances in which floor price and forbearance price may be fixed. Thus, the proviso purports to allow uncanalised and unguided power to the Commission. In order to exercise regulatory powers to intervene in the free and unfettered working of the power exchange, the Commission will be required to meet the jurisdictional preconditions provided under Reg. 53 read with Reg. 54 of the Power Market Regulations. REC market has suffered due to the unwarranted interference by the Commission, by not allowing the normal market forces of demand and supply to act in an unrestricted manner. The REC market has been operating smoothly for the last few years since 2017-18, wherein majority of the RECs that have been generated, have been traded during the course of the year at market discovered prices. The minimum clearing price of RECs at present, are clearly above the prevailing floor price, which suggests that the demand and supply forces in the market support a floor price well above Rs.1000/ MWh.

- **BSES Rajdhani Power Ltd and Uttam Value Steels Ltd** have suggested to use average tariff of RE for last 3 years in determination of floor price and forbearance price. They have suggested that such prices should be revised every six months.
- **Bharat Power Inc.** has submitted that no market study, empirical data or details are provided in the Order dated 31.03.2020 to demonstrate (i) the market reality referred to by CERC; (ii) why the present REC market is not operating in a healthy manner; (iii) whether there has been any market failure; (iv) consequences of the order on the REC market and the stakeholders etc. The order is intuitive at best, based on incorrect assumptions.
- **Bonafide Himachalies Hydro Power Developer Association and Sai Engineering Foundation** have submitted that wind energy needs to be excluded from the Non-Solar REC category and clubbed with Solar REC category so that SHP, biomass and cogen power plants under renewable project category remain viable under REC

mechanism. There should be uniform procedure to work out APPC for all the States so that the RE projects can plan the disposal of renewable power judiciously.

- **DNH Power Distribution** has requested to consider recent discovered bid tariff for determination of forbearance price. It has submitted that presently there is demand - supply gap in the Solar REC (i.e. demand is more than the supply). Hence, solar REC is always trading at ceiling price. Accordingly, forbearance price fixation for Solar REC should include element of recently discovered bid tariff.
- **MESCOM and Power Company of Karnataka Ltd** have submitted that the Commission has not considered the quantum of energy procured by MESCOM in excess of the RPO and the rates at which said RE power is being purchased. They have requested not to reduce floor price and forbearance price in one go but make a reduction in phased manner. They further submitted that weighted average procurement rates of RE for MESCOM/ Discoms are higher than the rate considered in Order and the strategy adopted in the suo-motu order for fixing the floor price and forbearance price of RECs keeping the present bidding rates as a benchmark are lower and is detrimental to MESCOM. They also submitted that the Commission has considered solar and wind bidding rates for bids invited between January 2017 and March 2020. The generic tariff is much more than the competitive bidding rates. The average power purchase cost is more than the bid discovered tariff considered by the Commission for calculating floor and forbearance price. Accordingly, it has suggested that average power purchase cost of RE projects may be considered instead of bid discovered tariff.
- **UPPCL** requested to separately determine forbearance price for each non-solar technology except wind. If forbearance price is same for Non-Solar Technologies, the Commission should propose a multiplier. Further, there may be four types of RECs – Solar, Non- Solar, Hydro, Other Power.
- **Gamma Green Power, Indian Wind Power Association, IWPA (NRC) and Orient Green Power Company** have submitted that the cost of generation as a concept clearly accommodates only a cost based method for a generator whereas, the competitive bid tariff adopted is not in any manner a 'cost of generation' as

envisaged in Regulation 9(2) by the 'cost of procurement' which are very different and incomparable. The total capacity commissioned under competitive bidding is less than 5% of the total installed capacity of wind installation in the country. It would not be proper to consider that as the basis for the determination of REC price band for Non-Solar RECs. ISTS charges form a major component of tariff, particularly for RE power with low PLF. These charges alone will work out to Rs 1.26 per unit and including transmission losses (@4%works out to Rs.0.11), total charges and losses are Rs 1.37 per unit. Land cost is assumed at Rs 0.10 per unit. The actual cost for the States that buy RE power through SECI would be the bid tariff + Rs 1.37 + Rs 0.10. The considered viability tariff @70% does not fulfil the basic financial obligation of wind projects. Considering capped APPC and inconsistent REC trade scenario attributable to deliberate non-compliance of RPO targets by various obligated entities, the viability tariff should be @85% of the cost of generation. This is also necessary to cover the increasing O & M cost of REC based projects due to aging of the projects.

- **Green Energy Association** argued that while considering the tariff discovered by various States, the Commission has also considered States like Sikkim which is neither a renewable energy rich State nor does it have any REC based solar power project. There are many States like Madhya Pradesh, Maharashtra, Rajasthan, Odisha, Andhra Pradesh, Chhattisgarh, Delhi, Haryana and Kerala where Discoms have not signed any agreement with REC based projects at APPC rates. The tariff structure of utility scale solar projects differs drastically from the tariff structure of REC based projects. The Commission should determine the REC floor price and forbearance price based on market transaction data and may also consider average market prices such as short term bilateral and day ahead market rates discovered on the power exchanges. In FY 2019-20, the Solar RECs were traded in the range of INR 2,400 and INR 2,000. For the month of March, 2020, the Solar RECs were traded at INR 2,400 i.e. 140% above the floor price. The Commission has also incorrectly assumed that minimum requirement for project viability is at fixed rate of 70%. This contradicts the stance of the Commission taken in Tariff Order dated

19.03.2019 passed in Petition No.1/SM/2019. In the said order the Commission expressly noted that the tariff for "Solar PV, Solar Thermal, Wind (onshore and offshore), MSW/RDF and other emerging renewable energy technologies, the tariff will be project specific, and not generic." Thus, use of weighted average in determining floor price and forbearance price for Solar RECs is incorrect. If the Commission wants to completely remove the security of the floor price, the forbearance price should also be removed.

- **InWEA, Dhariwal Industries Pvt Ltd, Shri Tradco India Pvt Ltd, BC Umpathy and IWTMA** have submitted that the bid price considered is of large quantum projects which should not form the basis of deciding feasibility of small size projects under REC scheme (mainly 2 MW and 5 MW projects). Further, these projects are tied up for long term while projects under REC are tied up to a maximum of 10 years and that too only in some cases. No new projects for even APPC are coming in now. As per data given in the Table 1 B of the Suo-Motu Order dated 31.03.2020, the weighted average tariff comes out to Rs. 2.76 per unit instead of Rs 2.74 per unit. They further submitted that tariff as discovered in the bids from April 2017 onwards should be included in Table B for Solar and Non-Solar instead of 2019 onwards for analysis. This is necessitated since some of the REC projects were registered in the year FY 17-18 and FY 18-19 which incurred cost in accordance with that financial year. Also, their viability was calculated in that year, while fixing floor price and forbearance price in March 2017. Suddenly reducing the floor price, while their project viability price remaining the same, would certainly push these projects as Non-Performing Assets. They also submitted to consider the method used in earlier orders for determining the floor price for non-Solar RECs.
- **ASSOCHAM** has requested to consider the discovered solar bid tariff from January 2019 to March 2020 to come out with Solar REC prices. This would ensure price determination on the basis of recent RE market data.
- **Cement Manufacturers Association, Welspun Group, RSPL Ltd, Chemplast Sanmar Ltd, JSW Steel Coated Product, GHCL Ltd., Tata Chemicals Ltd., Atul Ltd., Ultratech Cement, Grasim Industries-Birla Cellulosic, Nirma Ltd., Tamil**

Nadu Petro products Limited, AIA Engineering Ltd, Shell Energy India, Gujarat Chamber of Commerce & Industry, Alkali Manufacturers Association of India, DCM Shriram Limited, Arcelor Mittal Nippon Steel India Ltd, Finolex Industries Ltd, Meghmani Finechem Ltd, Hazira Area Industries Association, Vedanta Ltd., Shree Cement Ltd., Saurashtra Chamber of Commerce & Industry and Sanghi Industries Ltd. have requested to further reduce the REC forbearance price. They have submitted that while computing the forbearance price for solar RECs, three scenarios were considered based on the tariff discovered through competitive bidding in the years 2017, 2018 and 2019. Accordingly, three forbearance prices of Rs. 900, Rs. 610 and Rs. 460 were arrived per REC. However, the Commission has considered highest of the above three values and rounded off to Rs.1000. They have submitted that instead of taking highest values, most prevalent market price for year 2019 with forbearance price of Rs 460 per REC for Solar should have been considered. Alternatively, average of forbearance price of three scenarios should be considered which gives Rs. 650 per REC for Solar. Further, calculations have considered APPC value of year 2018-19 and therefore, it is appropriate to consider RE solar tariff of the same year 2018-19, which gives forbearance price of Rs.610 per REC. Further in case of Non-Solar REC, it was suggested that since wind is a very large segment of non-solar REC and the forbearance price is working out negative for the same, forbearance price for non-solar should be reduced below Rs 950 per REC.

- **Gujarat Biomass Energy Developers Association** has submitted that weighted average approach to calculate the REC prices disproportionately skews the data for biomass based projects. The technology specific forbearance price and floor price of biomass projects as per the proposed amendments is Rs. 4.38 and Rs. 1.86 respectively and for wind, it is Rs. -0.15 and Rs. -0.95 respectively. A floor price of Rs. 0 is unsustainable for biomass project and they should be provided with multiplier. They further submitted that the tariff of waste to energy projects is not taken into consideration and also most of the States impose various open access charges such as cross subsidy surcharge, additional surcharge, electricity duty,

wheeling charges on RE projects registered under REC Mechanism. These charges over the years have been constantly increasing resulting in increase in open access cost of supply. They requested not to compare REC projects with reverse-bidding based projects and also requested that bid discovered tariff should not be taken into consideration for calculating the average tariffs for REC price determination.

- **RPG Power Trading** has requested to examine whether it would be more appropriate to consider the REC framework based on the share of actual generation (PLF/CUF/No. of RECs issued) from each RE technology for the period for which the determination of forbearance price and floor price are being done.
- **National Solar Energy Federation of India (NSEFI)** requested that the mechanism of determining the floor price and forbearance price should be linked to normative principles and FiT tariffs considering the size and technology of the projects registered under REC Mechanism should be taken into consideration instead of discovered bid tariffs.
- **Ambuja Cement and ACC Cement** have submitted that Non-Solar REC Price should be determined on the basis of wind only.
- **Shree Cement** has submitted that factor (such as 70% of tariff determined by SERCs) should be applied on SERC determined prices in order to determine the forbearance price of Non-Solar RECs. The bid price of 2019-20 should be considered as base for determination of forbearance price for solar certificates to be procured from 2020-2021.
- **Bajaj Finserv, Jathar Textiles, Balkrishna Sizing Industries, BG Raibage, Shivashri Techno Homes Pvt Ltd, Pragati Agencies, SK Veerabhadrappa & Co, Sri Laxmi Industries, Sri Amareshwara Industries** have submitted that open access charges in Maharashtra have increased from Rs 2.26/unit in FY 2014-15 to Rs 4.75/unit on 1st January 2020. These charges are further going to increase to Rs 5.58/unit on 1st April 2020. 80% of the registered projects from Maharashtra are old. Under such circumstance with increasing O&M cost and other taxes, Open Access in Maharashtra is not viable. Hence, Commission may not consider competitive bidding prices of solar and wind projects of present situation to fix new floor price and

forbearance price. They requested that while determining the REC prices, the Commission should also consider various charges and fees paid by the generators (trading expenses, exchange transaction fees, accreditation and registration fees, one time and recurring expenses of nodal agencies, pro-forma certification etc.) which comes to about Rs. 0.16 per unit.

- **Enel Green Power India Pvt. Ltd** has submitted that it is inappropriate to reduce the floor price of RECs to 'zero' on the basis of tariffs discovered through bid or reverse auction. For purpose of calculation of floor price and forbearance price, the Commission may determine a normative tariff (FiT) which is not only correct reflection of various market parameters but also a sustainable one in the long run. They requested to consider only the tariffs of commissioned projects including the tariff adjustments which may be approved by the Appropriate Commission from time to time for the purpose of determination of floor price and forbearance price of RECs.
- **Basant Windfarms Pvt. Ltd., Karur Sree Rama Trading Private Limited, Amirthaa Green Infra Private Limited, Association of Power Producers (APP) and FICCI** have submitted that very few States allow REC registered projects to tie up at rate equivalent to State's APPC and this is due to the fact the current low RE tariff discovered through competitive bid is lower than State's APPC as well as India average of APPC. Most of REC registered RE generators are tied up in third party open access with C&I consumers at a rate which is very close to market prices. It may not be appropriate to link the APPC for determining the floor price and forbearance price for Non-Solar and Solar RECs. Apart from using APPC, they have suggested to also take suitable weights of the average power market prices i.e. based on short term bilateral and Day Ahead Market on power exchanges. DISCOMs as sellers may be considered while determining the floor and forbearance price. In Feb 2020, due to issuance of 54 lakhs Non-Solar RECs in favour of AP DISCOM, it has flooded the supply side inventory which not only crashed the price but also led to gaming by such DISCOM in clearing of both price and volume. In such a scenario, small RE Generators would suffer as their issued RECs would not be cleared. They also submitted that competitive bid tariff in recent years should not be taken into

account while determining floor and forbearance price because this consideration may not be fair in respect of project viability of small-scale REC projects. Accordingly, they have requested to review the methodology.

- **Reliance Industries Ltd** has submitted that for States where wind installations have been commissioned under the REC mechanism, only data of those States are used for determining the prices, whereas the same principle is not adopted for solar. They are requesting the Commission to adopt a similar principle. They requested to consider the average solar tariff discovered during January 2017 to March 2020 while determining the Solar REC prices. This will correctly reflect the current market realities and hence correct REC prices.
- **Gurudnyanankit Energy Pvt. Ltd., Agrawal Minerals (Goa) Pvt Ltd, Parekh Medisales Pvt. Ltd, Enrich Energy Ltd, Manikanchan Solar Park, Vikram Tea Processors Pvt Ltd, H & L Energy Solutions, Fasttrack Packers Pvt Ltd, Ferromar Shipping Pvt. Ltd, Triveni Sangam Holdings & Trading Co, Saidpur Jute Co. Ltd, Daksh Infrastructure Pvt Ltd, Ashok Iron Works (P) Ltd, Chaphalkar Brothers, ICC Realty (India) Pvt Ltd, Navlakha Tranlines, TS Wind Developers, S70 (Satara_Windmill)- Advik Renewable Energy Pvt. Ltd., CK10 (Nandurbar Windmill) - Advik Renewable Energy Pvt. Ltd., J112 (Dhule Windmill) - Advik Renewable Energy Pvt. Ltd., PVSP16 (Solapur Solar) – Advik HI-TechPvt. Ltd., JM Industries, Siporex India Pvt Ltd, Medilink Services, Hemant Group, Sargam Retails Pvt Ltd, Malpani Tea Corporation, Govindram Shobharam & Co., Saraswati Industries, Olam Sugar, Gangadhar Narsingdas Aggarwal and Bora Agro Foods, H & L Energy Solutions, Navalakha Translines, TS Wind Power Developers, Pooja Renewable Energy Pvt. Ltd, Persistent System Ltd, Winsol Engineers and JJ PV Solar Pvt Ltd** have requested to consider various charges/ fees while arriving at REC Price which are paid towards monthly certifying of RECs from Distribution Licensee, SLDC, NLDC, Trading, Accreditation & Registration. They further requested to consider an increase in charges/ fees for Open Access (OA) Sale of Power. There has been steep rise in OA

charges in State of Maharashtra. They also requested not to consider only present situation to propose new REC rates due to following reasons: -

i. Project cost of investment by initial Generators was very high in the years 2011-2014

ii. There are additional REC related expenses which are not considered in calculations. (Rs 0.11-0.30 per unit)

iii. There are Open Access charges which are not considered in calculations (this has increased 3.63 times from Rs 1.52 to Rs 4.63)

iv. REC Rates have been reduced 2 times, Vintage Multiplier was also removed and now further reduction shall make small projects unviable.

- **Inox Wind and Gujarat Fluorochemicals Ltd** has submitted that methodology used for determining the floor and forbearance price of RECs is to be reviewed and the methodology based on market transaction data may be considered as now significant market price/transactions data are available for several years. They further submitted that reverse auction based projects are not comparable with REC based projects whether in terms of size or the risk-rewards of these projects which are fundamentally different.
- **Sembcorp Green Infra Ltd** has requested to revisit the overall approach and methodology of determination of floor price and forbearance price. Rather than comparing the tariff with inter-State competitive bidding projects, it should be compared with existing preferential tariffs determined by SERCs.
- **CLP India Pvt Ltd** has submitted that competitive bidding has not established itself as a viable approach for ensuring growth of all segments of RE Industry. Further, many projects awarded under the competitive bidding scheme are facing viability concerns due to various difficulties in project execution. They also submitted that bid data is not even relevant to new wind projects. For instance, the bid data for 2018-19 mentions MSEDCL bid data for tender from September 2018 which was carried out for renewal of PPAs of old FIT projects in the State, after the expiry of their 13- year PPA with MSEDCL. They also submitted that the Commission has only considered tariff data from the projects being established in two wind resource rich States of

Tamil Nadu and Gujarat. The Commission needs to re-consider the average wind tariff determination only on the basis of price discovery under various bids coming from only two States, as the same is not reflective of the tariff across country.

- **Kanchanjunga Power Co Ltd** has submitted that in order to maintain investor confidence, impact on Floor Prices based on minimum Return of Equity/sustainable operations should be assessed. Small hydro projects require a minimum floor price of Rs 1000/MWh in order to remain viable and wind should not be considered while determining forbearance and floor price.
- **Hero Future Energies** has requested to consider Scenario 1 of the Appendix–1 for determining the floor price and forbearance price of Non-Solar REC and consider Floor Price as Rs 1 /kWh (Rounded off Rs 0.83 /kWh) and forbearance price as Rs 2.50 /kWh (Rounded off Rs 2.45 /kWh) for Non-Solar Certificates as was continuing earlier.
- **Greenko Group** has submitted that relative share of technologies should be calculated based on the RECs issued in last 3 years instead of technology wise projects registered for RECs. They suggested that the Commission should not consider the tariff discovered in the recent bids and should consider the risks and additional cost borne by the REC project developer to calculate the actual cost of generation from such projects while deciding the REC price. According to their estimate, the cost of generation from such REC project would not be less than Rs. 3.5/kwh in best case scenario. Considering RE generation cost of REC project being greater than Rs 3.5/kwh and average ex-bus price realisation at 33 kV level in all States which may be around ~ Rs. 1.25/kwh, floor price for RECs should be Rs. 2.25/kwh.
- **Renew Power** has submitted that projects allocated/ constructed under Tariff based competitive bidding (TBCB) are not comparable with projects registered under REC Mechanism. They further submitted that TBCB tariff needs to be adjusted with transmission cost for purpose of calculation of forbearance price and floor price for REC scheme. Transmission cost adjusted TBCB Tariff= (Avg. TBCB tariff + impact

on transmission charge waiver granted to such projects). TBCB tariff requires to be adjusted with tariff impact due to change in law or force majeure events.

- **Rana Sugars** has submitted that the decision by CERC through 'Scenario 1' which has resulted in drastic reduction in the determination of floor price and forbearance price of non-solar RECs, is manifestly arbitrary especially without providing any cogent rationale for the same. The reliance on tariff adopted through competitive bidding cannot be a correct method for calculating the general cost of generation of RE power for all the RE generators, especially when majority of the RE projects are small scale MW projects with higher cost variations. They further submitted that restrictive reliance on the tariff adopted by various SERCs through competitive bidding while determining the floor price and forbearance price of the RECs (especially when CERC has opted not to rely on other methodologies/principles prescribed under Reg 9(2) of the REC Regulations) is not only arbitrary but is also contrary and outside the scope of REC Regulations. They have also submitted that while determining REC prices, various aspects have been left out such as: (a) variation in Pooled Cost of Purchase across States; (b) expected electricity generation from RE sources under preferential tariff and REC mechanism; and (c) RPO targets set by SERCs.
- **Indian Sugar Mills Association** has submitted that no reason has been cited by CERC for revising/ determining the forbearance price and floor price of RECs and is not in conformity with the Power Market Regulations of the Commission. The price of RECs issued prior to 01.04.2017 would be different from those issued after 01.04.2017 if the proposal is finalised.
- **India Glycols Ltd** has submitted that in absence of impact analysis, it would be more scientific to index the installed capacity with the normative CUF declared by SERC in order to arrive at percentage share. This would prove to be more scientific as RECs are generation linked instruments and also for the reason that floor price and forbearance price is being determined on the basis of tariff. They submitted that percentage share capacity of projects be calculated based on the RECs issued to each technology category of projects from last amendments i.e. April 2017 onwards.

This approach would be specific, free from any assumption, would include effect of projects which are registered only for short time period and would also take care of generation based approach of REC scheme. Further, they submitted that with one or two exceptions, all projects registered under REC are connected to the State grids. Thus, while taking average MCP as the basis points, due regard should be paid to the transaction cost involved in the transaction from STU to respective region of the generator. Thus, the base price instead of APPC should be used (Avg MCP of the FY- Avg POC Charges of the region- Effect of Avg PoC losses of the region).

- **Shri Someswara Prasad KM** has submitted that the tariff discovered in competitive bids being used for determining floor price and forbearance price is not relevant as these projects (wind/ solar) get some benefits like exemption in inter-State transmission losses and charges. The projects have assured power off-take and also have payment security/ statement guarantee on payments. He has further submitted that few States have set RPO targets lower than RPO trajectory set by the Ministry of Power. Lower RPO target discourages the purchase of power from renewable energy resources by DISCOMs. The only avenue left for most of renewable energy generators is to supply through power exchanges, but the price discovered in energy exchanges is less than the APPC of the States and if floor price is reduced zero, no new renewable energy investors will come forward for Investments.
- **Adani Green Energy Ltd.** has suggested that Commission should not consider the tariff discovered in the recent bids and should consider the risk and additional cost borne by the REC project developer to calculate the actual cost of generation from such projects while deciding the REC price. They have stated that the REC projects bear the risks of PPA, project financing, offtaker ratings, payment security mechanism, economies of scale, dependence on STOA, relief for change in law. According to their estimate, if above mentioned risks and costs are considered, the cost of generation from such REC project would be more than Rs. 3.5-4.0/kwh in best case scenario.
- **Sri Sivajothi Spinning Mills (P) Ltd, Fab Colours, Snowdew Hydroelectric Power Project, SRG Apparels Pvt Ltd, Raghu Rama Renewable Energy Ltd, Cheenu**

Enterprises, R3K Power LLP, Giriraj Enterprises, Poysha Power Generation Pvt Ltd, Apex Coco and Solar Energy Ltd, Salora International Ltd, C J Shah & Co., Chiranjilal Spinners Pvt Ltd, Cogeneration Association of India, Ascent Hydro Projects Ltd, Manikanchan Solar Park, B. G Chitale Dairy, H & L Energy Solutions, Shah Promoters & Developers, Medak Solar Projects Pvt Ltd-Nereus Capital, Dubbak Solar Projects Pvt Ltd- Nereus Capital, Ajeet Seeds Pvt Ltd, Alten Power Pvt Ltd, Anu Cashews, Arhyama Solar Power Pvt Ltd, Sri Kumaraswamy Mineral Exports Pvt Ltd (Wind Genarator), Ponni Sugars (Erode) Ltd, Baidyanath Group, Mytrah Energy India Pvt Ltd, Sahkarmaharshi Bhausaheb Thorat SSK Ltd, PGSD Engineering LLP, Pristine Developers (P) Ltd, Visaka Industries Ltd, Gokak Power & Energy Limited, Finolex Cables Ltd, Dindayal Commodities, D J Malpani, Liberty Oil Mills Ltd, Kanoria Chemical Industries Ltd, Arkay Energy Ltd, K G Denim Ltd, Chartered Gold Financial Services Pvt Ltd, Ramesh Steels, Eastman International, Friends Salt Works & Allied Industries, Oswal Salt & Chemical Industries, Kandla Agro& Chemicals Pvt. Ltd and Gautam Freight Pvt Ltd have submitted that Reverse auction based projects are not comparable with REC based projects in terms of size, and the risk-rewards of these projects are fundamentally different. The average project size for wind and solar projects in the REC mechanism is 5.42 MW and 2.25 MW respectively. Compared to this, an average solar project in the bidding regime is 940 MW, and for wind is 963 MW. CERC needs to consider changing methodology of REC floor and forbearance price determination based on market transaction data, rather than the current approach as reverse bidding based projects are not comparable with REC projects. They submitted that non-solar RECs prices in the period April 2019 - March 2020 have ranged from Rs 1000 to Rs 2200. Out of this, Rs 1000 price was discovered only in March 2020 in the backdrop of significantly high supply volume due to lakhs of RECs being issued to Discoms. Market trading data suggests that there is robust demand as well above Rs 1,000 and even close to the current forbearance price. Thus, based on market trading data there is no justification of reducing the floor price. They submitted that if the viability approach is

to be adopted, the highest floor and forbearance price amongst all technologies should be adopted. Only this approach will ensure that all other technologies under the wide bucket of "Non-solar" remain viable. The highest floor and forbearance price is that of biomass - Rs 1.86 and Rs 4.38 respectively. They further added that after excluding the marginal States, and excluding the assumption that project viability is fixed 70% of the tariff, this assumption is unjustified given that per unit interest cost is often >70% at very low tariff levels.

- **Winsol Engineers and JJ PV Solar Pvt Ltd** has submitted that till date, Solar RECs were traded between Rs 2000 to Rs 2400, with trading most of the year at Rs 2400. In such a scenario when market has paid a price of Rs 2400, there is no justification for artificially reducing the prices further. They argued that while determining forbearance price (FBP) and floor price (FP) calculation of Sikkim is considered, Sikkim is neither a large State for solar plant installations nor does it have even one solar REC project. Hence, Commission needs to consider project viability and it is recommended to keep FP at Rs 2600 and FBP at Rs 4500.
- **Jathar Textiles Pvt. Ltd, Balkrishna Sizing Industries, M/S Bhanudas G. Raibage, Sri Amareshwara Industries, Sri Laxmi Industries, S.K Shivaraj Engineers & Infra Ventures, SK Veerabhadrappa & Co** have submitted that Solar & Wind projects in competitive bidding are of large capacity and their cost is lower when compared to small capacity of RE projects of upto 5 MW. They have requested not to consider reverse bidding tariff rate of solar and non solar projects for consideration of floor and forbearance price of RECs but instead it may be appropriate to consider preferential tariff of different RE sources by different SERCs. They also highlighted that for determination of floor price and forbearance price, CERC considered APPC, Reverse bidding rate for respective RE generation from all States and projects commissioned during this period. However, projects commissioned before 2017 are eligible under REC framework and totally depend on REC price. Besides, annual CUF of old projects are not up to the mark as against considered CUF by Commission to determine tariff.

- **Statkraft India Pvt Ltd** has submitted that for computing forbearance price for RECs, the tariffs discovered under Central and State bids are considered. These are large projects and are based on secured cash flows for project life, which results in substantial reduction in project cost compared to the projects under REC mechanism. This methodology to compute forbearance price of REC is inaccurate. It also submitted that absence of Floor Price would mean that there is a recognition that there may be no additional price or premium for the "Green Component" and RE power may in situations, be equated to Conventional Power.
- **BG Wind Power Ltd and ITC Limited** have submitted that there is a substantial change in the cost of generation and capital cost of the earlier projects (prior to April 2017) and the recent projects (after 2017). There are number of projects sanctioned in the recent past which have not yet been commissioned but tariff quoted by them have been considered for the purpose of determining floor and forbearance price. It has submitted that the Commission should analyze the State-wise capital cost of projects prior to April 2017 and post April 2017 and their tariff in respect of only those projects which have been formally commissioned and started injecting energy in the Grid. They also submitted that tariff realisation in REC Mechanism is lower than that of preferential tariff in Rajasthan.
- **Delhi Electricity Regulatory Commission** has suggested to develop a long term plan to ensure that there is adequate availability of Solar and Non-Solar RECs at power exchanges to meet RPO with zero Floor Price.
- **POSOCO** has submitted that in previous six months i.e. from October 2019 to March 2020, Solar RECs are being traded at forbearance price which is Rs 2400/-. In such a scenario, reducing the forbearance price may reduce the interest of RE Generating companies to participate in REC Mechanism, which may create shortfall of RECs in the inventory.
- **Inox wind and Gujarat Fluorochemicals Ltd** have suggested that the Commission needs to consider the market data to determine floor and forbearance prices wherein it can be noted that Non-solar RECs prices have ranged from Rs 1000 to Rs 2200

during the period from April 2019 to March 2020 where Rs 1000 was discovered in March 2020.

- **Jathar Textiles Pvt. Ltd, Balkrishna Sizing Industries, M/s Bhanudas G. Raibage, Sri Amareshwara Industries, Sri Laxmi Industries, S.K Shivaraj Engineers & Infra Ventures, SK Veerabhadrappa & Co** have submitted that for the past 3 years, discovered rate on both IEX and PXIL platform was never close to the forbearance price except in December 2019 and January 2020. This is because SERCs and CERC never laid emphasis on RPO compliance. At the same time, CERC by taking reference of REC Regulations is determining rate based on drop in RE rates promptly where such projects are not eligible for REC framework.
- **B C Umapathy, Shri Tradco India Pvt Ltd, Sargam Retails Pvt Ltd and Malpani Tea Corporation** have submitted that the demand of REC is not as per the anticipation at the time when the REC was premeditated. This is due to lack of enforcement of the obligations. Further, lack of participation from Distribution companies and large captive power plants is the main reason behind the price crash and accumulation of the RECs. The accumulation of the non-traded RECs is increasing month on month and after the trading in the month of March 31, 2020, the total number of RECs which remains un-traded reached at the highest level to 57 lakhs (i.e.57329959). They further submitted that over the past 36 trading sessions, average price of RECs was at Rs. 1249 during January - 2018 to December-2018 and was Rs. 1595 during January - 2019 to December-2019. In this context, an independent evaluation of the floor price may be done to see how it would impact the REC market going forward.
- **Sri Sivajothi Spinning Mills (P) Ltd, Fab Colours, Snowdew Hydroelectric Power Project, SRG Apparels Pvt Ltd, Raghu Rama Renewable Energy Ltd, Cheenu Enterprises, R3K Power LLP, Giriraj Enterprises, Poysha Power Generation Pvt Ltd, Apex Coco and Solar Energy Ltd, Salora International Ltd, C J Shah & Co., Chiranjilal Spinners Pvt Ltd, Ascent Hydro Projects Ltd, Manikanchan Solar Park, B. G Chitale Dairy, H & L Energy Solutions, Shah Promoters & Developers, Medak Solar Projects Pvt Ltd -Nereus Capital, Dubbak Solar**

Projects Pvt Ltd- Nereus Capital, Ajeet Seeds Pvt Ltd, Alten Power Pvt Ltd, Anu Cashews, Arhyama Solar Power Pvt Ltd, Cogeneration Association of India, Sri Kumaraswamy Mineral Exports Pvt Ltd (Wind Generator), Ponni Sugars (Erode) Ltd, Baidyanath Group, Mytrah Energy India Pvt Ltd, Sahkarmaharshi Bhausaheb Thorat SSK Ltd, PGSD Engineering LLP, Pristine Developers (P) Ltd, Visaka Industries Ltd, Kanoria Chemical Industries Ltd, Gokak Power & Energy Limited, Finolex Cables Ltd, Dindayal Commodities, D J Malpani, Liberty Oil Mills Ltd, Arkay Energy Ltd, K G Denim Ltd, Chartered Gold Financial Services Pvt Ltd, Ramesh Steels, Eastman International, Friends Salt Works & Allied Industries, Oswal Salt & Chemical Industries, Kandla Agro & Chemicals Pvt. Ltd and Gautam Freight Pvt Ltd have submitted that Non-solar REC prices in the period April 2019 - March 2020 have ranged from Rs 1000 to Rs 2200. Further, they added that market trading data suggests that there is a robust demand at well above Rs 1,000, and even close to the current forbearance price. Thus, based on market trading data, there is no justification of reducing the floor price (else most of the year RECs would have traded close to or at floor price). They also submitted that since the purpose served by the forbearance price is to act as a penalty price and prevent an irrational and unaffordable increase in compliance cost, having a forbearance price which is well below the recently traded prices is counterproductive.

- **Karnataka Electricity Regulatory Commission (KERC)** has stated that Karnataka considered Rs 3.50/kWh in the APPC for FY 2019. As per truing up, the APPC for FY 2019 comes out to Rs 3.85/kWh which may be considered. KERC has also submitted that the average bid tariff for wind is Rs.2.68/unit and for Solar (Annexure-2c) it is 2.74/unit. The national average APPC as per details furnished at Annexure-2c by CERC is Rs.3.85/unit. Thus, wind and solar projects opting for REC mechanism would get considerable profit, even at proposed floor price of zero. Thus, the APPC needs to be capped. In this regard, KERC through Regulations has specified as follows:

  '3. The Sub-Clause(c) under Clause-7 of the existing Regulations shall be modified as under:

"(c) A Generating Company opting for REC Scheme shall sell the electricity generated by it to ESCOMs of the State at the pooled cost of power purchase of the State for the relevant year, as notified by the Commission from time to time or at 75% of the Generic Tariff as determined by the Commission for the respective RE source for the relevant year, whichever is lower."

The above aspect also needs be considered while finalizing the Floor price and Forbearance price.

- **IEX** has submitted that as the prices discovered through competitive bidding has gone down significantly and in most of the States, lower than the APPC rates, the Discoms are not willing to purchase power from REC projects. In such a scenario, specifying the Forbearance price is not going to remove this anomaly. Rather it may discourage newer investments in merchant RE power or through the route of REC mechanism resulting into dilution of the REC market itself. Given the importance of REC mechanism, there is a need to revisit the overall market structure including the 'determination of APPC' across the States for strengthening the market.
- **Tamil Nadu Electricity Regulatory Commission (TNERC)** has stated that the APPC determined by them for the year 2019-20 is Rs 4.11. In the case of wind and solar, the RE generators under the REC scheme when paid at APPC will be able to realize prices between Rs.4 and Rs.5 per unit. It has suggested that payment of electricity component to the generators under REC scheme be linked with tariffs determined under section 62 or discovered under section 63 of the Electricity Act, 2003. It has also suggested that an amendment to the REC Regulations may be brought in such that RE generators under REC scheme get paid for the electricity component at a percentage of tariff determined under section 62 or bid tariff discovered in the previous year.
- **UPSMCA** submitted that allocation of costs etc. in the computations based on the capacity share of each technology is clearly erroneous, arbitrary, and discriminatory and has no correlation with the objectives of the REC Regulations or its provisions. They also argued that weightage is given on the basis of installed capacity instead of actual share in generation by RE Sources based on different technologies.

- **Gamma Green Power, Indian Wind Power Association, IWPA (NRC) Orient Green Power Company and CLP India Pvt. Ltd.** have submitted that many States like Tamil Nadu, Karnataka, Gujarat, Maharashtra and Rajasthan have capped the APPC price and the actual realization in such States to REC based RE generator is far less than the APPC figures considered by CERC in its draft Order. The Commission may examine the appropriateness of the APPC approach, in the absence any new investment in the APPC segment.
- **Greenko Group and Adani Green Energy Ltd.** have suggested that instead of APPC, Commission should consider the average ex-bus price realisation of electricity sold in Power Exchange by STU connected renewable power project i.e. ex-bus price = Exchange price minus POC charges and losses minus STU charges and losses minus Other open access charges (as applicable in various States) minus DSM charges payable on Day ahead forecast basis. They have also requested to collect data from all the SERCs about the quantum procured from REC registered projects before deciding whether APPC is still relevant in determining the price bandwidth.
- **Renew Power** has submitted that as per the policy stance taken by DISCOMs across the States, none of the generators have an option to sell electricity at APPC and that route has simply been made unavailable. Therefore, they have suggested that it would not be realistic to take APPC as the reference rate at which the electricity component of RE generators would be sold. It further submitted that average MCP of the Power Exchanges for last 2 to 3 years with proper adjustment should be taken in account, instead of APPC. The base price should be (Avg. MCP of the FY minus Avg. POC Charges of the region minus Effect of Avg. PoC losses of the region).
- **India Glycols Ltd** has submitted that taking APPC as the reference rate at which the electricity component of RE generators would be sold is not a realistic approach. The average MCP of the Power Exchanges for last 2-3 years with proper adjustment should be taken into account instead of APPC.
- **BG Wind** has submitted that Commission on one side has considered the bid price of the projects during January 2017 to March 2020, most of which are far away from commissioning. On the other side, it has considered the APPC for the year 2018-19

only. If the bid price has decreased, it is also pertinent to mention that the APPC tariff has increased from Rs. 3.47 per kwh in 2018-19 to Rs. 3.74 per kwh in 2019-2020. Despite this, Non-Solar REC (Wind Projects) are not being given APPC based tariff. At the same time, in the State of Rajasthan, no tariff bid has been conducted to discover the price and capital cost.

- **Association of Power Producers (APP) and FICCI** have submitted that instead of the APPC, it is suggested that a "Minimum Guaranteed Tariff" be used. The Minimum Guaranteed tariff" is based on the tariff realized at present by any developer (who has opted for REC mechanism) for sale of the electricity component from his project. Such tariff realized could be through sale of Discoms or on Open Access or on Captive route. This Minimum Guaranteed Tariff should replace the APPC in the computations of Forbearance and Floor price. The Commission may consider the prices in the last 3 years to arrive at the REC prices as the forbearance price and floor price shall be applicable to RECs issued after 01.04.2017.

Analysis and Decision:

35. Several stakeholders have suggested that the regulator determined tariff should be considered instead of the tariff discovered through competitive bidding. Some stakeholders have argued that competitive bidding projects are generally large in size and as such should not be considered as reference for determination of floor price and forbearance price for REC projects which are small in size. A few stakeholders have also highlighted the concessions that the RE projects commissioned through competitive bidding mechanism get, e.g. waiver of transmission charges and losses, land allocation etc. Some stakeholders have suggested that the 'Minimum Guaranteed Tariff' approach should be adopted, instead of APPC approach. Other suggestions include consideration of additional parameters such as availability of RECs, Day Ahead Market price, project viability at 80% instead of 70% etc. Several stakeholders have

objected to fixing the floor price at zero and expressed concerns that REC traded at floor price of zero would not allow the generators to recover even the charges and fees for participation in REC mechanism. On the APPC figures for States, some stakeholders suggested to use APPC rates for FY 2019-20 instead of FY 2018-19. Some raised concerns around viability of REC projects which are often forced to sell electricity component below APPC rates.

36. The Commission observes that competitive bidding for RE especially for wind and solar technologies has resulted in significant reduction in the cost of RE power. Many State Electricity Regulatory Commissions (SERCs) have done away with the practice of issuing generic tariff for solar and wind including this Commission. Many SERCs have adopted tariff discovered through competitive bidding for RE instead of determining generic tariff especially for wind and solar technologies. Further, the Commission also agrees with the argument that if the RECs are unreasonably priced, the obligated entities would get further disinterested from REC markets. Hence, it is necessary that the floor price and forbearance price of RECs reflect the market realities and must move with the market price of renewable power. Accordingly, the Commission has decided to align the REC floor price and forbearance price with the prevailing market conditions in terms of tariffs, APPC, etc. The Commission believes that proposed floor price and forbearance price balances and safeguards the interest of consumers and investors.

37. Stakeholders have suggested inclusion of other parameters like actual availability of renewable energy, actual availability of RECs, delay in SCOD of RE Plants whose

PPAs have been signed, payment of electricity component to the generators under REC scheme be linked with tariffs determined under section 62 or discovered under section 63 of the Act, replacement cost of generation from coal vis-à-vis renewable energy sources, clean energy cess levied on electricity generated from coal based power plants, cost incurred by existing coal based plants in retrofitting by installation of FGD, scrubbers etc. for meeting the environmental norms, life cycle cost of coal mining and implied carbon prices etc.

38. The Commission has noted the suggestions and would like to reiterate that the principles outlined in Regulation 9(2) of the REC Regulations have been followed while determining the forbearance price and floor price. Adoption of any other parameter(s) would be a deviation from the REC Regulations. The parameters as suggested by the stakeholders tantamount to an amendment in REC Regulations which is beyond the scope of this exercise.

39. Stakeholders have suggested that for each year, weighted average of all bids put together should be considered. They have also submitted that in computations of floor price and forbearance price, APPC of FY19 is considered and, therefore, the bid price should also be considered for FY19 so that the comparison is for the same year.

40. The Commission would like to reiterate that the methodology of computation of prices of bids have been explained in a footnote to the relevant tables in Annexures 1 & 2 of the order dated 31.03.2020 in this suo-motu Petition. In the aforesaid Annexures, the range of successful bids for the relevant year have been provided and weighted

average winning price of each bid in a particular year has been computed. Thereafter, the weighted averages of all the bids in that year have been taken and a simple average of these bids have been taken as a reference for the particular year. The same principle was used in the 2017 REC Price Order while computing the bid prices of solar bids.

41. As regards reference period of the bid price, the Commission would like to reiterate that the variation in bid prices for the respective years between 2017-20 has been taken and scenarios have been developed, which exhibit the variation. Also, the floor price and forbearance price have not been revised since 2017 and it was felt necessary to take into account the bids for 2017-20 period in order to safeguard the interests of both generators and consumers.

42. Stakeholders have suggested for merger of wind energy-based REC with Solar REC citing reasons like having similar PLF, similar competitive bid tariff, no variable cost in either case and infirm nature of power for both technologies. They have submitted that non-solar technologies other than wind like SHP, biomass and cogeneration plants can become viable when included as part of Non-Solar REC.

43. The Commission is of the view that it will not be possible to consider the suggestion of merging of solar and wind technologies since it shall entail an amendment in the REC Regulations which is beyond the scope of this exercise.

44. Stakeholders have submitted that the REC market has been operating smoothly for the last few years since 2017-18, with majority of the RECs generated, being traded

during the year at market discovered prices and that there is no need for regulatory intervention in the matter of price fixation of RECs at present.

45. The Commission has taken cognizance of the market situation and has acted in accordance with the REC regulations to determine the floor and forbearance prices for RECs. The Commission has noted the variation in costs of generation of RE and has explained the same in detail in the proposal.

46. Stakeholders have suggested to use average tariff of RE for last 3 years in determination of price and suggested for periodic revision of floor price and forbearance price since market is very dynamic. Some of them have suggested that these prices should be revised periodically every six months. Few stakeholders have also submitted to consider recent discovered bid tariff for determination of forbearance price.

47. The Commission has taken note of the variation in bid prices for the respective years between 2017-20 and has formed scenarios which exhibit the variation. Thereafter, a balanced approach has been considered in order to safeguard the interests of both generators and consumers.

48. Some stakeholders have claimed that no market study, empirical data or details have been provided in the Order dated 31.03.2020 to demonstrate (i) the market reality referred to by CERC; (ii) why the present REC market is not operating healthily; (iii) whether there has been any market failure; (iv) consequences of the order on the REC market and the stakeholders etc. In their view, the order is intuitive at best, based on incorrect assumptions.

49. The Commission reiterates that the Principles as enunciated in Regulation 9(2) of the REC Regulations have been taken into consideration while determining the forbearance price and floor price. The required analysis has been explained in detail in the proposal which includes assessment of the current market situation and cost of generation.

50. Some stakeholders have also submitted that the Commission should analyze the State-wise capital cost of projects prior to April 2017 and post-April 2017 and their tariff in respect of only those projects which have been formally commissioned and started injecting energy in the Grid.

51. The Commission reiterates that the principles outlined in Regulation 9(2) of the REC Regulations have been taken into consideration while determining forbearance price and floor price. Any other methodology would violate provisions of the REC Regulations which is beyond the purview of this exercise. Rationale for the whole exercise has been explained in detail in the proposal which includes assessment of the current market situation and cost of generation. The Commission has taken cognizance of the market situation and has acted in accordance with the REC regulations to determine the REC Prices.

52. Several stakeholders have submitted that there is requirement of revision in consideration of APPC and have suggested using a minimum guaranteed tariff, using trued up APPC or using average MCP of the Power Exchanges for last 2-3 years with proper adjustment of POC Charges. Suggestions have also been given to replace

APPC with average ex-bus price realisation of electricity sold in Power Exchange by STU connected renewable power project. i.e. ex-bus price = power exchange price minus POC charges and losses minus STU charges and losses minus Other open access charges (as applicable in various state) minus DSM charges payable on Day ahead forecast basis.

53. Some stakeholders have also submitted that many States have manipulated and distorted APPC determination or have arbitrarily applied caps on its further escalation on year on year basis.

54. It is noted that that as per the principles of fixation of Forbearance and Floor Price as enunciated in the REC Regulations, pooled cost of purchase is used as one of the determinants while proposing the floor and forbearance price, the pooled cost of purchase as per the definition in the REC Regulations has been used. The suggestion of using Minimum Guaranteed Tariff or any other principle (market data, ex-bus price etc.) would amount to an amendment in the REC Regulations which is beyond the scope of this exercise.

55. Some stakeholders have submitted that bid prices for projects which are yet to be commissioned have been considered. They have submitted that there have been instances where the bids considered in the tabulation have been scrapped or cancelled by agencies. Some stakeholders have requested to consider Scenario 1 for determining the floor price and forbearance price of Non-Solar RECs while others have suggested to compare the same with existing preferential tariffs determined by SERCs. In general,

these stakeholders have submitted that methodology used for determining the floor price and forbearance price of RECs is to be reviewed and the methodology based on market transaction data may be considered as significant market price/ transactions data are available for several years now.

56. The review of methodology entails an amendment in the REC Regulations which is beyond the scope of this exercise. The Commission has considered a balanced approach to safeguard the interests of the eligible RE generators and obligated entities.

57. Several stakeholders have supported revision of forbearance price and floor price as according to them it reflects prevailing market conditions which has changed significantly from earlier order of the Commission on forbearance price and floor price in 2017. However, they have requested that the forbearance prices of solar RECs should be further reduced to Rs. 650 per REC by considering the competitive tariff for year 2019 instead of highest of three years. Some others have suggested to further reduce forbearance price for Solar RECs to Rs. 460 per REC by considering the competitive bidding tariff of latest year i.e. 2019 to reflect current market conditions. It was also suggested to consider tariff discovered in competitive bidding only for FY 2018-19 to arrive at forbearance price for Solar RECs to Rs. 610 per REC citing the reason that APPC of 2018-19 was considered. For forbearance price of non-solar RECs some stakeholders have requested to reduce the same below Rs 950 per REC to reflect negative forbearance price for wind technology which constitute larger pie in the non-solar technology. Some stakeholders have suggested to reduce forbearance price for solar and non-solar RECs to Rs. 500 per REC. Some stakeholders requested to

frequently revise forbearance price and floor price in view of the increase in APPC rate and further decline in the RE tariff in future.

58. The Commission has taken note of the variation in bid prices for the respective years between 2017-20 and has formed scenarios which exhibit the variations. As regards considering the highest number for computation in forbearance price for Solar RECs, the Commission, as explained in the proposal, has considered highest number given that forbearance price represents ceiling price and is to ensure viability of the project. Further, as regards forbearance price for Non-Solar RECs, weighted average of projects capacity registered under non-solar categories were considered to normalize the technology specific forbearance price for non-solar REC. The Commission believes that this balanced approach is necessary to safeguard the interests of both generators and consumers.

59. **Comments on applicability of the Proposed REC Price**

Stakeholders Comments

- **South Indian Sugar Manufactures Association** has submitted that the proposed Solar and Non-Solar REC prices should be deferred for the next 2 or 3 years and till then the existing 2017 REC price order may be continued.
- **Gujarat Biomass Energy Developers Association** has requested to defer the proposed revisions for at least a year or till such time when the market and economic situation has normalized.
- **Statkraft India Pvt. Ltd.** has submitted that retrospective applicability of the order is in-principle, wrong and impacts businesses negatively. Rather, a considered view on a prospective applicability should be undertaken.
- **Indian Sugar Mills Association** has submitted that changes proposed under the Draft Electricity (Amendment) Act, 2020 is bound to have direct impact on the RE

sector as well as REC market of the country. Therefore, any revision in Floor Price and Forbearance Price should be withheld till such time the Electricity Act, 2003 is amended.

- **Indian Sugar Mills Association, S Gurudnyanankit Energy Pvt. Ltd., Agrawal Minerals (Goa) Pvt Ltd, Parekh Medisales Pvt. Ltd, Enrich Energy Ltd, Manikanchan Solar Park, Vikram Tea Processors Pvt Ltd, H & L Energy Solutions, Triveni Sangam Holdings & Trading Co, Saidpur Jute Co. Ltd, Daksh Infrastructure Pvt Ltd, Chaphalkar Brothers, ICC Realty (India) Pvt Ltd, TS Wind Developers, Govindram Shobharam & Co., JM Industries, Siporex India Pvt Ltd, H & L Energy Solutions, Medilink Services, Hemant Group, Gangadhar Narsingdas Aggarwal,Persistent System Ltd, Ashok Iron Works (P) Ltd, Olam Sugar, Bora Agro Foods,, Ferromar Shipping Pvt. LtdPVSP16 (Solapur Solar) – Advik HI-Tech Pvt. Ltd, S70 (Satara Windmill) - Advik Renewable Energy Pvt. Ltd., CK10 (Nandurbar_Windmill) - Advik Renewable Energy Pvt. Ltd., J112 (Dhule_Windmill) - Advik Renewable Energy Pvt. Ltd., Enrich Energy Pvt Ltd, Greenko Group, Navalakha Translines, TS Wind Power Developers, Pooja Renewable Energy Pvt. Ltd and Saraswati Industries** have suggested to propose new rates for the projects that will be commissioned after 01.04.2020.

Analysis and Decision:

60. Several stakeholders suggested that the new REC price should be applicable for the REC projects commissioned after 01.04.2020. The argument is that the new floor price and forbearance price should not be applied on the older projects. This suggestion is akin to the concept of vintage multiplier wherein instead of differential prices for different sets of projects, higher number of RECs are given to the older projects to align them to the new price regime. The Commission has already held in earlier orders that the vintage multiplier cannot be granted unless there are specific provisions in the REC Regulations.

61. Thus, the Commission cannot provide for separate floor price and forbearance price for REC projects commissioned after 01.04.2020. Same treatment has to be accorded to all RECs issued after 01.04.2017 and the revised forbearance price and floor price would be applicable to all RECs issued after 01.04.2017.

62. It is not out of place to mention here that the Commission has already commissioned a study on regulatory impact assessment of the existing REC Mechanism. The Commission directs the staff of the Commission to examine, inter alia, the suggestions on vintage multiplier and propose a way forward for REC design in future.

63. **Comments on Introducing Technology Multiplier and Vintage Multiplier:**

Stakeholders Comments

- **Kanchanjunga Power Co Ltd** has requested to introduce a multiplier for small hydro projects in order to retain their viability if the proposed order on floor and forbearance price is adopted by the Commission.
- **Greenko Group and Hindalco** have suggested to provide a technology-based multiplier as there is a wide variation in viability tariff requirement of different technologies. They have requested not to reduce REC Floor price for small hydro projects for ensuring future investment in small hydro sector and alternately higher RECs may be issued considering technology-based multiplier concept (higher capex cost and higher generation PLF).
- **Adani Green Energy Ltd.** has submitted that there is a reduction in capital cost for solar and wind projects. However, the capital cost of Small Hydro Power (SHP) projects is increasing and the present capital cost is more than Rs 10 -12 crores/MW. It means higher nos. of RECs should be issued in comparison with wind and solar

generation, commensurate with increase in capital cost and tariff. They have also suggested that relative share of technologies should be calculated based on the RECs issued in last 3 years considering technology multiplier, instead of technology-wise projects registered for RECs.

- According to **UPSMCA**, it would balance the equities and best serve the cause of justice if proposed Floor Price and Forbearance Price are made applicable to projects registered on or after 01.04.2020. In case the proposed prices are to be applied to existing registered projects, then they should be given vintage multiplier so as to protect their interests and for maintaining level playing field.
- **National Solar Energy Federation of India (NSEFI)** submitted that it would be appropriate to segregate the wind energy based REC from the non-Solar REC mix while determining the floor and forbearance price under REC mechanism else a technology based multiplier concept needs to be introduced. It would also be appropriate that the REC certificates for solar and non-solar projects of different vintage may be assigned different floor price and forbearance price to protect the interest of such investments made in preliminary years, else a vintage based multiplier concept needs to be re-introduced.
- **Sri Sivajothi Spinning Mills (P) Ltd, Fab Colours, Snowdew Hydroelectric Power Project, SRG Apparels Pvt Ltd, Raghu Rama Renewable Energy Ltd, Cheenu Enterprises, R3K Power LLP, Giriraj Enterprises, Poysha Power Generation Pvt Ltd, Apex Coco and Solar Energy Ltd, Salora International Ltd, C J Shah & Co., Chiranjilal Spinners Pvt Ltd, Ascent Hydro Projects Ltd, Manikanchan Solar Park, B. G Chitale Dairy, H & L Energy Solutions, Shah Promoters & Developers, Medak Solar Projects Pvt Ltd -Nereus Capital, Dubbak Solar Projects Pvt Ltd- Nereus Capital, Ajeet Seeds Pvt Ltd, Anu Cashews, Arhyama Solar Power Pvt Ltd, Cogeneration Association of India, Sri Kumaraswamy Mineral Exports Pvt Ltd (Wind Genarator), Ponni Sugars (Erode) Ltd, Baidyanath Group, Mytrah Energy India Pvt Ltd, Sahkarmaharshi Bhausaheb Thorat SSK Ltd, PGSD Engineering LLP, Pristine Developers (P) Ltd, Visaka Industries Ltd, Gokak Power & Energy Limited, Finolex Cables Ltd, Dindayal**

Commodities, D J Malpani, Liberty Oil Mills Ltd, Arkay Energy Ltd, K G Denim Ltd, Chartered Gold Financial Services Pvt Ltd, Kanoria Chemical Industries Ltd, Ramesh Steels, Eastman International and Alten Power Pvt. Ltd., Friends Salt Works & Allied Industries, Oswal Salt & Chemical Industries, Kandla Agro& Chemicals Pvt. Ltd and Gautam Freight Pvt Ltd have submitted that the Commission should consider the viability of all technologies and not just wind or solar. Therefore, an alternative approach to achieve the same would be to provide technology specific multipliers. Based on project viability, forbearance and floor price of non-solar REC may be Rs 4400 and Rs 1900 respectively.

- **Maharashtra Electricity Regulatory Commission (MERC)** has suggested that CERC may remove the distinction of Solar and Non-Solar RECs and allow both these baskets to be traded as single product as now the Forbearance and Floor price of Solar and Non-Solar RECs are proposed to be same. It has also suggested to issue RECs to Discoms procuring power from Small Hydro, Biomass, Bagasse and Municipal Solid Waste based RE sources. Said energy procured from these resources will be used for meeting RPO of Distribution Licensee and it should also earn RECs for Distribution Licensee. The same is not in accordance with existing REC framework and will require amendment.
- **NHPC** has submitted that the Commission may prescribe REC multiplier mechanism based on year of commissioning of the plant as stipulated in the Tariff Policy (say, two nos. of RECs for 1 MWh of generation with floor price of Rs 500/MWh) or vintage multiplier mechanism (in line with the mechanism already provided to solar power projects registered under REC Mechanism prior to 1st January, 2015 under third amendment to REC Regulations) for the projects already registered under REC Mechanism prior to 31.03.2020 atleast for a period of 13 years from the COD of such projects so as to comply with the loan repayment obligations. CERC RE Tariff Regulations, 2017 stipulates repayment of loan in 13 years.
- **Greenko Group and Hindalco** have suggested to re-introduce the concept of Vintage Multiplier for the RECs remaining unsold and to be issued to the entities already registered.

- **Renew Power** has submitted that RECs may be issued to the States surpassing the national level renewable purchase obligation trajectory.
- **Adani Green Energy Ltd.** has requested the Commission to consider providing Vintage Multiplier to the projects developed during the control period for sustenance of forecasted REC revenue for at least 10 years post COD so as to enable RE developer service its obligation to repay its term loans. Vintage Multiplier may be considered to reflect change in Floor price at the time of project COD and post COD.
- **Enel Green Energy** has submitted that the investments made in wind projects (developed under REC Mechanism) were quite high and only in last few years the equipment and installation costs of wind technology have witnessed substantial drop. Therefore, it would be appropriate that the REC for wind projects of different vintage may be assigned a different floor price and forbearance price to protect the interest of such investments made in preliminary years.
- **Oil India Ltd** has submitted that in this revision of Floor price and Forbearance price, no relaxation to the RE generators has been provided in the form of vintage multiplier though it was provided earlier.
- **Gurudnyanankit Energy Pvt. Ltd., Agrawal Minerals (Goa) Pvt Ltd, Parekh Medisales Pvt. Ltd, Enrich Energy Ltd, Manikanchan Solar Park, Vikram Tea Processors Pvt Ltd, H & L Energy Solutions, Triveni Sangam Holdings & Trading Co, Saldpur Jute Co. Ltd, Daksh Infrastructure Pvt Ltd, Ashok Iron Works (P) Ltd, Chaphalkar Brothers, Enrich Energy Pvt Ltd, ICC Realty (India) Pvt Ltd, Navlakha Tranlines, TS Wind Developers, S70 (Satara Windmill) -Advik Renewable Energy Pvt. Ltd., CK10 (Nandurbar Windmill) - Advik Renewable Energy Pvt. Ltd., J112 (Dhule Windmill) - Advik Renewable Energy Pvt. Ltd., PVSP16 (Solapur Solar) – Advik HI-Tech Pvt. Ltd., JM Industries, Siporex India Pvt Ltd, Persistent System Ltd, Medilink Services, Olam Sugars, Ferromar Shipping Pvt. Ltd, Bora Agro Foods, Gangadhar Narsingdas Aggarwal, Govindram Shobharam & Co., H & L Energy Solutions, Navalakha Translines, TS Wind Power Developers, Pooja Renewable Energy Pvt. Ltd, Saraswati Industries and Hemant Group** have submitted that Commission has reduced REC

rates two times and Vintage Multiplier was also removed and now further reduction of REC prices shall make small projects unviable.

Analysis and Decision:

64. Several stakeholders have suggested to introduce technology multiplier and vintage multiplier. The Commission has reviewed the suggestions in this regard and is of the view that introduction of any multiplier shall require an amendment in the REC Regulations. As the present exercise is limited to determination of REC Forbearance and Floor Price, the same cannot be considered now. As stated earlier, the Commission has already initiated a study for regulatory impact assessment of REC mechanism and directed the staff to review the submissions and propose a way forward.

65. **Comments on Validity of RECs**

Stakeholders Comments

- **Rana Sugars** has submitted that the absence of any control period for the validity of the proposed REC price will lead to regulatory uncertainty and will make REC market speculative.
- **DNH Power Distribution** has requested to reduce validity of REC to 180 days as market has matured.
- **Enel Green Power** has submitted that validity of REC certificates may be extended till perpetuity.
- **PTC India** has submitted that there should be no further extension of validity of RECs as it would lead to hoarding of RECs and a hindrance in operations of transparent REC market without any price barriers.

Analysis and Decision:

66. Validity of RECs is one thousand and ninety five days from the date of their issuance in accordance with the REC Regulations. The Commission does not find merit

in the arguments of the stakeholders to either extend or reduce the validity of RECs. Even otherwise, this issue is out of purview of this Petition.

67. **Comments on Penal Provisions for non-compliance of RPO in extant SERC Regulations:**

Stakeholders Comments

- **Delhi Electricity Regulatory Commission** has submitted that if there is no floor price of RECs, then the provisions of penalty indicated by DERC in its Regulations, which plays a deterrent role, will fall flat since in absence of any Floor Price, it is difficult to consider the Power Purchase Cost projections towards RPO compliance while determining the ARR of the DISCOMs.
- **POSOCO** has submitted that the RPO Regulations notified by the respective SERCs have provision of linking the default in meeting of RPO with the forbearance price. Hence, reducing the forbearance price may be detrimental to the overall REC Mechanism.
- **Adani Green Energy Ltd.** has submitted that penalties on the obligated entities for not meeting the RPO should be based on the Average Market Clearing price discovered in Power exchange instead of being linked with Floor and Forbearance price currently.
- **InWEA, B C Umapathy, Shri Tradco India Pvt Ltd, Sargam Retails Pvt Ltd and Dhariwal Industries Pvt Ltd** have submitted that the penalty amount for the defaulting obligated entity is linked to the forbearance price. Thus, in order to operationalise this provision of the RPO-REC Regulations, there is a need that forbearance price exists. Further, this would be more relevant in the context of stringent RPO enforcement expected from SERCs through operationalizing such provisions of the respective State RPO-REC Regulations. Accordingly, they requested that CERC should continue specifying the forbearance price and also the same should be set at such value such that it acts as a deterrent to default in RPO compliance.

Analysis and Decision:

68. Several stakeholders have pointed out the linkage of forbearance price (and floor price) with penal provisions for non-compliance of RPO in Regulations notified by various State Electricity Regulatory Commissions while ensuring that the same will act as a deterrent against default in RPO compliance. The Commission is of the view that at present RE power can be procured by the obligated entities at significantly low price to fulfil RPO, and as such the floor and forbearance prices for REC would have to be aligned to the market realities. Deciding RPOs and providing for deterrence for non-compliance of RPOs is the domain of SERCs and they may, if deemed fit, review the basis of deterrent against default in RPO compliance.

69. **Miscellaneous Comments:**

Stakeholders Comments

- **ACC Cement, Ambuja Cement and PTC India** have submitted that if the concept of bilateral sale is allowed through OTC and Market Makers, it would bring reduced market risk, provide certainty of cash flows for RE generators, enable projects to get cheaper finance from banks and would bring in higher liquidity and hence better price discovery.
- **Amines & Plasticizers Ltd. and Apar Industries** have requested to provide REC on Captive Consumption of RE power over and above its RPO obligation in line with provision of REC to Distribution Licensee.
- **PXIL** has submitted that currently the RECs are issued to such Renewable generating plants that are connected to STU network and receive RECs from REC Registry based on the energy injection report issued by SLDCs. The market participants have informed that a similar framework needs to be developed for renewable energy plants that are connected to CTU network. This would help in

promotion of merchant sales through Day Ahead Market and Term Ahead Market of Power Exchanges.

- **BSES Rajdhani Power Ltd and JSW Steel Coated Products** have requested that any renewable generation in the area of Distribution licensee should be considered for fulfilment of RPO of the respective Discoms as per Electricity Act, 2003. Obligated entities should be allowed to meet their RPO through procurement of either solar or Non-Solar RECs. They also requested to permit bilateral sale /purchase of REC and suggested to direct Power Exchanges not to levy GST on RECs.
- **Bonafide Himachalies Hydro Power Developer Association and Sai Engineering Foundation** have submitted that separate window to trade power generated from SHP at the power exchange be allowed expeditiously with exemption of all open access charges and losses for such transactions.
- **DNH Power Distribution and GMR Energy Trading** requested to reduce power exchange fees from the existing Rs 20+tax for RECs traded.
- **Ultratech Cement, Uttam Value Steels Ltd. and ONGC Uran** have requested that RPO compliances should be at national level and obligated entities should be allowed to comply at company level. RECs should be allowed to the captive RE project where the consuming units are not obligated or RE generators and they may opt to choose to operate under the REC mechanism.
- **PTC India** has commented that Commission may look at introducing future and forward financial contracts in the Renewable Energy market. These energy futures will be standardized contracts based on the underlying RE products. The participants should be allowed to trade energy futures and also hedge against future price uncertainties.
- **UPPCL and GMR Energy Trading** requested to allow increase of frequency of REC trading and also to reduce transaction fee of power exchanges.
- **Statkraft India Pvt Ltd** has requested to introduce Hydro RECs as a separate category instead of placing these within the Non-Solar REC category.
- **Cement Manufacturers Association and Reliance Industries Ltd.** have requested that carrying forward of RPO to subsequent years should be considered in view of

COVID-19 impact on the Industry and Business. There should be a single regulation for RPO compliances at national level and all obligated entities should be required to comply at the company level i.e. combined for all its obligated manufacturing units. They also requested to allow RE projects which are availing the benefit in the form of concessional/ promotional transmission or wheeling charges or banking facility benefit and all Captive Projects for RECs.

- **Adani Green Energy Ltd.** has submitted that Open access consumers should not be granted NOC by SLDC/RLDC in case they fail to provide the RPO fulfilment certificate from competent authority and reasonable penalties linked with Forbearance Price should be imposed on the obligated entities failing to fulfil RPO requirement.
- **NSEFI** commented that existing inventory is the result of lack of demand of RECs, which has been caused due to lack of RPO enforcement by the SERCs. This represents a significant failure on the part of SERCs, the burden of which will have to be borne by RE projects for no fault of theirs.
- **SISMA** has requested that Commission should continue to fix, monitor and enforce the RPO targets on the obligated entities.
- **Serum Institute of India** has requested to extend the period after generation from present six months to one year for sending documents to NLDC for REC issuance.
- **Winsol Engineers and JJ PV Solar Pvt Ltd** have requested to issue necessary directions or to take action towards adoption of progressive targets of Renewable Purchase Obligations in accordance with the mandate of Electricity Act, 2003 and National Electricity Policy, 2005.
- **Green Energy Association** submitted that the SERCs have allowed carry-forward and waiver of RPOs despite RECs being abundantly available in the market and provision being made in tariff orders for purchase of renewable energy. In fact, even in rare instances where penalty was imposed on non-compliant obligated entities, the fund so created was used for purposes other than for purchase of RECs.
- **Sharada Erectors Pvt Ltd and NTS Power** have stated that due to complete lockdown in Maharashtra, local Circle officials are not being able to approve the REC

EIR from their end and provide it to SLDC and without the REC EIR from the local circle, SLDC will not process the SLDC verification report.

- **JVS Export** has stated that TANGEDCO has not paid for solar energy for the last two years and total amount payable is Rs. 3.70 Crores. Even though the Madras High Court has ordered them to pay the dues, TANGEDCO has not paid.
- **BG Wind Power Ltd.** has submitted that there are pending disputes on APPC, certification of energy generated in the State of Rajasthan and wind power projects are facing acute liquidity and viability issues in view of several directions passed by the SERC. Before fixing the floor price and forbearance price of RECs, the bottleneck of the State of Rajasthan may be first taken up in the Forum of Regulators to resolve the issue of REC Tariff at APPC of Discom and PPA.
- **Association of Power Producers (APP), FICCI, Tata Power, Basant Wind Farms Pvt. Ltd., Karur Sree Rama Trading Private Limited and Amirthaa Green Infra Private Limited** have requested to introduce REC trading on bilateral platform with different modes; one of which may be through the concept of Virtual Power Plant. It has suggested that CERC may review to shift/allow REC trading through trading licensee under OTC trade.
- **Ajeet Seeds Pvt Ltd, Ascent Hydro Projects Ltd, Anu Cashews, Apex Coco and Solar Energy, Arhyama Solar Power Pvt Ltd, Arkay Energy Ltd, Baidyanath Group, B.G. Chitale Dairy, CJ Shah & Co., Chartered Gold Financial Services, Cheenu Enterprises, Chiranjilal Spinners Pvt Ltd, Cogeneration Association of India, Dindayal Commodities, DJ Malpani, Medak Solar Projects Pvt Ltd - Nereus Capital, Dubbak Solar Projects Pvt Ltd- Nereus Capital, Fab Colors, Finolex Cables Limited, Friends Salt Works & Allied Industries, Oswal Salt & Chemical Industries, Kandla Agro& Chemicals Pvt. Ltd, Kanoria Chemical Industries Ltd, Gautam Freight Pvt Ltd, Giriraj Enterprises, H & L Energy Solutions, KG Denim, Liberty Oil Mills Ltd, Manikanchan Solar Park, Visaka Industries Ltd, Winsol Engineers and JJ PV Solar Pvt Ltd,** have submitted that the clarifications issued by MoP instead of progressively increasing RPO, seeks to fix the percentage of RE obligations for captive power consumers corresponding to

their year of commissioning. Therefore, by capping the RPO, it causes hindrance in creation of demand for RE based power resulting in disregarding the objective of the Electricity Act, 2003 and National Electricity Policy, 2005. They have submitted that:

- To clarify and advise the Ministry of Power and SERCs that the impact of its action is regressive and has resulted in suppressing growth of environment friendly sources of renewable energy generation within India.
- Issue necessary directions or to take necessary action towards adoption of progressive targets of Renewable Purchase Obligations in accordance with the mandate of Electricity Act, 2003 and National Electricity Policy, 2005.
- Define the role of Ministry of Power in setting long term growth trajectory of RPO and State Electricity Regulatory Commission in specifying RPO targets in accordance with Section 86(1)(e) of the Electricity Act, 2003 and Clause 6.4 of National Tariff Policy, 2016 so that order passed by Ministry of Power may not encroach upon the legislative domain of SERCs.

Analysis and Decision:

70. The Commission has taken note of the aforesaid submissions by the stakeholders. It is to reiterate that the present exercise is for the determination of forbearance price and floor price only. Considering above comments is beyond the scope of this Order. However, the Commission would like to reiterate that the staff has been directed to carry out review of the REC mechanism and suggest way forward.

71. Summary of Decisions

71.1. Floor and Forbearance price for Non-Solar RECs shall be as follows:

	Non-Solar REC (Rs./ MWh)
Forbearance Price	1,000
Floor Price	0

71.2. Floor and Forbearance price for Solar RECs shall be as follows:

	Solar REC (Rs./ MWh)
Forbearance Price	1,000
Floor Price	0

71.3. The forbearance price and floor price as above shall be effective from 01.07.2020 and shall remain in force till 30.06.2021 or until further orders of the Commission.

71.4. The Commission directs the Staff to undertake review of REC mechanism in the light of the prevailing market developments, including inter alia review the need for floor and forbearance price for REC mechanism and vintage or technology multiplier.

72. The forbearance price and floor price decided in this order for Non-solar RECs shall be applicable to Non-solar RECs issued on or after 01.04.2017. For Non-solar RECs issued prior to 01.04.2017, the trading shall take place in accordance with Commission's letter dated 28.05.2018 and shall be subject to the final decision of the Hon'ble Supreme Court in Civil Appeal No. 4801/2018.

73. In terms of the above, the Petition No. 05/SM/2020 is disposed of.

Sd/-	Sd/-	Sd/-
(Arun Goyal)	**(I.S. Jha)**	**(P.K. Pujari)**
MEMBER	**MEMBER**	**CHAIRPERSON**

Annexure-A: List of stakeholders who have submitted their comments

1	ACC Limited	41	Bora Agro Foods
2	Adani Green Energy Ltd	42	BSES Rajdhani Power Ltd
3	Adhya Renewable Energy-Kiran Group	43	C J Shah & Co
4	Aditya Birla Group	44	Cement Manufacturers Association
5	Advik Hi-Tech Private Limited Pvsp16	45	CER IIT Kanpur
6	Advik Renewable Energy Private Limited Ck10	46	Chamber of Commerce and Industry - Kutch
7	Advik Renewable Energy Private Limited J112	47	Chaphalkar Brothers
8	Advik Renewable Energy Private Limited S70	48	Chartered Gold Financial Services
9	Agarwal Packaging Pvt Ltd	49	Cheenu Enterprises
10	Agrawal Minerals (Goa) Pvt Ltd	50	ChemplastCuddaloreVinyls Ltd
11	AIA Engineering Ltd	51	Chiranjilal Spinners Pvt Ltd
12	Ajeet Seeds Pvt Ltd	52	CLP India
13	Alkali Manufacturers Association of India	53	Cogeneration Association of India
14	All India Renewable Energy Protection Associatio	54	Confederation of Captive Power Plants Odisha
15	Alten Power Pvt Ltd	55	Daksh Infrastructure Pvt Ltd
16	Ambuja Cements Limited	56	Dalmia Cement Bharat Limited
17	Amines & Plasticizers Ltd	57	DCM Shriram Limited
18	Amirthaa Green Infra Private Limited	58	DERC
19	ANU CASHEWS	59	DharampalPremchand Ltd
20	Apar Industries Ltd	60	Dhariwal Industries Pvt Ltd
21	Apex Coco and Solar Energy	61	Dindayal Commodities Private Limited
22	APP	62	DJ Malpani
23	Arcelor Mittal Nippon Steel India Ltd	63	DNH Power Distribution
24	Arhyama Solar Power Pvt Ltd	64	Dubbak Solar Projects Private Limited
25	Arkay Energy Ltd	65	Eastman International
26	Ascent Hydro Projects Ltd	66	Enel Green Power India Private Limited
27	Ashok Iron Works Pvt Ltd	67	Enrich Energy Pvt Ltd
28	Assocham	68	Etica Developers Pvt Ltd
29	Atul Ltd	69	Fab Colors
30	Baidyanath Group of Companies	70	Fasttrack Packers Pvt Ltd
31	Bajaj Finserv Ltd	71	Ferromar Shipping Pvt Ltd
32	Balkrishna Sizing Industries	72	FICCI
33	Basant Windfarms Private Limited Unit-1&2	73	Finolex Cables Limited
34	BC Umapathy	74	Finolex Industries Ltd
35	BG Chitale Dairy	75	Flow Devices Systems
36	BG Raibage	76	Fortum India Private Limited
37	BG Wind Power Limited	77	Friends Salt Works & Allied Industries
38	Bharat Power Inc	78	Gamma Green Power
39	BonafideHimachalies Hydro Power Developer Ass	79	iationGangadhar Narsingdas Aggarwal 1
40	Bonaterra Greenhouses LLP	80	Gautam Freight Pvt Ltd

81	GHCL Limited	123	Kandla Agro& Chemicals Pvt Ltd
82	Giriraj Enterprises	124	Kanoria Chemicals & Industries Ltd
83	GMR Energy Trading Limited	125	Karur Sree Rama Trading Private Limited
84	GMR Generation Assets Limited	126	KERC
85	Gokak Power & Energy Ltd	127	KG Denim
86	Gomathy International	128	Kreate Energy
87	GovindramShobharam& Co	129	Liberty Oil Mills Limited
88	Grasim Industries Limited	130	LNJ Bhilwara
89	Green Energy Association	131	Malpani Tea Corporation
90	Greenko Group	132	Manikanchan Solar Park
91	Gujarat Ambuja Exports Limited	133	Manikaran Power Limited
92	Gujarat Biomass Energy Developers Association	134	MB Power (Madhya Pradesh) Limited
93	Gujarat Chamber of Commerce and Industry	135	MEDAK Solar Projects Private Limited
94	Gujarat Fluorochemicals Limited	136	Medilink services
95	Gupta sons	137	MeghmaniFinechem Limited
96	Gurudnyanankit Energy Pvt Ltd	138	MERC
97	H&L Energy Solutions	139	MESCOM
98	Harsh Renewable Energy-Kiran Group	140	MNRE
99	Hazira Area Industries Association	141	Mytrah Energy (India) Private Limited
100	Hemant Group	142	Nava Bharat Ventures Ltd
101	Hero Future Energies	143	NavalakhaTranslines
102	Hindalco	144	NHPC
103	Hindustan Platinum Private Limited	145	Nirma Limited
104	ICC Realty (India) Pvt Ltd	146	NSEFI
105	IEX	147	NTPC
106	India Glycols Ltd	148	NTS Power
107	Indian Sugar Mills Association	149	NVVN
108	Indian Wind Power Association	150	Oil India Limited
109	Indo Rama Synthetics	151	Olam Agro India Private Limited
110	Inox Renewables Ltd	152	ONGC - Hazira Plant
111	InWEA	153	ONGC Uran Plant
112	IPF Vikram India Limited	154	Orient Green Power Company
113	IPPAI	155	Oswal Salt & Chemicals Industries
114	ITC Limited	156	Parekh Medisales Pvt Ltd
115	IWPA-NRC	157	PEDA
116	IWTMA	158	Persistent Systems Ltd
117	Jathar Textiles	159	PGSD Engineering LLP
118	JJ PV Solar Pvt Ltd	160	PHD Chamber of Commerce and Industry
119	JM Industries	161	PONNI SUGARS (ERODE) LTD
120	JSW Steel Coated Products Ltd	162	Pooja Renewable Energy Pvt Ltd
121	JVS Export	163	POSOCO
122	Kanchanjunga Power Company Private Limited	164	Power Company of Karnataka Ltd

165	Poysha Power Generation Private Limited
166	Pradeep Metals Ltd
167	Pragati Agencies
168	Pristine Developers (P) Ltd
169	Prodigy Hydro Power Private Limited
170	PTC India
171	PXIL
172	R3K Power
173	Raghu Rama Renewable Energy Pvt Ltd
174	Ramesh Steels
175	Rana Sugars Limited
176	Reliance Industries Ltd
177	Renew Power
178	RPG Power Trading Co Ltd
179	RSPL Limited
180	SahkarmaharshiBhausahebThorat SSK Ltd
181	Sai Engineering Foundation
182	Saidpur Jute Company Ltd
183	Salora International
184	Sanghi Industries Ltd
185	Sapphire Pro Ventures Pvt Ltd
186	Saraswati Industries
187	Sargam Retails Pvt Ltd
188	Saurashtra Chamber of Commerce & Industry
189	Seattle Power Solutions Pvt Ltd
190	Semcorp Green Infra
191	Serum Institute of India
192	Shah Promoters & Developers
193	Sharada Erectors Pvt Ltd
194	Sharma Industries
195	Shell Energy India Pvt Ltd
196	Shivashri Techno Homes Pvt Ltd
197	Shree Cement Ltd
198	Shri Tradco India Pvt Ltd
199	Siporex India Pvt Ltd
200	SISMA Tamil Nadu
201	Sivajothi Spinning Mills
202	SkShivaraj
203	SK Veerabhadrappa& Co
204	Snowdew Hydroelectric Power Projects Pvt Ltd
205	Shri Someswara Prasad KM
206	Southern Gujarat Chamber of Commerce & Industry
207	SRG Apparels Pvt Ltd
208	Sri Amareshwar Industries
209	Sri Kumaraswamy Mineral Exports Pvt Ltd
210	Sri Laxmi Industries
211	SRS Engineers
212	Star Delta Transformers Ltd
213	Statkraft
214	Systematics Enterprises Pvt Ltd
215	Tamilnadu Petroproducts Limited
216	TATA Chemicals
217	Tata Power Company Ltd
218	Tata Steel BSI
219	TNERC
220	TRBEX IMPEX Pvt Ltd
221	Triveni Sangam Holdings & Trading Co
222	TS Wind Power Developers
223	Tuhina Enterprises
224	Ujaas Energy Ltd
225	Ultratech Cement
226	UP Sugar Mills Cogen Association
227	UPPCL
228	Uttam Value Steels Limited
229	Vedanta Ltd
230	Vikram Tea Processor Pvt Ltd
231	Vikram Urethane Private Limited
232	Vippy Industries Limited
233	Visaka Industries Limited
234	Welspun Group
235	Winsol Engineers

COURT-I

IN THE APPELLATE TRIBUNAL FOR ELECTRICITY
(Appellate Jurisdiction)

APPEAL NO. 113 OF 2020 &
IA NO. 817 OF 202, IA NO. 816 OF 2020 &
IA NOS. 848, 857 & 858 OF 2020

Dated: 24th July, 2020

Present: Hon'ble Mrs. Justice Manjula Chellur, Chairperson
Hon'ble Mr. S.D. Dubey, Technical Member

In the matter of:

Indian Wind Power Association .... **Appellant(s)**

Versus

Central Electricity Regulatory Commission .... **Respondent(s)**

Counsel on record for the Appellant(s) : Mr. Vishal Gupta
Mr. Avinash Menon
Mr. Sumeet Sharma
Mr. Divyanshu Gupta
Mr. Paras Choudhary

Counsel on record for the Respondent(s): Mr. K. R. Sasiprabhu **for Caveator**

Mr. Buddy A. Ranganadhan
Mr. Hemant Singh
Mr. Lakshyuajit Singh Bagdwal
Mr. Anirban Mondak **for Impleader**

ORDER

Proceedings in this matter today are conducted through video conferencing.

Heard Mr. Sajan Poovayya, learned senior counsel arguing for Appellant in presence of Mr. Ramji Srinivasan, learned senior counsel

arguing for the Caveator-Captive Power Producers Association, Mr. Gopal Jain, learned senior counsel arguing for the Impleader-Vedanta & BALCO, and Mr. Dhruv Mehta, learned senior counsel appearing for the Impleader-Indian Captive Power Producers Association in the presence of Mr. Saurabh Mishra, learned counsel arguing for CERC..

Admit. Issue notice to the Respondents returnable on 27.07.2020.

Mr. Saurabh Mishra, learned counsel takes notice on behalf of the Respondent-CERC.

Registry is directed to put up all impleading applications filed in these appeals by next date of hearing.

The Appellant shall serve all the papers to the impleading applicants also.

Meanwhile, the trading of RECs scheduled on 29.7.2020 shall be postponed by four weeks.

It is made clear that if validity for any REC is going to be expired within four weeks, as stated above, the same shall be extended by the concerned authority.

List the matter on ***27.07.2020 (through video conferencing).***

(S.D. Dubey)
Technical Member

(Justice Manjula Chellur)
Chairperson

tpd

Collectively

COURT-I

IN THE APPELLATE TRIBUNAL FOR ELECTRICITY
(Appellate Jurisdiction)

APPEAL NO. 113 OF 2020 &
IA NOs. 817, 816, 895, 896, 983, 984 & 989 OF 2020

Dated: 11th August. 2020

Present: Hon'ble Mrs. Justice Manjula Chellur, Chairperson
Hon'ble Mr. S.D. Dubey, Technical Member

In the matter of:

Indian Wind Power Association .... Appellant(s)

Versus

Central Electricity Regulatory Commission .... Respondent(s)

Counsel on record for the Appellant(s) : Mr. Vishal Gupta
Mr. Avinash Menon
Mr. Sumeet Sharma
Mr. Divyanshu Gupta
Mr. Paras Choudhary

Counsel on record for the Respondent(s): Mr. Hemant Singh
Mr. Mridul Chakravarty
Mr. Lakshyajit Singh Bagdwal
Mr. Karan Govel
Mr. Anirban Mondal for R.2 to R.4

Mr. R. S. Prabhu for R.5

Mr. Apoorva Misra
Mr. Aditya Kumar Singh
Ms. Soumya Prakash
Mr. Samarth Kashyap for R.6 & R.7

ORDER

IA No. 989 of 2020
(Appln. for condonation of delay in filing reply)

Proceedings in this matter today are conducted through video conferencing.

For the reasons set out in the application, delay in filing reply is condoned. Reply is taken on record.

Application is disposed of.

APPEAL NO. 113 OF 2020

Mr. Sajan Poovayya, learned senior counsel arguing for the Appellant, Mr. Gopal Jain, learned senior counsel arguing for Respondent No.2, Mr. Dhruv Mehta, learned senior counsel arguing for Respondent No.4, Mr. Ramji Srinivasan, learned senior counsel arguing for Respondent No.5, Mr. Gaurav Maitra, learned counsel arguing for Captive Power Producers Association, Mr. Apoorva Mishra, learned counsel appearing for Respondent Nos. 6 & 7 and Mr. Saurabh Mishra, learned counsel appearing for CERC are present.

Learned counsel appearing for Respondent Nos. 6 & 7 submits that the Modification application filed by Respondent Nos. 6 & 7 can be treated as their reply. Learned counsel for Respondent No.1-CERC submits that he will be filing reply during the course of the day. He is permitted to file the same with advance copy to the other side. Learned counsel for the Appellant may file common rejoinder, if any, on or before 17.08.2020 with advance copy to the other side.

List the matter for directions on ***26.08.2020*** ***(through video conferencing).*** Interim order dated 24.07.2020, which expires on 21.08.2020, is extended till the next date of hearing.

(S.D. Dubey)
Technical Member

(Justice Manjula Chellur)
Chairperson

ts

COURT-I

IN THE APPELLATE TRIBUNAL FOR ELECTRICITY
(Appellate Jurisdiction)

APPEAL NO. 113 OF 2020 &
IA NO. 817 OF 2020, IA NO. 816 OF 2020 &
IA NOS. 983 & 984 OF 2020

Dated: 26th August, 2020

Present: Hon'ble Mrs. Justice Manjula Chellur, Chairperson
Hon'ble Mr. S.D. Dubey, Technical Member

In the matter of:

Indian Wind Power Association .... Appellant(s)

Versus

Central Electricity Regulatory Commission .... Respondent(s)

Counsel on record for the Appellant(s) : Mr. Vishal Gupta
Mr. Avinash Menon
Mr. Sumeet Sharma
Mr. Divyanshu Gupta
Mr. Paras Choudhary

Counsel on record for the Respondent(s): Mr. Saurabh Mishra for R-1

Mr. Buddy A Ranganadhan
Mr. Hemant Singh
Mr. Mridul Chakravarty
Mr. Karan Govel
Mr. Lakshyuajit Singh Bagdwal
Mr. Anirban Mondak for R-2 to R-4

Mr. K.R. Sasiprabhu
Mr. Gaurav Mitra
Mr. Amey Nabar
Mr. Vishnu Sharma for R-5

Mr. Apoorva Misra
Mr. Aditya Kumar Singh
Ms. Soumya Prakash
Mr. Samarth Kashyap for R-6 & R-7

ORDER

Proceedings in this matter today are conducted through video conferencing.

Mr. Sajan Poovayya, learned senior counsel for the Appellant, Mr. Ramji Srinivasan, learned senior counsel arguing for the Caveator-Captive Power Producers Association, Mr. Gopal Jain, learned senior counsel arguing for the Impleader-Vedanta & BALCO and Mr. Saurabh Mishra, learned counsel arguing for CERC are present.

Learned counsel for the CERC is permitted to adopt reply filed in other appeals by filing a memo along with copy of their reply. Appellant shall file rejoinder by the next date of hearing with advance copy on the other side.

Interim order, if any, shall continue till the next date of hearing.

Pleadings are complete.

List the matter for hearing on **4.9.2020 & 5.9.2020** ***(through video conferencing).***

(S.D. Dubey)
Technical Member

(Justice Manjula Chellur)
Chairperson

pr

COURT-I

IN THE APPELLATE TRIBUNAL FOR ELECTRICITY
(Appellate Jurisdiction)

APPEAL NO. 113 OF 2020 &
IA NOS. 817 OF 2020, 816 OF 2020 &
IA NOS. 983 & 984 OF 2020

Dated: 05th September, 2020

Present: Hon'ble Mrs. Justice Manjula Chellur, Chairperson
Hon'ble Mr. S.D. Dubey, Technical Member

In the matter of:

Indian Wind Power Association .... Appellant(s)

Versus

Central Electricity Regulatory Commission .... Respondent(s)

Counsel on record for the Appellant(s) : Mr. Vishal Gupta
Mr. Avinash Menon
Mr. Sumeet Sharma
Mr. Divyanshu Gupta
Mr. Paras Choudhary

Counsel on record for the Respondent(s): Mr. Saurabh Mishra for R-1

Mr. Buddy A Ranganadhan
Mr. Hemant Singh
Mr. Mridul Chakravarty
Mr. Karan Govel
Mr. Lakshyuajit Singh Bagdwal
Mr. Anirban Mondak for R-2 to R-4

Mr. K.R. Sasiprabhu
Mr. Gaurav Mitra
Mr. Amey Nabar
Mr. Vishnu Sharma for R-5

Mr. Apoorva Misra
Mr. Aditya Kumar Singh
Ms. Soumya Prakash
Mr. Samarth Kashyap for R-6 & R-7

ORDER

Proceedings in this matter today are conducted through video conferencing.

Mr. Sajan Poovayya, learned senior counsel for the Appellant, Mr. Ramji Srinivasan, learned senior counsel arguing for the Caveator-Captive Power Producers Association, Mr. Dhruv Mehta, learned senior counsel arguing for ICPPA/ R-4, Mr. Gopal Jain, learned senior counsel arguing for the Impleader-Vedanta & BALCO and Mr. Saurabh Mishra, learned counsel arguing for CERC are present.

Heard in part. Since most of the arguments supporting the Appellants claim is covered by the arguments of Mr. Sajan Poovayya, learned senior counsel arguing for the Appellant in Appeal No.113 of 2020, the other senior counsel arguing for the Appellants may submit only those points which are not covered by Mr. Sajan Poovayya, on the next date of hearing i.e. 08.9.2020 at 02.30 p.m.

Learned counsel for Respondent Commission shall address the Respondents points of view covering most of the arguments on 10.09.2020 at 02.30 p.m. since the impugned order is an outcome of the regulatory exercise of the Commission.

If any points which are not addressed to, by the counsel for the Respondent Commission, the same can be addressed by other Respondent counsels on 11.09.2020 at 02.30 p.m. Meanwhile, all the parties are directed to furnish their written arguments for convenience sake with advance copy to the other side.

Interim order, if any, shall continue till completion of the arguments.

List the matter for further hearing on ***08.09.2020, 10.09.2020 & 11.09.2020 at 02.30 p.m.*** **through video conferencing.**

(S.D. Dubey)
Technical Member

(Justice Manjula Chellur)
Chairperson

pr

COURT-I

IN THE APPELLATE TRIBUNAL FOR ELECTRICITY
(Appellate Jurisdiction)

APPEAL NO. 113 OF 2020 &
IA NOS. 817 OF 2020, 816 OF 2020 &
IA NOS. 983 & 984 OF 2020

Dated: 10th September, 2020

Present: Hon'ble Mrs. Justice Manjula Chellur, Chairperson
Hon'ble Mr. S.D. Dubey, Technical Member

In the matter of:

Indian Wind Power Association .... Appellant(s)

Versus

Central Electricity Regulatory Commission .... Respondent(s)

Counsel on record for the Appellant(s) : Mr. Vishal Gupta
Mr. Avinash Menon
Mr. Sumeet Sharma
Mr. Divyanshu Gupta
Mr. Paras Choudhary

Counsel on record for the Respondent(s): Mr. Saurabh Mishra for R-1

Mr. Buddy A Ranganadhan
Mr. Hemant Singh
Mr. Mridul Chakravarty
Mr. Karan Govel
Mr. Lakshyuajit Singh Bagdwal
Mr. Anirban Mondak for R-2 to R-4

Mr. K.R. Sasiprabhu
Mr. Gaurav Mitra
Mr. Amey Nabar
Mr. Vishnu Sharma for R-5

Mr. Apoorva Misra
Mr. Aditya Kumar Singh
Ms. Soumya Prakash
Mr. Samarth Kashyap for R-6 & R-7

ORDER

Proceedings in this matter today are conducted through video conferencing.

Heard Mr. Sakya Singha Chaudhuri, learned counsel arguing for the Appellant in Appeal No.123 of 2020, Mr. S. Venkatesh, learned counsel arguing for the Appellant in Appeal No.137 of 2020, Mr. Shailendera Kishore Singh, learned counsel arguing for the Appellant in Appeal No.138 of 2020, Mr. Saurabh Mishra, learned counsel arguing for CERC and Mr. Dhruv Mehta, learned senior arguing counsel for ICPPA / R-4 at some length in the presence of Mr. Basava Prabhu Patil, learned senior arguing counsel for the Appellant in Appeal No.117 of 2020 and Mr. Sanjay Sen, learned senior arguing counsel for the Appellant in Appeal No.118 of 2020, Mr. Sajan Poovayya, learned senior counsel for the Appellant in A.No.113 of 2020, Mr. Ramji Srinivasan, learned senior counsel arguing for the Caveator-Captive Power Producers Association.

All parties are directed to exchange the written submissions, if possible by tomorrow.

Interim order, if any, shall continue till completion of the arguments.

List the matter on ***11.09.2020 at 12.30 and will continue at 02.30 p.m.*** **through video conferencing.**

(S.D. Dubey)
Technical Member(Electricity)

(Justice Manjula Chellur)
Chairperson

pr

COURT-1

IN THE APPELLATE TRIBUNAL FOR ELECTRICITY
(Appellate Jurisdiction)

APPEAL NO. 113 OF 2020 &
IA NOS. 817, 816, 983 & 984 OF 2020

Dated: 25th September, 2020

Present: Hon'ble Mrs. Justice Manjula Chellur, Chairperson
Hon'ble Mr. S.D. Dubey, Technical Member

In the matter of:

Indian Wind Power Association .... **Appellant(s)**

Versus

Central Electricity Regulatory Commission & Ors. .... **Respondent(s)**

Counsel on record for the Appellant(s) : Mr. Vishal Gupta
Mr. Avinash Menon
Mr. Sumeet Sharma
Mr. Divyanshu Gupta
Mr. Paras Choudhary

Counsel on record for the Respondent(s): Mr. Saurabh Mishra **for R-1**

Mr. Hemant Singh
Mr. Lakshyajit Singh Bagdwal
Mr. Karan Govel
Mr. Anirban Mondal
Mr. Mridul Chakravarty **for R-2 to 4**

Mr. R. S. Prabhu **for R-5**

Mr. Apoorva Misra
Mr. Aditya K. Singh
Ms. Soumya Prakash
Mr. Samart Kashyap for **R-6 & 7**

ORDER

Proceedings in this matter today are conducted through video conferencing.

Heard Mr. Sajan Poovayya, learned senior counsel arguing for the Appellant, Mr. Buddy A. Ranganadhan, learned counsel appearing for Respondent No. 4, Mr. Ramji Srinivasan, learned senior counsel arguing for Respondent No. 5, and Mr. Gopal Jain, learned senior counsel arguing for BALCO.

Arguments concluded. All parties are at liberty to file written submissions within one week i.e., on or before 02.10.2020 with advance copy to the other side.

Judgment Reserved. Interim order, if any shall continue till the judgment is pronounced.

(S.D. Dubey)
Technical Member(Electricity)

(Justice Manjula Chellur)
Chairperson

tpd

IN THE APPELLATE TRIBUNAL FOR ELECTRICITY
(Appellate Jurisdiction)

APL NO. 113 OF 2020 &
IA NOs. 817, 816, 983 & 984 OF 2020

APL NO. 117 OF 2020 &
IA NOs. 820 & 819 OF 2020

APL NO. 118 OF 2020 &
IA NOs. 840, 839 & 1090 OF 2020

APL NO. 123 OF 2020 &
IA NOs. 925 & 924 OF 2020

APL NO. 137 OF 2020 &
IA NOs. 1005 & 1004 OF 2020

AND

APL NO. 138 OF 2020 &
IA NOs. 961 & 960 OF 2020

Dated: **09th November 2021**

Present: **Hon'ble Mr. Justice R.K. Gauba, Judicial Member**
Hon'ble Mr. Sandesh Kumar Sharma, Technical Member

APL NO. 113 OF 2020 &
IA NOs. 817, 816, 983 & 984 OF 2020

In the matter of:

INDIAN WIND POWER ASSOCIATION
(Northern Region Council)
GF 28, World Trade Centre,
Connaught Place,
New Delhi – 110001
ashish.npti@gmail.com ... Appellant

VERSUS

1. **CENTRAL ELECTRICITY REGULATORY COMMISSION**
[Through Its Secretary]
3rd and4th Floor, Chanderlok Building,
36, Janpath,
New Delhi – 110001
info@cerc.gov.in

2. **BHARAT ALUMINIUM COMPANY LIMITED**
[Through Its Managing Director]
AluminiumSadan,
Core-6, Scope Office Complex,
7 Lodhi Road,
New Delhi – 110003

3. **M/S. VEDANTA LIMITED**
[Through Its Managing Director]
1st Floor, C Wing, Unit 103,
Corporate Avenue Atul Projects,
Chakala, Andheri (East), Mumbai,
Maharashtra – 400093

4. **INDIAN CAPTIVE POWER PRODUCERS ASSOCIATION**
[Through Its President]
309, Mansarovar Building,
90, Nehru Place,
New Delhi – 110019

5. **CAPTIVE POWER PRODUCERS ASSOCIATION**
[Through Its President]
Secretariat Office,
Technocraft Industries (India) Ltd.,
Opus Centre, MIDC, Marol Andheri-East,
Mumbai, Maharashtra – 400093

6. **POWER EXCHANGE INDIA LIMITED**
[Through Its Managing Director]
901, 9th Floor, Sumer Plaza,
Marol Maroshi Road,
Marol Andheri (East),
Mumbai, Maharashtra – 400059

7. **INDIAN ENERGY EXCHANGE LIMITED**
[Through Its Managing Director]
Unit No.3, 4, 5 and 6, 4th Floor,
TDI Centre, Plot No.-7,
Jasola, New Delhi – 110025 .... Respondents

Counsel for the Appellant(s)	:	Mr. SajanPoovayya, Sr. Adv. Mr. Vishal Gupta Mr. Divyanshu Gupta Mr. Pratibhanu Singh Kharola Ms. Raksha Agrawal
Counsel for the Respondent(s)	:	Mr. Saurabh Mishra for R-1 Mr. Gopal Jain, Sr. Adv.

Mr. Hemant Singh
Mr. Mridul Chakravarty
Mr. Lakshyajit Singh Bagdwal
for R-2/BALCO

Mr. Buddy A. Ranganadhan
Mr. Hemant Singh
Mr. Mridul Chakravarty
Mr. Lakshyajit Singh Bagdwal
for R-3/Vedanta

Mr. Hemant Singh
Mr. Mridul Chakravarty
Mr. Lakshyajit Singh Bagdwal
for R-4/ICPPA
Mr. Ramji Srinivasan, Sr. Adv.
Mr. K. R. Shashiprabhu
Mr. Gaurav Mitra
Mr. AmeyNabar
Mr. Vishnu Sharma
Ms. Rajshree Choudhary
for R-5/CPPA

Mr. Apoorva Misra for R-6/PEIL

Mr. Anand K. Ganesan for R-7/IEEL

APL NO. 117 OF 2020 &
IA NOs. 820 & 819 OF 2020

In the matter of:

TECHNO ELECTRIC & ENGINEERING COMPANY LIMITED
[Represented Through Its Company Secretary]
Corporate Office: 1B, Park Plaza,
South Block, 71, Park Street,
Kolkata- 700016. ... Appellant

VERSUS

1 **CENTRAL ELECTRICITY REGULATORY COMMISSION**
[Through Its Secretary]
3rd and 4th Floor, Chanderlok Building,
36, Janpath,
New Delhi – 110001
info@cerc.gov.in

2. **MINISTRY OF NEW AND RENEWABLE ENERGY**
Government Of India
Represented by its Secretary,
having office at:Block-14, CGO Complex, Lodhi Road,
New Delhi - 110003

secy-mnre@nic.dot.in ... Respondents

Counsel for the Appellant(s) : Ms. Poonam Verma
Mr. SaunakRajguru
Ms. Gayatri Aryan

Counsel for the Respondent(s) : Mr. Saurabh Mishra for R-1

APL NO. 118 OF 2020 &
IA NOs. 840, 839 & 1090 OF 2020

In the matter of:

M/S GREEN ENERGY ASSOCIATION
Sargam, 143, Taqdir Terrace,
Near Shirodkar High School,
Dr. E. Borjes Road, Parel (E),
Mumbai - 400 012 ... Appellant

VERSUS

CENTRAL ELECTRICITY REGULATORY COMMISSION
[Through its Secretary]
3rd and 4th Floor,
Chanderlok Building,
36, Janpath,
New Delhi – 110001
info@cerc.gov.in ... Respondent

Counsel for the Appellant(s) : Mr. Sanjay Sen, Sr. Adv.
Ms. Mandakini Ghosh
Mr. Parinay Deep Shah
Ms. Surabhi Pandey

Counsel for the Respondent(s) : Mr. Saurabh Mishra for R-1

Mr. R.S. Prabhu for R-2

Mr. Ramji Srinivasan, Sr. Adv.
Mr. K. R. Shashiprabhu
Mr. Gaurav Mitra
Mr. AmeyNabar
Mr. Vishnu Sharma
Mr. Rajshree Choudhary for R-3

Mr. Hemant Singh
Mr. Mridul Chakravarty
Mr. Lakshyajit Singh Bagdwal
for BALCO/Caveator

APL NO. 123 OF 2020 &
IA NOs. 925 & 924 OF 2020

In the matter of:

U.P. SUGAR MILLS COGEN ASSOCIATION
4th Floor, Room No. 403,
Chintels House, Trade Centre,
16, Station Road, Lucknow – 226001 ... Appellant

VERSUS

CENTRAL ELECTRICITY REGULATORY COMMISSION
[Through its Secretary]
3rd and 4th Floor, Chanderlok Building,
36, Janpath,
New Delhi – 110001
info@cerc.gov.in ... Respondent

Counsel for the Appellant(s) : Mr. Sakya Singha Chaudhuri
Mr. Avijeet Lala
Ms. Astha Sharma
Mr. Shubham Kumar

Counsel for the Respondent(s): Mr. R. S. Prabhu
for CPPA/Caveator

Mr. Hemant Singh
Mr. Mridul Chakravarty
Mr. Lakshyajit Singh Bagdwal
for BALCO/Caveator

APL NO. 137 OF 2020 &
IA NOs. 1005 & 1004 OF 2020

In the matter of:

M/S INDIAN SUGAR MILLS ASSOCIATION
[Through its Authorized Representative]
having office of correspondence at:
Ansal Plaza, 'C' Block, 2nd Floor,
August Kranti Marg, Andrews Ganj,
New Delhi- 110049. ... Appellant

VERSUS

CENTRAL ELECTRICITY REGULATORY COMMISSION
[Through Its Secretary]
3rd and 4th Floor, Chanderlok Building,
36, Janpath,
New Delhi – 110001

info@cerc.gov.in ... Respondent

Counsel for the Appellant(s) : Mr. Shri Venkatesh
Mr. Abhiprav Singh
Mr. Ashutosh K Srivastava
Mr. Siddharth Joshi
Mr. Rishub Kapoor

Counsel for the Respondent(s): Mr. Hemant Singh
Mr. Mridul Chakravarty
Mr. Lakshyajit Singh Bagdwal
for BALCO/Caveator

APL NO. 138 OF 2020 &
IA NOs. 961 & 960 OF 2020

In the matter of:

ALL INDIA RENEWABLE ENERGY PROTECTION ASSOCIATION
[Through: Authorized Representative]
A Company Incorporated Under
The Companies Act, 2013 and
having its registered office at:3, Scindia House,
2nd Floor, Janpath, Connaught Place,
New Delhi-110001 ... Appellant-1

BONAFIDE HIMACHALIES HYDRO POWER DEVELOPERS ASSOCIATION
[Through: Authorized Representative]
A Society Registered under
The H.P. Societies Registration Act, 2006 and
having its registered office t:Sai Bhawan,
Sector-IV, Phase-II
New Shimla-171009, Himachal Pradesh ... Appellant-2

VERSUS

CENTRAL ELECTRICITY REGULATORY COMMISSION
[Through Its Secretary]
3rd and 4th Floor, Chanderlok Building,
36, Janpath,
New Delhi – 110001
info@cerc.gov.in ... Respondent

Counsel for the Appellant(s) : Mr. Shailendra Singh
Mr. Prithu Garg

Counsel for the Respondent(s): Mr. Hemant Singh
Mr. Mridul Chakravarty
Mr. Lakshyajit Singh Bagdwal

for BALCO/Caveator

JUDGMENT

PER HON'BLE MR. JUSTICE R.K. GAUBA, JUDICIAL MEMBER

1. The Electricity Act, 2003 brought in various reforms for the electricity industry, the prime objective being inclusive of creating environment conducive to its development, promoting competition therein, protecting interest of consumers in supply of electricity to all areas, rationalization of electricity tariff and ensuring transparent policies regarding subsidies, and adoption of efficient and environmentally benign policies. There is a special emphasis by this legislative measure on promotion of *Renewable Sources of Energy* in contrast of electricity generation by resources such as coal, natural gas, nuclear substances or material, and hydro power. The endeavor of promotion by generation of electricity from renewable sources of energy, expressly provided in various provisions of the statute, has been governed for more than a decade now by regulatory framework promulgated by Central Electricity Regulatory Commission (hereinafter referred to variously as, "*the Central Commission*" or "*CERC*" or "*the Commission*") through *Central Electricity Regulatory Commission (Terms and Conditions for recognition and issuance of Renewable Energy Certificate for Renewable Energy Generation) Regulations, 2010* (in short, "*REC Regulations*"). The renewable sources of energy are broadly

classified into two categories *viz. solar* and *non-solar*. The Central Commission by its Orders, issued from time to time, has been fixing *floor price* and *forbearance price* for sale of *Renewable Energy Certificates* ("*RECs*") in exercise of its powers under the REC Regulations. By Order dated 17.06.2020 passed in Petition no. 05/SM/2020, the Central Commission revised the floor and forbearance price of solar and non-solar RECs at Rs. 0/MWh and Rs. 1000/MWh respectively. The renewable energy generators have felt aggrieved by the said decision and have brought in a challenge under Section 111 of Electricity Act, 2003 before this Tribunal assailing the Order dated 17.06.2020 raising questions of law *vis-à-vis* substantive issues and alleging procedural infractions.

COMPETING PARTIES

2. It may be mentioned at the outset that *Indian Wind Power Association*, the appellant in first captioned appeal (no. 113 of 2020), describes itself as a non-profit organization, registered in 1996 under the Tamil Nadu Societies Registration Act, 1975. The appellant in second captioned appeal (no. 117 of 2020), *Techno Electric & Engineering Company*, is a generating company in terms of Section 2(28) of the Electricity Act engaged in operating and maintaining electricity generating units based on renewable sources of energy. *Green Energy Association*,

the appellant in third captioned appeal (no. 118 of 2020), similarly is a registered association of companies and entities engaged in the business of renewable energy under the Renewable Energy Certificate (REC) mechanism. *U.P. Sugar Mills Co-Gen Association*, the appellant in fourth captioned appeal (no. 123 of 2020), claims to be a body representative of the sugar mills operating in the State of Uttar Pradesh which are engaged in power generation through co-generation power plants using bagasse fuel. The fifth appellant, *Indian Sugar Mills Association* (in Appeal no.137 of 2020) is described as the apex body of all-India associations of Sugar Mills (including public and private sector), associated in promoting primarily bagasse based co-generation of power. *All India Renewable Energy Production Association*, the appellant in last captioned appeal (no. 138 of 2020) is described as a combination of two separate and distinct associations having power projects registered under REC mechanism, mainly located in the State of Himachal Pradesh. The appellants, thus, broadly represent both interest groups on one side of the divide i. e. *solar* power generators and power generators using *non-solar* resources of energy.

3. Aside from the Central Commission, the array on the other side includes the captive power producers or consumers who have been at the forefront to seek changes in the regime on the subject of REC pricing.

4. The Electricity Act has established Electricity Regulatory Commissions as the statutory authorities on which the responsibility to take requisite measures for achieving the objectives of the law is placed, they inclusive of the *Central Commission*, on one hand, and the *State Electricity Regulatory Commissions* (*"SERCs"*), on the other. The functions of the Central Commission are set out in Section 79 and include the power to regulate the tariff of generating companies owned or controlled by the Central Government or of such generating companies as enter into or otherwise having composite scheme of generation and sale of electricity in more than one State. The functions of the SERCs, on the other hand, are provided by Section 86 vesting in the said authorities the responsibility of determining tariff for generation, supply, transmission, etc. of electricity within the State and promotion of "*generation of electricity from renewable sources of energy*".

5. Section 86(1)(e) of the Electricity Act needs to be quoted for present purposes. It reads thus:

> *"Section 86. (Functions of State Commission): (1) The State Commission shall discharge the following functions, namely:–*
> ...
> *(e) promote co-generation and generation of electricity from renewable sources of energy by providing suitable measures for connectivity with the grid and sale of electricity*

to any person, and also specify, for purchase of electricity from such sources, a percentage of the total consumption of electricity in the area of a distribution licensee;
..."

6. It is clear from plain reading of the above clause of Section 86 that for purposes of promotion, *inter-alia*, of generation of electricity from renewable sources of energy, it is permissible for the Commission to adopt suitable measures which may include "*a percentage of total consumption of electricity in the area of a distribution licensee*" to be specified, as a mandate, for purchase of electricity from such resources.

7. The sale and purchase of electricity generated by the renewable energy generators is also subjected to *Tariff Regulations* by the statutory authorities i.e. the *appropriate commission*. Section 61 guides the process of Tariff Regulations and, by clause (h), expressly requires the regulatory authority to bear in mind the need for promotion of generation of electricity from renewable sources of energy while specifying the terms and conditions for the determination of tariff. It is trite that tariff is determined either under Section 62 of the Electricity Act where it is generally known as "*cost plus*" tariff or under Section 63 wherein the tariff *discovered* by a transparent process of *bidding* undertaken in accordance with the guidelines issued by the Central Government is adopted by the Regulatory Commission. That the cost of generation of electricity through renewable

sources of energy, in contradistinction of the generation of electricity by other modes – say, use of fossil fuel – has been comparatively higher is a matter of common knowledge. At the same time, however, the policy makers have been alive to the fact that dependance on the fossil fuel-based generation of electricity which adds to the environmental pollution and being dependent on natural resources which are depleting must be gradually reduced. The renewable sources of energy, also described as non-conventional sources, have, thus, come to be promoted as the possible future mainstay notwithstanding the fact that the technology involved in the establishment, operations and maintenance of such generating units has generally been costlier. At the same time, it must be acknowledged that, given the impetus this stream has received from the policy-makers, the renewable energy (RE) generators have benefitted over the period from focused research and development, and improvements in the technology and witnessed, importantly from the standpoint of the consumers' interest, reduction of the costs involved.

8. As mentioned at the outset, the legislation lays a great emphasis on environmentally benign policies *vis-à-vis* the electricity generation, by expecting promotion, *inter-alia*, of renewable sources of energy. The *National Electricity Policy*, framed by the Central Government, in exercise of its power under Section 3 guides the action of the authorities towards

this end. We may quote, with advantage, the following part of the National Electricity Policy ("*NEP*") as notified on 12.02.2005, it being relevant for the present discussion: -

> *"1.2 Electricity is an essential requirement for all facets of our life. It has been recognized as a basic human need. It is a critical infrastructure on which the socio-economic development of the country depends. Supply of electricity at reasonable rate to rural India is essential for its overall development. Equally important is availability of reliable and quality power at competitive rates to Indian industry to make it globally competitive and to enable it to exploit the tremendous potential of employment generation. Services sector has made significant contribution to the growth of our economy. Availability of quality supply of electricity is very crucial to sustained growth of this segment.*
>
> *1.3 Recognizing that electricity is one of the key drivers for rapid economic growth and poverty alleviation, the nation has set itself the target of providing access to all households in next five years. As per Census 2001, about 44% of the households do not have access to electricity. Hence meeting the target of providing universal access is a daunting task requiring significant addition to generation capacity and expansion of the transmission and distribution network.*
>
> *1.4 Indian Power sector is witnessing major changes. Growth of Power Sector in India since its Independence has been noteworthy. However, the demand for power has been outstripping the growth of availability. Substantial peak and energy shortages prevail in the country. This is due to inadequacies in generation, transmission & distribution as well as inefficient use of electricity. Very high level of technical and commercial losses and lack of commercial approach in management of utilities has led to unsustainable financial operations. Cross-subsidies have risen to unsustainable levels. Inadequacies in distribution networks has been one of the major reasons for poor quality of supply.*

1.5 Electricity industry is capital-intensive having long gestation period. Resources of power generation are unevenly dispersed across the country. Electricity is a commodity that cannot be stored in the grid where demand and supply have to be continuously balanced. The widely distributed and rapidly increasing demand requirements of the country need to be met in an optimum manner.

...

1.8 The National Electricity Policy aims at laying guidelines for accelerated development of the power sector, providing supply of electricity to all areas and protecting interests of consumers and other stakeholders keeping in view availability of energy resources, technology available to exploit these resources, economics of generation using different resources, and energy security issues.

...

Non-conventional Energy Sources

5.2.20 Feasible potential of non-conventional energy resources, mainly small hydro, wind and biomass would also need to be exploited fully to create additional power generation capacity. With a view to increase the overall share of non-conventional energy sources in the electricity mix, efforts will be made to encourage private sector participation through suitable promotional measures.

...

5.12 COGENERATION AND NON-CONVENTIONAL ENERGY SOURCES

5.12.1 Non-conventional sources of energy being the most environment friendly there is an urgent need to promote generation of electricity based on such sources of energy. For this purpose, efforts need to be made to reduce the capital cost of projects based on non-conventional and renewable sources of energy. Cost of energy can also be reduced by promoting competition within such projects. At the same time, adequate promotional measures would also have to be taken for development of technologies and a sustained growth of these sources.

5.12.2 The Electricity Act 2003 provides that co-generation and generation of electricity from non-conventional sources would be promoted by the SERCs by providing suitable measures for connectivity with grid and sale of electricity to any person and also by specifying, for purchase of

electricity from such sources, a percentage of the total consumption of electricity in the area of a distribution licensee. Such percentage for purchase of power from non-conventional sources should be made applicable for the tariffs to be determined by the SERCs at the earliest. Progressively the share of electricity from non-conventional sources would need to be increased as prescribed by State Electricity Regulatory Commissions. Such purchase by distribution companies shall be through competitive bidding process. Considering the fact that it will take some time before non-conventional technologies compete, in terms of cost, with conventional sources, the Commission may determine an appropriate differential in prices to promote these technologies.

5.12.3 Industries in which both process heat and electricity are needed are well suited for cogeneration of electricity. A significant potential for cogeneration exists in the country, particularly in the sugar industry. SERCs may promote arrangements between the co-generator and the concerned distribution licensee for purchase of surplus power from such plants. Cogeneration system also needs to be encouraged in the overall interest of energy efficiency and also grid stability.".
..."

(Emphasis supplied)

9. Section 3 of the Electricity Act also enjoins upon the Central Government the responsibility to publish *National Tariff Policy* ("NTP") from time to time. It is relevant to note that the NTP notified in January 2006 by the Central Government in 2005, in continuation of the NEP published on 12.02.2005, also focused on the subject of promotion of renewable sources of energy, the relevant part reading thus:-

"6.4 Non-conventional sources of energy generation including Co-generation:

(1) Pursuant to provisions of section 86(1)(e) of the Act, the Appropriate Commission shall fix a minimum percentage for purchase of energy from such sources taking into account availability of such resources in the region and its impact on retail tariffs. Such percentage for purchase of energy should be made applicable for the tariffs to be determined by the SERCs latest by April 1, 2006.

It will take some time before non-conventional technologies can compete with conventional sources in terms of cost of electricity. Therefore, procurement by distribution companies shall be done at preferential tariffs determined by the Appropriate Commission.

(2) Such procurement by Distribution Licensees for future requirements shall be done, as far as possible, through competitive bidding process under Section 63 of the Act within suppliers offering energy from same type of non-conventional sources. In the long-term, these technologies would need to compete with other sources in terms of full costs.

(3) The Central Commission should lay down guidelines within three months for pricing non-firm power, especially from non–conventional sources, to be followed in cases where such procurement is not through competitive bidding."

(Emphasis supplied)

10. It may be added here that policy framework *vis-à-vis* renewable sources of energy, as indicated above, has continued to be adopted ever since, particularly for the period to which the present controversy relates. The NEP or NTP have yet to evolve to the stage when it can be said that the technology for RE or non-conventional energy has attained such levels wherein they can compete with other sources in terms of costs such that

there is no further need or justification to adopt promotional measures in their respect.

11. Before proceeding further, it is also essential to take note of the following provision of the Electricity Act, 2003:

> *Section 66. (Development of market):*
> *The Appropriate Commission shall endeavour to promote the development of a market (including trading) in power in such manner as may be specified and shall be guided by the National Electricity Policy referred to in section 3 in this regard.*

12. As indicated at the outset, the protection of the interest of the consumer at large is the prime objective of the legislative measure, the rationalization of the electricity tariff sought to be achieved, *inter-alia*, by promoting competition in the electricity industry, towards which end the trading in electricity undertaken within the regulatory framework by the licensed entities is one of the modes invigorated. The above-quoted provision, contained in Section 66, is in furtherance of the said objective. The Central Commission has been conferred with the requisite power by Section 178(2)(y) to frame regulations on the specific subject of the manner in which the *market* for *power trading* is to be developed, in terms of Section 66.

13. In exercise of powers conferred under sub-section (1) of Section 178 and Section 66 read with clause (y) of sub-section (2) of Section 178 of the Electricity Act, 2003, and all other powers enabling it in this behalf, and after previous publication, the Central Commission has framed the regulations for the development of market in power from Non-Conventional Energy Sources by issuance of transferable and saleable credit certificates, they being known as *Central Electricity Regulatory Commission (Terms and Conditions for recognition and issuance of Renewable Energy Certificate for Renewable Energy Generation) Regulations, 2010* (in short, "*REC Regulations*").

14. While framing the REC Regulations, the CERC noted NEP and NTP as indeed the *National Action Plan of Climate Change* ("NAPCC") which had set the target of 5% renewable energy purchase for FY 2009-10 which is expected to increase by 1% for next 10 years, NAPCC further recommending strong regulatory measures to fulfil these targets. In the *Statement of Objects & Reasons* ("SOR") for promulgation of REC Regulations, it was noted as under:

> "...
> 1.6 While the Electricity Act, 2003, the policies framed under the Act, as also the NAPCC provide for a roadmap for increasing the share of renewable in the total generation capacity in the country, there are constraints in terms of availability of RE sources evenly across different parts of the country. This inhibits the state commissions, especially in those states where the potential of RE

sources is not that significant, from specifying higher renewable purchase obligation. For example, given the fact that Delhi does not have sufficient renewable energy potential, the State Commission of Delhi has specified RPO of 1% for the distribution licensees in the State. There are states like Madhya Pradesh where the SERC has fixed the RPO of 10% but actual achievement of RPO is less than 1%. On the other hand, we also have states like Rajasthan and Tamil Nadu where there is very high potential of RE sources and the State Commissions have specified higher RPO. In fact, in such states there are avenues for harnessing the potential beyond the RPO level fixed by the State Commissions. However, the fact that the cost of generation from RE sources is high, discourages the local distribution licensees from purchasing RE generation beyond the RPO level mandated by the State Commission.

1.7 It is in this context that the concept of Renewable Energy Certificate (REC) assumes significance. This concept seeks to address the mismatch between availability of RE sources and the requirement of the obligated entities to meet their renewable purchase obligation. The Forum of Regulators deliberated on this concept in detail and evolved a framework for implementation of this mechanism. It was also felt that it would be necessary for both the CERC and the SERCs to frame suitable regulations for giving effect to the REC framework...."

(Emphasis supplied)

15. The salient features of the REC framework were set out in *Annexure-I* to the *SOR*, some of the parts whereof are crucial for present discussion. The same may be extracted as under:

Salient Features of REC framework

• Renewable Energy Certificate (REC) mechanism is a market based instrument to promote renewable energy and facilitate renewable purchase obligations (RPO)

• REC mechanism is aimed at addressing the mismatch between availability of RE resources in state and the requirement of the obligated entities to meet the renewable purchase obligation (RPO).
• Cost of electricity generation from renewable energy sources is classified as cost of electricity generation equivalent to conventional energy sources and the cost for environmental attributes.
• RE generators will have two options i) either to sell the renewable energy at preferential tariff or ii) to sell electricity generation and environmental attributes associated with RE generations separately.
...
• The environmental attributes can be exchanged in the form of Renewable Energy Certificates (REC).
...
• REC could be purchased by the obligated entities to meet their RPO under section 86 (1) (e) of the Act. Purchase of REC would be deemed as purchase of RE for RPO compliance.
...
• CERC to designate Central Agency for registration, repository, and other functions for implementation of REC framework at national level.
• Only accredited project can register for REC at Central Agency.
• Central Agency would issue REC to RE generators for specified quantity of electricity injected into the grid.
• REC would be exchanged only in the CERC approved power exchanges. Price of electricity component of RE generation would be equivalent to the weighted average power purchase cost of the discom including short term power purchase but excluding renewable power purchase.
• REC would be exchanged within the forbearance price and floor price. This forbearance and floor price would be determined by CERC in consultation with Central agency and FOR from time to time.
• In case of default SERC may direct obligated entity to deposit into a
separate fund to purchase the shortfall of REC at forbearance price.
..."

(Emphasis supplied)

16. The abbreviation "FOR" is used in the SOR quoted above for the "*Forum of Regulators*", provided for under Section 166 of Electricity Act, to which we shall revert a little later.

17. The REC Regulations defined the expression "*Renewable Energy Sources*" by Regulation 2(1)(l) as under: -

> *"2. Definitions and Interpretation:*
> *(1) In these regulations, unless the context otherwise requires,*
> ...
> *l) 'renewable energy sources' means renewable sources such as small hydro, wind, solar including its integration with combined cycle, biomass, bio fuel cogeneration, urban or municipal waste and such other sources as recognized or approved by MNRE ;*
> ..."

18. The expression "*MNRE*" appearing in the above definition means the Ministry of New and Renewable Energy *[per regulation 2(1)(h)]*. These regulations develop the idea of "Renewable Purchase Obligation" ("RPO") as envisaged in Section 86(1)(e) to mean "*requirement specified ..... for the obligated entity to purchase electricity from renewable energy sources*". The *obligated entity* under Section 86(1)(e), generally speaking, refers to the distribution licensee responsible for distribution of electricity in the area under its license (and some others). The REC Regulations confer certain benefits and privileges on the obligated entities which comply with the mandate under Section 86(1)(e) in terms of the REC mechanism promulgated and enforced by the Commission. The Regulation 5 sets out

the eligibility conditions, making it mandatory for the concerned entities to be registered by providing as under:

> *"5. Eligibility and Registration for Certificates:*
>
> *(1) A generating company engaged in generation of electricity from renewable energy sources shall be eligible to apply for registration for issuance of and dealing in Certificates if it fulfills the following conditions:*
>
> *a. it has obtained accreditation from the State Agency;*
>
> *b. it does not have any power purchase agreement for the capacity related to such generation to sell electricity at a preferential tariff determined by the Appropriate Commission; and*
>
> *c. it sells the electricity generated either (i) to the distribution licensee of the area in which the eligible entity is located, at a price not exceeding the pooled cost of power purchase of such distribution licensee, or (ii) to any other licensee or to an open access consumer at a mutually agreed price, or through power exchange at market determined price*
>
> *Explanation.- for the purpose of these regulations 'Pooled Cost of Purchase' means the weighted average pooled price at which the distribution licensee has purchased the electricity including cost of self generation, if any, in the previous year from all the energy suppliers long-term and short-term, but excluding those based on renewable energy sources, as the case may be.*
>
> *(2) The generating company after fulfilling the eligibility criteria as provided in clause (1) of this regulation may apply for registration with the Central Agency in such manner as may be provided in the detailed procedure:*
>
> *(3)The Central Agency shall accord registration to such applicant within fifteen days from the date of application for such registration. Provided that an applicant shall be given a*

reasonable opportunity of being heard before his application is rejected with reasons to be recorded in writing.

(4) A person aggrieved by the order of the Central Agency under proviso to clause (3) of this regulation may appeal before the Commission within fifteen days from the date of such order, and the Commission may pass order, as deemed appropriate on such appeal."

19. The REC Regulations make a distinction between *solar energy* and *non-solar energy* and conceive of *Renewable Energy Certificates* ("RECs") to be issued by the specified central agency, designated in terms of Regulation 3(1), in accordance with the procedure laid down by the regulatory frame work. The RECs, defined by the Regulations simply as "*certificate*", are categorized as under: -

"4. Categories of Certificates:

(1) There shall be two categories of certificates, viz., solar certificates issued to eligible entities for generation of electricity based on solar as renewable energy source, and non-solar certificates issued to eligible entities for generation of electricity based on renewable energy sources other than solar:

(2) The solar certificate shall be sold to the obligated entities to enable them to meet their renewable purchase obligation for solar, and non-solar certificate shall be sold to the obligated entities to enable them to meet their obligation for purchase from renewable energy sources other than solar."

(Emphasis supplied)

20. The RECs are issued by the specified central agency to the eligible entity in terms of the periodicity and denomination specified in Regulation 7 providing thus: -

"7. Denomination and issuance of Certificates

(1) The eligible entities shall apply to the Central Agency for Certificates within three months after corresponding generation from eligible renewable energy projects:

> *Provided that the application for issuance of certificates may be made on fortnightly basis, that is, on the first day of the month or on the fifteenth day of the month.*

(2) The Certificates shall be issued to the eligible entity after the Central Agency duly satisfies itself that all the conditions for issuance of Certificate, as may be stipulated in the detailed procedure, are complied with by the eligible entity:

(3) The Certificates shall be issued by the Central Agency within fifteen days from the date of application by the eligible entities.

(4) The Certificates shall be issued to the eligible entity on the basis of the units of electricity generated from renewable energy sources and injected into the Grid, and duly accounted in the Energy Accounting System as per the Indian Electricity Grid Code or the State Grid Code as the case may be, and the directions of the authorities constituted under the Act to oversee scheduling and dispatch and energy accounting, or based on written communication of distribution licensee to the concerned State Load Dispatch Centre with regard to the energy input by renewable energy generators which are not covered under the existing scheduling and dispatch procedures.

(5) The process of certifying the energy injection shall be as stipulated in the detailed procedures to be issued by the Central agency.

(6) Each Certificate issued shall represent one Megawatt hour of electricity generated from renewable energy source and injected into the grid."

21. Clause (3) of Regulation 8 permits an eligible renewable energy developer (including eligible captive generating plant) "*to retain the certificates for offsetting its renewable energy obligation as a consumer subject to certification and verification by the concerned State Agency*". Other than this exception, the general mandate by clause (1) of Regulation 8 is that the certificate shall be dealt "*only through power exchange*". To put it simply, the RECs are tradable commodities which can be sold or purchased in the power exchange.

22. The REC Regulations have specified, by Regulation 10, the period of validity of RECs to be ordinarily 1095 days which is equivalent to three years from the date of issuance (as per amendment carried out in 2014).

23. The provision contained in Regulation 9 on the subject of "*Pricing of Certificate*" is at the heart of the controversy at hand and the same (last amended with effect from 11.07.2013, by virtue of *Second Amendment Regulations, 2013*) reads as under:

> *"9. Pricing of Certificate:*
>
> *(1) The price of Certificate shall be as discovered in the Power Exchange:*
>
> *Provided that the Commission may, in consultation with the Central Agency and Forum of Regulators from time to time provide for the floor price and*

forbearance price separately for solar and non-solar Certificates.

(2) The Commission while determining the floor price and forbearance price, shall be guided inter alia by the following principles:
(a) Variation in cost of generation of different renewable energy technologies falling under solar and non-solar category, across States in the country:

(b) Variation in the Pooled Cost of Purchase across States in the country;

(c) Expected electricity generation from renewable energy sources including: -

(i) expected renewable energy capacity under tariff, for sale of electricity to an obligated entity for the purpose of meeting its renewable purchase obligations, determined under Section 62 or adopted under Section 63 of the Act by the Appropriate Commission.

(ii) expected renewable energy capacity under mechanism of certificates;

(d) Renewable purchase obligation targets set by various State Commissions."

(Emphasis supplied)

24. It may be noted here that prior to its amendment by *Second Amendment Regulations, 2013*, Clause (c)(i) of Regulation 9(2) read as under:

> *"expected renewable energy capacity under preferential tariff"*

25. There is no quarrel with the proposition that RECs being tradable commodity the price at which they may be sold is generally expected to be

"*discovered*", by negotiation, and quite obviously depends on principles of demand and supply, at the time of tender for sale and offer to purchase in the power exchange. The proviso to clause (1) of Regulation 9 is enabling provision which permits the Central Commission to specify the "*floor price and forbearance price*" separately for solar or non-solar certificates.

26. There was general consensus among the learned counsel for the parties as to the fact that since the proviso uses the expression "*may*", it naturally follows that the Commission "may" or "may not" choose to provide for the floor price and forbearance price. For clarity, it may be added here that unlike the tariff order generally issued from year to year (called *control period*), the orders that may be issued by the Central Commission under the proviso to Regulation 9(1) need not necessarily be for every financial year. The order once issued would continue to regulate the floor and forbearance price unless it is varied or modified by a subsequent order, the need for which to be issued is to be considered by the Commission "*from time to time*".

27. It was highlighted during the hearing, and we find merit in the submission, that there is neglect of proper punctuation in the proviso to Regulation 9(1) wherein the use of comma (,)" after the words "*provided that the Commission may*" is not followed by use of another comma (,) in the rest of the sentence. In our view, another comma (,) should have been

added after the words "*from time to time*" so as to make the thought incorporated therein clearer. Reading the proviso to Regulation 9(1) thus, we conclude, and there is no argument contrary to this conclusion, that the consultation expected to be indulged in by the Commission prior to issuance of order providing for the floor price and forbearance price is in relation to the "*Central Agency*" and "*Forum of Regulators*" (for short, "FOR").

28. The "*Central Agency*" as referred to in the above quoted proviso to Regulation 9(1) is to be designated by the Central Commission in terms of Regulation 3. It was explained at the hearing that the *Power System Operation Corporation Limited* (for short, "POSOCO") is the Central Agency designated for such purposes by the Central Commission. There is no dispute that POSOCO, the Central Agency mentioned in the above provision, was in the loop and duly consulted by the Central Commission in the run up to the impugned order being passed.

29. The *Forum of Regulators* mentioned in the statutory provision quoted above as the other agency required to be consulted by the Central Government (also mentioned as a consultee in the *SOR* to the REC Regulations extracted earlier) is a statutory body constituted by the Central

Commission, in terms of Section 166 of the Electricity Act. The said provision reads thus: -

> *"Section 166. (Coordination Forum): --- (1) The Central Government shall constitute a coordination forum consisting of the Chairperson of the Central Commission and Members thereof, the Chairperson of the Authority, representatives of generating companies and transmission licensees engaged in inter-State transmission of electricity for smooth and coordinated development of the power system in the country.*
>
> *(2) The Central Government shall also constitute a forum of regulators consisting of the Chairperson of the Central Commission and Chairpersons of the State Commissions.*
> *(3) The Chairperson of the Central Commission shall be the Chairperson of the Forum of regulators referred to in sub-section (2).*
>
> *(4) The State Government shall constitute a Coordination Forum consisting of the Chairperson of the State Commission and Members thereof representatives of the generating companies, transmission licensee and distribution licensees engaged in generation, transmission and distribution of electricity in that State for smooth and coordinated development of the power system in the State.*
>
> *(5) There shall be a committee in each district to be constituted by the Appropriate Government –*
>
> *(a) to coordinate and review the extension of electrification in each district;*
>
> *(b) to review the quality of power supply and consumer satisfaction;*
>
> *(c) to promote energy efficiency and its conservation."*

30. The marginal heading - "*Coordination Forum*" – of Section 166 is deficient, not fully reflective of the entire provision contained therein. The

Coordination Forum is constituted under sub-section (1) while *Forum of Regulators* is constituted under sub-section (2). Unlike the *Coordination Forum*, the various clauses of Section 166 do not specify the role expected to be performed to the *Forum of Regulators* (or FOR). What stands out, however, is the fact that FOR is a statutory body distinct from the Central Commission and the State Commissions, the only link being that the chairperson of the Central Commission is also *ex officio* chairperson of FOR, the chairpersons of the State Commissions being its *ex officio* members.

31. The expression "floor price" is defined by Regulation 2(1)(f) to mean "*the minimum price as determined by the Commission in accordance with these regulations at and above which the certificate can be dealt in the power exchange*". Similarly, the expression "forbearance price" is defined by Regulation 2(1)(g) to mean "*the ceiling price as determined by the Commission in accordance with these regulations within which only the certificates can be dealt in the power exchange*" (emphasis added).

32. The factors which are to be taken into consideration and guide the determination of floor price and forbearance price are provided by clause (2) of Regulation 9. To put it simply, they broadly include the *variation* in the "*cost of generation*" of different renewable energy technologies "*across*

States in the country"; *variation* in the "*pooled cost of purchase*", again "*across States in the country*"; the "*expected electricity generation*" from renewable energy sources, particular focus being on "*expected renewable energy capacity*" for purposes of allowing obligated entities to meet RPOs as well as "*under mechanism of certificates*; as indeed the RPO "*targets set by various State Commissions*".

33. The "*Pooled Cost of Purchase*" referred to above, is also known as *average power purchase cost* (for short "APPC"), as determined by the respective State Commissions from time to time. As noted earlier, prior to the Second Amendment Regulations being brought into effect from 11.07.2013, the element of "*expected renewable energy capacity*" was to be computed to the extent it was governed by "*preferential tariff*". However, post the said amendment, which would apply to the period under consideration here, the determination of the "*expected*" renewable energy "*capacity*" under tariff for sale to obligated entities is based on tariff determination exercises both under *cost-plus* regime (Section 62) and by *bid-discovered price* (under Section 63).

34. From the law and regulations governing the field, it emerges that RE power mechanism has two components, 'Brown' and 'Green'. Under 'Brown' component, RE generators earn by 'Sale of RE Power' to (i) Distribution Licensee at APPC rate and/or (ii) Third party ('Open Access

Consumer' or 'Captive Consumer') at a negotiated price. Under 'Green' component, RE generator earns by selling REC in the power exchange. The Distribution Licensees can buy RE Power either at 'APPC rate' or at 'SERC determined tariff.' If Distribution Licensee buys RE Power at SERC determined tariff, it is not required to buy any Green component. RE generator selling power at SERC determined tariff in this case, will also not be entitled to issue of REC (Green component). If Distribution Licensee buys RE Power at APPC rate, it will have to buy REC (Green component), which will, generally speaking, be equal to the difference between SERC determined tariff and APPC rate. The *Open Access* ("OA") *Consumer* or the *Captive Consumer* ("CPP"), also covered in the category of Obligated Entity, can negotiate with the RE generator for the procurement of RE power and enter into contract with RE generator either to buy only the 'Brown component' or 'Brown + Green component', the price being generally negotiated on such basis. If they (OA consumer or CPP) contract to buy only the Brown component, they are obliged to buy the 'Green' component i.e. RECs from exchange to fulfill their RPO and in case of such PPA (and not otherwise), the RE generator shall be entitled for issuance of REC. Based on the quantum of power generated by RE generators, they get equivalent quantity of REC from National Regional Load Despatch Centre ("NRLDC"). Thus, REC (green component) is provided as a promotional measure since RE Generators were not able to recover their

cost of generation, as market was not able to procure the RE power at such high price.

35. It is not correct to say that the *"Forbearance Price"* is based on the concept that RE generator should not get more than its cost of generation or that it represents the difference between 'cost of generation' and 'APPC'". The argument is perverse and misconceived since it is based on premise that RE Generator under the REC Mechanism is entitled to receive only the "Cost of Generation" and no further returns. This would not only create an imbalance between RE generators under REC Mechanism and RE generators under the Preferential Tariff Mechanism but also be in the teeth of law mandating promotion of RE as a whole. The plea ignores the SOR (Para 3.8.2) for the RE Mechanism declaring "*revenue certainty*" to be one of the objectives.

DETERMINATION BY CERC IN THE PAST

36. It is essential to go into history of the regime *vis-à-vis* floor price and forbearance price put in position, from time to time, by the Central Commission in exercise of its enabling power under the proviso to Regulation 9(1) of RE Regulations, *albeit* in brief.

37. By Order dated 01.06.2010, passed in *Suo-motu* Petition no. 99/2010 under the heading *determination of forbearance and floor price REC*

framework, having consulted, *inter-alia*, the Forum of Regulators and invited comments from various stakeholders, the Commission had proceeded to determine the same based on following principles: -

> *"(a) RE target: The target for RE generation (year 2010-11) has been taken as 6% of the total projected energy requirement (National Action plan on Climate Change Target).*
>
> *(b) Additional RE capacity addition: To develop scenarios for future state level RE technology specific supply, for each RE technology across select states, the growth in capacity has been projected based on the Cumulative Aggregate Growth Rate (CAGR) for that RE technology in the states based on the past 5 years performance, current achievement, MNRE/ GoI's 11th Plan Targets for Capacity Addition in RE and the remaining potential available in the state. Year 2009 has been taken as a base year for projection of capacity addition from RE.*
>
> *(c) To estimate additional generation at the state level in year 2010-11, the capacity added under a specific RE technology has been multiplied by the Capacity Utilization Factor of the RE technology, as per the CERC RE Tariff Regulations 2009, for the sake of uniformity.*
>
> *(d) Cost of Generation/RE tariff: Costs of Generation/ RE Tariff for different technologies for FY 2009-10 have been assumed as per the CERC RE Tariff Regulations 2009, for the sake of uniformity.*
>
> *(e) Average Power Purchase Cost (APPC): The APPC for a state represents the weighted average pooled power purchase by distribution licensees (without transmission charges) in the state during the last financial year (2009-10).*
>
> *(f) Forbearance Price: The forbearance price has been derived based on the highest difference between cost of generation of RE technologies / RE tariff and the average power purchase cost of 2009-10 for the respective states.*

(g) Floor Price: The floor price has been determined keeping in view the basic minimum requirements for ensuring the viability of RE projects set up to meet the RE targets. This viability requirement shall cover loan repayment & interest charges, O&M expenses and fuel expenses in case of Biomass and Cogeneration."

(Emphasis supplied)

38. By the said Order dated 01.06.2010, the CERC prescribed the forbearance price and floor price for RECs, valid up to 31.03.2012, as under:

	Non Solar (Rs/Mwh)	Solar
Forbearance Price	3900	17000
Floor Price	1500	12000

39. On 23.08.2011, the Central Commission revised the forbearance price and floor price for period from 01.04.2012 to 31.03.2017, in *Suo-motu* Petition no. 142/2011, as under:

	Non Solar (Rs/Mwh)	Solar
Forbearance Price	3300	13400
Floor Price	1500	9300

40. The above regime underwent a further change, upon redetermination of forbearance price and floor price for solar RECs for the period 31.12.2014 to 31.03.2017 as under:

	Solar
Forbearance Price	5800
Floor Price	3500

41. It may be mentioned here that the methodology adopted by the Central Commission for determination of the forbearance and floor price in the first order of its kind continued till the last such order issued on 30.12.2014.

42. On 30.03.2017, however, while determining the floor price and forbearance price afresh, in *Suo-motu* Petition no. 02/SM/2017, the Central Commission modified the methodology, and made the fresh determined price applicable to all RECs (pending or new) to be traded in REC market from 01.04.2017 as under:

	Non Solar (Rs/Mwh)	Solar
Forbearance Price	2400	3000
Floor Price	1000	1000

43. The Order dated 30.03.2017 was challenged by some renewable energy generators (including two appellants herein – *Indian Wind Power Association* and *Green Energy Association*), by appeal nos. 105 and 95 of 2017, which were decided by this tribunal eventually by Judgment dated 12.04.2018. Prior to the said final order, this tribunal had declined to stay the decision dated 30.03.2017 of the Central Commission, the order to

which effect was challenged by Civil Appeal nos. 6083/2017 and 633/2017. Hon'ble Supreme Court, by its Order dated 08.05.2017, was pleased to stay the Order dated 30.03.2017 of the Central Commission but later, by Order dated 14.07.2017, modified it and directed as under:

> *"...any obligated entity purchasing RECs at the floor price determined vide the order dated 30.03.2017 shall deposit the difference between the earlier floor price and the present Floor Price with the Respondent No.1, Central Commission during the pendency of the Appeal No. 105 of 2017 before the Appellate Tribunal."*

44. The appeals of the RE generators against the Order dated 30.03.2017 of the Central Commission bringing about a material change of methodology for determination of forbearance and floor prices were dismissed by this tribunal by Judgment dated 12.04.2018. Since arguments based on the doctrine of *res judicata* have been pressed in aid, it would be essential to take note of the relevant portions of the Judgment dated 12.04.2018. We propose to do so in the context of the contentions urged by the appellants assailing the impugned order.

45. The Judgment dated 12.04.2018 of this tribunal dismissing the challenge to the methodology adopted by the Central Commission by Order dated 30.03.2017 was assailed before the Supreme Court by Civil Appeal no. 4801/2018. By Order dated 14.05.2018, the Hon'ble Court admitted the said appeal and directed as under:

"...Interim orders dated 08.05.2017 and 14.07.2017 to continue. However, we clarify that this interim order will not apply to RECs issued on or after 01.04.2017."

46. The Civil appeal no. 4801/2018 brought before the Supreme Court assailing the decision of this tribunal by judgment dated 12.04.2018 repelling the challenge to the Order dated 30.3.2017 of CERC is pending, awaiting final hearing and disposal.

47. After interim Order dated 14.05.2018 of the Hon'ble Supreme Court in Civil Appeal no. 4801/2018, the CERC by a letter issued on 28.05.2018 issued following directions:

"...Non-Solar RECs issued on or after 1.4.2017 shall continue to be traded in accordance with the floor price (i.e. Rs.1000/MWh) determined in the order dated 30.3.2017 in 2/SM/2017."

THE IMPUGNED ORDER

48. On 31.03.2020, the Central Commission initiated fresh process by Petition no. 05/SM/2020 for redetermining the forbearance and floor price for RECs inviting comments/suggestions from the stakeholders by 20.04.2020, proposing as under:

	Non Solar (Rs/Mwh)	Solar
Forbearance	1000	1000

Price		
Floor Price	0	0

49. Some of these appellants are stated to have participated in the exercise by submitting objections/suggestions. Though request was made for the time-lines for the purpose to be extended, *inter-alia*, with reference to the ongoing Covid-19 pandemic conditions, and for public hearing to be conducted, the Central Commission having extended the period for suggestions / comments till 30.04.2020, proceeded to pass the order on 17.06.2020 adopting the forbearance and floor price, as proposed on 31.03.2020, making it effective from 01.04.2017.

50. It is essential to extract certain relevant parts of the said order dated 17.06.2020, impugned by these appeals, as under:

> *"33. The Commission has decided that the revised floor price and forbearance price would be applicable to non-solar RECs issued on or after 01.04.2017, in compliance to the Order dated 14.05.2018 passed by the Hon'ble Supreme Court. There is, however, no interim direction with regard to the floor and forbearance price of solar RECs. Accordingly, the Commission does not find any legal infirmity in determining floor price and forbearance price of RECs."*
>
> ...
>
> *"35. Several stakeholders have suggested that the regulator determined tariff should be considered instead of the tariff discovered through competitive bidding. Some stakeholders have argued that competitive bidding projects are generally large in size and as such should not be considered as reference for determination of floor price and forbearance price for REC projects which are small in size. A few*

stakeholders have also highlighted the concessions that the RE projects commissioned through competitive bidding mechanism get, e.g. waiver of transmission charges and losses, land allocation etc. Some stakeholders have suggested that the 'Minimum Guaranteed Tariff' approach should be adopted, instead of APPC approach. Other suggestions include consideration of additional parameters such as availability of RECs, Day Ahead Market price, project viability at 80% instead of 70% etc. Several stakeholders have objected to fixing the floor price at zero and expressed concerns that REC traded at floor price of zero would not allow the generators to recover even the charges and fees for participation in REC mechanism. On the APPC figures for States, some stakeholders suggested to use APPC rates for FY 2019-20 instead of FY 2018-19. Some raised concerns around viability of REC projects which are often forced to sell electricity component below APPC rates.

36. The Commission observes that competitive bidding for RE especially for wind and solar technologies has resulted in significant reduction in the cost of RE power. Many State Electricity Regulatory Commissions (SERCs) have done away with the practice of issuing generic tariff for solar and wind including this Commission. Many SERCs have adopted tariff discovered through competitive bidding for RE instead of determining generic tariff especially for wind and solar technologies. Further, the Commission also agrees with the argument that if the RECs are unreasonably priced, the obligated entities would get further disinterested from REC markets. Hence, it is necessary that the floor price and forbearance price of RECs reflect the market realities and must move with the market price of renewable power. Accordingly, the Commission has decided to align the REC floor price and forbearance price with the prevailing market conditions in terms of tariffs, APPC, etc. The Commission believes that proposed floor price and forbearance price balances and safeguards the interest of consumers and investors."

...

40. The Commission would like to reiterate that the methodology of computation of prices of bids have been explained in a footnote to the relevant tables in Annexures 1 & 2 of the order dated 31.03.2020 in this suo-motu Petition.

In the aforesaid Annexures, the range of successful bids for the relevant year have been provided and weighted average winning price of each bid in a particular year has been computed. Thereafter, the weighted averages of all the bids in that year have been taken and a simple average of these bids have been taken as a reference for the particular year. The same principle was used in the 2017 REC Price Order while computing the bid prices of solar bids"

...

61. Thus, the Commission cannot provide for separate floor price and forbearance price for REC projects commissioned after 01.04.2020. Same treatment has to be accorded to all RECs issued after 01.04.2017 and the revised forbearance price and floor price would be applicable to all RECs issued after 01.04.2017."

...

"70. The Commission has taken note of the aforesaid submissions by the stakeholders. It is to reiterate that the present exercise is for the determination of forbearance price and floor price only. Considering above comments is beyond the scope of this Order. However, the Commission would like to reiterate that the staff has been directed to carry out review of the REC mechanism and suggest way forward.

71. Summary of Decisions

71.1. Floor and Forbearance price for Non-Solar RECs shall be as follows:

	Non Solar REC (Rs/Mwh)
Forbearance Price	1000
Floor Price	0

71.2. Floor and Forbearance price for Solar RECs shall be as follows:

	Solar REC (Rs/Mwh)
Forbearance Price	1000
Floor Price	0

71.3. The forbearance price and floor price as above shall be effective from 01.07.2020 and shall remain in force till 30.06.2021 or until further orders of the Commission.

71.4. The Commission directs the Staff to undertake review of REC mechanism in the light of the prevailing market developments, including inter alia review the need for floor and forbearance price for REC mechanism and vintage or technology multiplier.

72. The forbearance price and floor price decided in this order for Non-solar RECs shall be applicable to Non-solar RECs issued on or after 01.04.2017. For Non-solar RECs issued prior to 01.04.2017, the trading shall take place in accordance with Commission's letter dated 28.05.2018 and shall be subject to the final decision of the Hon'ble Supreme Court in Civil Appeal No. 4801/2018.
..."

(Emphasis supplied)

THE CHALLENGE

51. The floor price and the forbearance price, as determined by CERC, from time to time, may be tabulated for *at a glance* scrutiny as under:

	Non-Solar RECs (Rs. / MwH)		Solar RECs (Rs. / MwH)	
Date of the Order	Floor Price	Forbearance price	Floor Price	Forbearance price
01.06.2010	1500	3900	12000	17000
23.08.2011	1500	3300	9300	13400
30.12.2014	1500	3300	3500	5800
30.03.2017	1000	3000	1000	2400
17.06.2020	0	1000	0	1000

52. These appeals challenge the Order dated 17.06.2020 passed by CERC on the grounds that the retrospective revision of the floor and

forbearance price even for RECs issued between 01.04.2017 and 17.06.2020 in a manner contrary to the entire scheme, import and purport of the Electricity Act of 2003, the policies framed there under and the Regulations framed by the Central Commission is unjust, illegal and result of a vitiated process. It is submitted that the Impugned Order is erroneous and has been passed without conducting a prior public hearing, violating the principles of natural justice and without appreciating the facts of the case, in correct perspective.

53. It is the contention that the REC Mechanism envisages for the generators recovery of their cost with sufficient returns by bifurcating the tariff receivable into two components, one being the tariff equivalent to the tariff of conserving electricity sources for the *brown component* of the electricity sold to the distributing licensee of the State, which is equivalent to APPC of such distribution licensee and the second part being the price at which the RECs are to be sold by the generator to the Obligatory Entity of other States, it representing the *green component*. The appellants, *inter alia*, submit that CERC, while determining the floor and forbearance price, relied upon the principles provided under Regulation 9(2) of the REC Regulations and admitted that applying any other methodology would violate the provisions of the REC Regulations and yet by "Scenario 2", in its draft Order dated 31.03.2020, based its computation on tariff adopted through competitive bids which do not fall within any of the criteria

mentioned under said Regulation 9(2) of the REC Regulations. It is submitted that the Commission has failed to duly appreciate that tariff adopted under Section 63 by way of competitive bidding is based on very different methodology and premise as compared to determination of APPC or Preferential Tariff under Section 62 of the Act, the tariff under Section 63 being an unregulated tariff (as the respective Commissions only adopts the same through a competitive bidding process) and so, as per the argument, purposefully left outside the scope and methodologies provided under Regulation 9(2) of the REC Regulations. The appellants also contend that restrictive reliance by CERC upon the tariff adopted by various State Commissions through competitive bidding while determining the Forbearance and Floor Price of the RECs is arbitrary, contrary to and outside the scope of the extant Regulations, the Commission having also failed to consider the actual compliance of the RPO targets set by various State Commissions as was necessary under Regulation 9(2)(d) of the REC Regulations.

54. It is the case of the appellants that the fundamental problem in REC segment of RE is the continuous defiance of the Obligated Entities who are not abiding by the mandate of law towards specified RPO targets some State Commissions not even verifying RPO compliance by the non-DISCOM obligated entities. It is contended that, in such a scenario, by reducing the floor price and forbearance price the CERC has prejudiced the

legitimate interest of the RE Generators in as much as the pending RECs would now be purchased at prices which are much less than the prices at which they would have been originally purchased if the scheme had been implemented strictly, the defaulting Obligated Entities having thereby been rewarded.

55. The appellants also plead that the impugned order is a result of exercise which was flawed since the mandatory consultation with FOR was not done and the requisite data in terms of the guideline in the Regulation 9 was not collected from "*across States in the Country*", no endeavor having been made to gather information as to "*variation*" in the "*cost of generation*" of different renewable energy technologies and in APPC, the "*expected electricity generation*" from RE sources, the "*expected renewable energy capacity*" and the RPO "*targets set by various State Commissions*", the order falling foul of Regulation 9(2).

56. The Respondents defend the impugned order submitting that the change in Forbearance & Floor Price has been necessitated by market changes as the landscape of renewable energy in the country has undergone a massive alteration wherein the renewable energy tariff of solar and wind projects has declined substantially. It is submitted that the CERC has duly complied with the requirements of Regulation 9 (1) and (2) of REC Regulations. For ascertaining the variable cost of generation, the Commission has relied upon "*tariff determined by appropriate Commission*"

or "*bid discovered tariff*". But from 2017-18 onwards CERC has done away with the practice of issuing generic tariff for Wind (Non-Solar) and Solar power. Thus, the Wind (Non-Solar) and Solar tariff is determined by bid-discovered tariff while SERC determined tariff is utilized for Small Hydro, Biomass and Biofuel/ Bagasse (Non-Solar). It is argued that while computing Floor and Forbearance price, CERC has used APPC and SERC notified tariff for all non-solar renewable energy technologies including bid-discovered tariff for Wind Projects and preferential tariff for small hydro, Biomass and Biofuel Co-generation. It is submitted that the appellants had raised similar contentions in their challenge to the 2017 REC Price Order which were repelled by this tribunal by Judgment dated 12.04.2018. The respondents submit that if the RECs are unreasonably priced, the Obligated Entities would get further disinterested from REC markets and, hence, CERC has deemed it necessary that the floor price and forbearance price of RECs reflect the market realities and must move with the market price of renewable power.

57. In the submission of the contesting respondents (mainly CPPs), the REC Project has two components - Electricity component (the price at which energy is sold in a PPA) & Renewable Energy Certificates (price at which REC is sold in exchange). It is argued that Floor Price of 'zero' does not indicate a loss to the seller of the REC, it merely indicating that REC generator is already earning enough profit (PPA tariff). The Floor Price is

determined at zero when the Electricity component earned by the Seller is sufficient to cover the minimum project viability cost as guaranteed under the REC mechanism, even if they do not get any price of REC. The impugned decision is sought to be justified by plea that after taking into account relevant factors, the floor price was ascertained by the Commission to be in the 'negative', i.e. 'less than zero' and, therefore, it was fixed at Zero. It is also argued that such determination does not mean that trading will take place at Zero, since it (trading) can take place at any price between floor and forbearance price. Reliance is placed on the observations of this tribunal in its judgment dated 12.04.2018 to the effect that "*majority of States in the country do not need any floor price support as Minimum Project Viability Requirement is negative in those states*".

58. On the subject of unsold inventory (of RECs), which has been one of the contentions of the appellants, the contesting respondents rely on judgment dated 12.04.2018 of this tribunal submitting that if the prices are kept artificially high then RECs may remain unsold as the Obligated Entities may seek to fulfil their RPO by means other than purchase of RECs and further that since sufficient time is given by the Regulations to RE generators for selling RECs, the certificates may have remained unsold also due to expectation of RE generators for better future prices. Relying upon data on the sale of RECs as against the issuance of RECs during the period FY 2011-12 to FY 2019-20, it is submitted that the RECs consumed

are much more than total RECs issued during the year. It is speculated that on account of non-availability of required number of RECs in the market, the Obligated Entities in certain cases may not have been able fulfil their entire RPOs.

59. It is the submission of the respondents that there is no legal mandate under the Electricity Act or under the Regulations to provide public hearing since Section 62 and 64 do not apply to Determination of Floor and Forbearance price of RECs. The plea is that CERC has followed the principles of natural justice by publishing the Proposal order dated 31.03.2020, inviting comments and suggestions of all stakeholders, the time for which was extended to 08.05.2020 at the request of stakeholders on account of the prevailing circumstances of lockdown due to Covid-19, the grievances about non grant of public hearing having been rejected by the Hon'ble Supreme Court finding no irregularity in the conduct of proceedings upon consideration of application - in Civil Appeal (Diary) No. 22737 of 2018 - seeking stay of the proceedings arising from the Proposal Order dated 30.03.2020 raising the same grounds.

60. We may say here itself that since the plea of denial of public hearing has admittedly already been considered and rejected by Hon'ble Supreme Court, we are not entertaining such argument in these appeals. Our focus would be on the merits of the challenge to the impugned decision on the touchstone of REC Regulations.

Maintainability of appeals

61. Objection to the maintainability of the appeals is raised on the grounds that the Central Commission has exercised its Regulatory/ Legislative jurisdiction while passing the impugned order and that the exercise undertaken by the Central Commission, while passing the impugned order, cannot be termed as undertaken under a dispute adjudicatory function. Reliance is placed on decision of Supreme Court reported as *PTC India Ltd. v. Central Electricity Regulatory Commission* (2010) 4 SCC 603. We may extract the relevant part of the said ruling as under:

> *"55. To regulate is an exercise which is different from making of a regulation. However, making of a regulation under Section 178 is not a precondition to the Central Commission taking any steps/measures under Section 79(1). As stated, if there is a regulation, then the measure taken under Section 79(1) has to be in conformity with such regulation under Section 178. This principle flows from various judgment of this Court which we have discussed hereinafter. For example, under Section 79(1)(g) the Central Commission is required to levy fees for the purpose of the 2003 Act. An order imposing regulatory fees could be passed even in absence of a regulation under Section 178. If the levy is unreasonable, it could be the subject-matter of challenge before the appellate authority under Section 111 as the levy is imposed by an order/decision-making process. Making of a regulation under Section 178 is not a precondition to passing of an order levying a regulatory fee under Section 79(1)(g). However, if there is a regulation under Section 178 in that regard then the order levying fees under Section 79(1)(g) has to be in consonance with such regulations.*

...

65. The above two citations have been given by us only to demonstrate that under the 2003 Act, applying the test of "general application", a regulation stands on a higher pedestal vis-à-vis an order (decision) of CERC in the sense that an order has to be in conformity with the regulation...

66. While deciding the nature of an order (decision) vis-à-vis a regulation under the Act, one needs to apply the test of general application. On the making of the impugned 2006 Regulations, even the existing power purchase agreements (PPA had to be modified and aligned with the said Regulations. In other words, the impugned Regulations make an inroad into even the existing contracts. This itself indicates the width of the power conferred on CERC under Section 178 of the 2003 Act. All contract coming into existence after making of the impugned 2006 Regulations have also to factor in the capping of the trading margins. That itself indicates that the impugned Regulations are in the nature of subordinate legislation. Such regulatory intervention into the existing contracts across the board could have been done only by making regulations under Section 178 and not by passing an order under Section 79(1)(j) of the 2003 Act. Therefore, in our view, if we keep the above discussion in mind, it becomes clear that the word "order" in Section 111 of the 2003 Act cannot include the impugned 2006 Regulations made under Section 178 of the 2003 Act.

Summary of our Findings:

92. (i) ...

...

(iii) A regulation under Section 178 is made under the authority of delegated legislation and consequently its validity can be tested only in judicial review proceedings before the courts and not by way of appeal before the Appellate Tribunal for Electricity under Section 111 of the said Act.

...

(v) If a dispute arises in adjudication of interpretation of a regulation made under Section 178, an appeal would certainly lie before the Appellate Tribunal under Section 111, however no appeal to the Appellate shall lie on the validity of a regulation made under Section 178.

..."

(Emphasis Supplied)

62. We must reject the contention that the determination of REC Prices cannot be termed to be a tariff determination. As already noticed, the REC Mechanism envisages for the generator's recovery of cost with sufficient returns by bifurcating the tariff receivable into two components, one being the tariff equivalent to the tariff of conserving electricity sources for the brown component of the electricity sold to the distributing licensee of the State (equivalent to APPC) and, the other, the price at which the RECs are to be sold by the generator to the Obligatory Entity of other States. This gives to the orders revising the Floor and Forbearance Prices of the RECs the color of a Tariff Order. There is no doubt that the power of judicial review of a regulation (delegated legislation) framed by a Commission is not vested in this tribunal but we have the necessary jurisdiction, in terms of Section 111, to adjudicate upon an appeal filed by anyone aggrieved from a decision-making process (order) of a Commission or a dispute arising for adjudication of interpretation of a regulation framed by such Commission under the Electricity Act. The objection to maintainability is misconceived and so rejected.

Non-compliance with Regulation 9(2)

63. It appears that in the previous round of challenge to the approach of CERC for determination of floor and forbearance prices by Order dated

30.03.2017, which had become subject-matter of appeal nos. 95, 105 and 173 of 2017, decided by judgment dated 12.04.2018 of this tribunal, one of the grievances was that the CERC had gone by the bid-discovered tariff instead of its own tariff orders. The contentions of the appellants in those proceedings were noted in the judgment dated 12.04.2018 as under:

> "*4.2 The CERC in the Impugned Order has deviated from its usual practice of calculating the floor and forbearance price by taking the CERC benchmark capital cost. CERC in all its previous Orders for determination of floor and forbearance price of RECs has taken into account the tariff determined for Solar PV and thermal plants in its own tariff Orders. The said methodology has been followed by CERC for the past six years and was also used for determining floor and forbearance price in the Previous REC Order.*
>
> *4.3 CERC in the Impugned Order, for the first time, has used Bid Discovered Tariff for all States and Union Territories (UTs) in India. The Appellants have alleged that CERC has failed to provide any cogent reasoning for such a departure and ignored its own Tariff Orders which have been passed for determination of Solar PV and thermal plants and using bid discovered tariff as reference tariff for determining floor and forbearance cost of RECs is in violation of Regulation 9 of the CERC REC Regulations.*"
>
> (Emphasis supplied)

64. It is pointed out that the appellant Green Energy Association, while prosecuting its earlier appeal no. 95 of 2017, had argued (in the written submissions) as under:

> "*6.26 The Central Commission has relied upon the current solar tariff that has been discovered in the auctions conducted during January 2016 to February 2017. This approach is wrong as the Central Commission itself in its order dated 23.08.2011 had rejected the NVVN discovered solar tariff (through bids) and had relied upon the tariff determined by Central Commission in terms of the Central*

Commission (Terms and Conditions for Tariff determination from Renewable Energy Sources) Regulations, 2010 and the subsequent amendments. However, in the Impugned Order, Central Commission goes back and picks up tariff discovered in auctions. This somersault, particularly when vested rights are affected is not permissible."

(Emphasis supplied)

65. Similarly, the other two appellants (*Indian Wind Power Association* and *Uttar Pradesh Sugar Mills Co-Gen Association*), had pressed their appeals (nos. 105 and 173 of 2017) submitting thus:

"7.13 This reduction is moreover, also based on a totally new methodology for determination of floor and forbearance price of REC in significant departure to the principle followed uniformly under the previous REC pricing orders.

7.14 It is the Appellants' contention in these appeals that the reduction of REC pricing by adopting new methodology and making it applicable retrospectively is improper and without considering and / or adhering to the provisions of the Electricity Act, National Tariff Policy and the REC Regulations, which stood acted upon and recognise a vested right in favour of the members' of the Appellants' Association to have their existing renewable energy projects continue to be governed under and/or in terms of the principles followed in earlier REC Pricing Orders dated 01.06.2010 and 23.08.2011.

7.35 The Central Commission has further arbitrarily changed the methodology used for determination of floor and forbearance price which was earlier based on the National RPO target set up under the NAPCC issued by the Government of India, the tariff determined by the Central Commission under its RE tariff Regulations and Average power procurement Cost (APPC) of various state distribution licensees. In the impugned Order dated 30.03.2017 the Central Commission while determining the REC pricing has wrongly considered and used the RE tariff determined by a few state commissions and APPC."

(Emphasis supplied)

66. This tribunal, it is pointed out, had identified the core issue and answered it, by judgment dated 12.04.2018, thus:

> *"Issue 2: Whether change in methodology for determining the floor & forbearance prices, discontinuation of vintage multipliers, etc. is reasonably justified?*
>
> *"The Appellants have repeatedly emphasised that the Central Commission in impugned order has deviated from its usual practice of calculating the floor and forbearance prices considering its own benchmark capital cost without assigning any cogent reasoning. It has used bid discovered tariff in specifying the floor price of RECs. The Central Commission has clarified that a tariff fixation exercise or use of a particular methodology in such an exercise cannot be considered as a representation or a guarantee. In fact the provision in the REC Regulations for specifying floor and forbearance price is discretionary in nature and any change in methodology cannot be termed as a deviation from an alleged promise or representation. Further, the Vintage Multiplier in case of solar was introduced by the Central Commission through its third amendment to the Regulations and was valid up to 31.03.2017. The Appellants were well aware of the timeframe and did not choose to challenge the amendment and now after completion of the statutory period provided in the REC Regulations are claiming vested right. Going through various material placed before us, it is relevant to note that the Central Commission has done away with a practice of issuing the generic tariff for RE projects from 2017-18 onwards and accordingly the earlier practice of using Commission notified tariff as a reference price for determination of floor and forbearance price of REC is of no relevance now. In view of the growing competition and induction of latest technologies, more and more generators are participating in the auctions/bids with considerable reduced cost of generation. Thus, the Central Commission*

in specifying REC prices, has shifted to bid discovered prices in place of earlier generic tariff fixed by it when the RE sector specially solar was in infancy stage. Similar is the case of Vintage Multiplier which was specified based on its necessity under the discretionary powers of the Central Commission. The Central Commission has adequately dealt with these matters in the impugned order with cogent reasoning and we do not find any infirmity or otherwise, unjustness in specifying the floor and forbearance prices of REC and discontinuation of the Vintage Multiplier. [Para 12.9]

"Per Contra, the Central Commission has submitted that it is required to take a holistic view of the market and balance the interest of the stakeholders. In fact, REC is not issued with a fixed price on it, rather it is issued to an eligible entity on the basis of units of electricity generated/consumed from a RE source. The pricing is a market based instrument and governed by the cost, demand and supply of the electricity generated from RES. It would be evident on comparison of REC prices over the years since the inception of REC framework that there has been a consistent downward trend in the REC prices for both solar as well as non-solar. The pricing of RECs is, therefore, non-static and the Central Commission must take into account sector realities. Thus, the Appellants cannot claim a vested right to a fixed floor price. While referring to REC Regulations, it is clear that the Central Commission may provide from time to time the floor and forbearance price taking into account a progressive reflection of the cost of supply of electricity through solar and non-solar sources of renewable energy. As such, the Appellants cannot claim vested right to get a specific floor price beyond the specified control period which ended on 31.03.2017. It has also been added by the Central Commission that suggestions to link the validity of RECs with the viability of the project i.e. to provide for control period for a total life of the projects to enable viability access of the project was

rejected by the Commission as far back as in 2010. It is also submitted by the Central Commission that it has duly examined the viability of solar projects in 17 states by comparing the average bid tariff with the respective states APPC and it has emerged that majority of the States enlisted do not need any floor price support, as Minimum Project Viability Requirement (MVPR) is negative in those States. For example, Madhya Pradesh, the floor price based on MVPR is determined at Rs.0.44/unit and hence, there is sufficient buffer to account for large scale efficiencies. [Para 12.16]

The Appellants have contended that the impugned order passed by the Central Commission is a serious blow to the RE generators and many of them may be on the verge of being declared NPA due to drastic reduction in REC prices. The impugned order has affected the vested rights of the generators and squarely falls under the Doctrine of Promissory Estoppel. They have further submitted that the right to recover tariff for supplied electricity is a right protected under the Statute, once the regulator admits for tariff having not been recovered. It is thus duty of the Regulator to ensure the recovery of tariff for the projects who have participated in the REC scheme. The Central Commission has clarified that it is required to take a holistic view of the market and strike a balance between the interests of various stakeholders. The REC pricing is a market driven instrument and governed by cost, demand and supply of electricity generated from various RE sources. In fact, with this rationale only, the REC prices have undergone a consistent downward trend since the inception of REC framework. Accordingly, the pricing of RECs being dynamic in nature and aligned with sectoral realities cannot be claimed by the Appellants as a matter of vested right to have a fixed floor price. We have gone through the facts and figures presented by the Appellants and the Respondent Commission and note that majority of States in the country do not need any floor price support as

Minimum Project Viability Requirement is negative in those states. For instance, the State of Madhya Pradesh, the floor price based on MPVR is determined as Rs. 0.44/unit which has sufficient buffer as compared to the floor price of Rs.1.00/unit specified by the Central Commission. Another important fact is that among the three routes available for RE generators, the REC capacity is dominated by RE generators operating under CGP and OA route rendering APPC route as the last choice. It may be due to the fact that under the APPC route, the RE generator gets lower tariff than the reference price level under CGP & OA route. This issue of higher realisation of revenue by RE generators by sale/consumption of electricity under OA/CGP route has been raised by different State commissions/stakeholders from time to time. Keeping all these facts in view, we are of the opinion that REC prices being non-static and market driven cannot be claimed as a matter of vested rights by RE generators. [Para 12.17]

After due consideration of oral and documentary evidence available in the file and after careful perusal of the impugned order passed by the Central Commission, we do not find any error or illegality nor the Appellants have made out any case to interfere in the well considered impugned order passed by the Central Commission. It is undoubtedly clear that the generation from RE sources, in its all forms, being environment friendly, is required to be promoted to their fullest potential. The Government has accordingly provided enabling environment for development of RE sources so as to achieve the national commitment for achieving desired percent generation from non-fossil fuels by 2030. The statutory framework created by the Govt. from time to time including the Electricity Act, Electricity Policy, Tariff Policy etc. lays emphasis on the promotion of RE generation. With this background, Renewable Projects Obligation (RPO) has been prescribed to be complied with by all obligated entities in a time bound manner with reference to its growth trajectory in the future. CERC as facilitator has brought out REC Regulations from time to time stipulating the prices of REC i.e. floor and forbearance price. In earlier years of its regulations, the Central

Commission used to determine the REC prices based on its own benchmark capital cost but with the growing competition and induction of efficient & cheaper technology, it has now switched over to the method of specifying REC prices based on the prices discovered from bids and / or auctions. The earlier REC prices used to be higher due to higher generic tariff and higher benchmark capital cost of RE projects. Now, the bid discovered prices of RE generation are lower because of more and more competition. The lower REC prices now stipulated to be applicable from 01.04.2017 is the case for which the RE generators are agitated. The various issues related with the RE generation such as stranded REC inventory, recovery of cost, RPO compliances, market realities, etc. have duly been analysed by the Central Commission in the impugned order with the rationale thereof. It is also relevant to mention that the RE generators have flexibility to sale their power through all the three routes available i.e. OA/CGP/APPC. Keeping all the facts associated with the case in view, we are of the firm opinion that the impugned order passed by the Central Commission does not suffer from any legal infirmity or ambiguity. [Para 12.18]"

(Emphasis supplied)

67. It is the argument of the respondents that the previous round had approved the methodology used and so the issue cannot be reopened.

68. Upon careful appraisal of the arguments which are put forward in the present proceedings, and the nuances of the issues raised in previous round, we find the plea of *res judicata* misplaced. The rule of *res judicata* applies when the subsequent case is (i) between the same parties; (ii) respecting the same issues; and (iii) and on the *same cause of action* [see *Mathura Prasad Bajoo Jaiswal & Ors. v. Dossibai N.B. Jeejeebhoy* 1970 (1) SCC 613 and *Canara Bank v. N.G. Subbaraya Sety & Anr.* (2018) 16 SCC

228]. The following passage from the decision in *Mathura Prasad Bajoo Jaiswal* (supra) should suffice to repel the objection raised before us:

> "***5.*** *But the doctrine of res judicata belongs to the domain of procedure: it cannot be exalted to the status of a legislative direction between the parties so as to determine the question relating to the interpretation of enactment affecting the jurisdiction of a Court finally between them, even though no question of fact or mixed question of law and fact and relating to the right in dispute between the parties has been determined thereby. A decision of a competent Court on a matter in issue may be res judicata in another proceeding between the same parties: the "matter in issue" may be an issue of fact, an issue of law, or one of mixed law and fact. An issue of fact or an issue of mixed law and fact decided by a competent Court is finally determined between the parties and cannot be re-opened between them in another proceeding. The previous decision on a matter in issue alone is res judicata; the reasons for the decision are not res judicata. A matter in issue between the parties is the right claimed by one party and denied by the other, and the claim of right from its very nature depends upon proof of facts and application of the relevant law thereto. A pure question of law unrelated to facts which give rise to a right, cannot be deemed to be a matter in issue. When it is said that a previous decision is res judicata, it is meant that the right claimed has been adjudicated upon and cannot again be placed in contest between the same parties. A previous decision of a competent Court on facts which are the foundation of the right and the relevant law applicable to the determination of the transaction which is the source of the right is res judicata. A previous decision on a matter in issue is a composite decision: the decision on law cannot be dissociated from the decision on facts on which the right is founded. A decision on an issue of law will be as res judicata in a subsequent proceeding between the same parties, if the cause of action of the subsequent proceeding be the same as in the previous proceeding, but not when the cause of action is different, nor when the law has since the earlier decision been altered by a competent authority.*

nor when the decision relates to the jurisdiction of the Court to try the earlier proceeding, nor when the earlier decision declares valid a transaction which is prohibited by law."

(Emphasis Supplied)

69. The issues involved in the present proceedings arising from a different cause of action are not focused on the interpretation of Regulation 9 of the REC Regulations but primarily concern certain errors stated to have been committed by CERC in the decision-making process. Illustratively, reference may be made to the submission of the appellants that CERC has proceeded to examine the matter on basis of (as quoted in the impugned order) of the Regulation 9(2) of the REC Regulations as it stood prior to its amendment in 2013 rendering it arguably "*fundamentally flawed*".

70. The judgment dated 12.04.2018 of this tribunal has not yet attained finality. The challenge by second appeals assailing the same is still pending before Hon'ble Supreme Court. More than that, however, it is the material difference in the arguments pressed, as indeed the distinguishing features of the order under challenge before us, which obliges us to consider the contentions of the parties vis-à-vis merits or correctness of the process leading to, and the end-result of the impugned exercise undertaken by CERC, afresh and with open mind, not feeling bound by the dispensation through earlier judgment dated 12.04.2018. If we may add, the previous judgment has not dealt with some of the nuanced arguments raised before

us which we deal in the discourse that follows and, therefore, comes across as *sub silentio*.

71. In above context, we must note that the challenge in previous round - where the methodology adopted by CERC was similar (bid-discovered price rather than the tariff determined) – was mounted primarily on basis of grievances in the nature that the order dated 30.03.2017 of the Commission was incorrect since it reflected "*deviation*" or "*departure*" from past practice wherein the floor and forbearance price was statedly fixed "*by taking CERC benchmark capital cost*" and "*arbitrarily changed*" to reliance on "*current solar tariff ... discovered in the auctions conducted*", the latter being a "*totally new methodology*" and adversely affecting the "*vested right*" of the "*existing renewable energy projects*". This tribunal had considered the said appeals and decided the same by judgment dated 12.04.2018 examining the justification or otherwise of "*change in methodology*" by "*discontinuation of vintage multipliers*" and "*usual practice of ... considering ... benchmark capital cost*". The departure from past methodology was upheld noting certain facts like CERC having "*done away with a practice of issuing the generic tariff for RE projects from 2017-18 onwards*" rendering "*the earlier practice of using Commission notified tariff as a reference price ... of no relevance*", approving use of data relating to bid-discovered price since "*more and more generators are participating in the auctions/bids with*

considerable reduced cost of generation", the subject of pricing being "*market based instrument and governed by the cost, demand and supply of the electricity generated from RES*", a "*consistent downward trend in the REC prices for both solar as well as non-solar*" being noticeable "*on comparison of REC prices over the years since the inception of REC framework*", there being no case made out for a "*vested right to a fixed floor price*", the examination of the "*viability of solar projects in 17 states by comparing the average bid tariff with the respective states APPC*" having shown that "*majority of the States enlisted do not need any floor price support, as Minimum Project Viability Requirement (MVPR) is negative in those States*". This tribunal in the said earlier decision also accepted the argument that "*RE generators have flexibility to sale their power through all the three routes available i.e. OA/CGP/APPC*", the Government having "*provided enabling environment for development of RE sources so as to achieve the national commitment for achieving desired percent generation from non-fossil fuels by 2030*", the "*REC prices being non-static and market driven*" since the REC capacity is "*dominated by RE generators operating under CGP and OA route rendering APPC route as the last choice*". Pertinently, there was no argument raised nor scrutiny of the previous order of CERC done from the perspective as to whether the methodology adopted passes the muster of extant Regulation 9(2) of REC Regulations.

72. We find force in the submissions of the appellants that the impugned order suffers from infraction of Regulation 9(2) of RE Regulations. The fundamental error lies in the fact that there is no determination of "*cost of generation*" or expected RE generation capacity or variations therein to justify a fresh determination. The "*cost of procurement*" may be an indicator of the "*cost of generation*" but cannot fully reflect the same if the data respecting the former is gathered from a category that cannot be treated as truly representative of all RE generators.

73. The very premise to go solely by competitive bid-discovered tariff on the ground that CERC and some SERCs have discontinued determining generic tariff for wind and solar RE seems erroneous. Reference may be made here to Regulation 7 of the CERC 2017 RE Tariff Regulations reading thus:

> *"7. Project Specific tariff*
> *a) Project specific tariff, on case to case basis, shall be determined by the Commission for the following types of projects:*
> *i. Solar PV and Solar Thermal;*
> *ii. Wind Energy (including on-shore and off-shore);*
> *iii. Biomass Gasifier based projects; if a project developer opts for project specific tariff;*
> *iv. Biogas based projects; if a project developer opts for project specific tariff;*
> *v. Municipal Solid Waste and Refuse Derived Fuel based projects with Rankine cycle technology;*
> *vi. Hybrid Solar Thermal Power Projects;*
> *vii. Other hybrid projects include renewable–renewable or renewable– conventional sources, for which renewable technology is approved by MNRE;*

viii. Any other new renewable energy technologies approved by MNRE.

b) Determination of Project specific tariff for generation of electricity from such renewable energy sources shall be in accordance with such terms and conditions as stipulated under relevant Orders of the Commission.

c) No annual generic tariff shall be determined for the technologies mentioned in Clause (a) of this Regulation. Financial and Operational norms as may be specified would be the ceiling norms while determining the project specific tariff."

(Emphasis Supplied)

74. The Central Commission may no longer be determining generic tariff, but it was still determining *project specific tariff*, which would be under Section 62 and, therefore, sufficient normative data for determining the cost of generation across the country could still be gathered. Be that as it may, the option to access the requisite normative data from the POSOCO (the Central Agency) or the FOR (the other consultee statutorily mandated) under Regulation 9(1) of the REC Regulations could have been explored. The exercise of determining floor and forbearance price of RECs, based on necessary inputs including *variation* in *cost of generation* need not have been based on cost of procurement (though that may be one indicator). The CERC has the resources to undertake market study, collect and get collated empirical data or details to substantiate the impressions (or assumptions) on market 'reality' on which the proposal was put out and later adopted. But, recourse to such options has been sidelined. In fact, in our reading of the REC Regulations, the general rule is that the price of

REC is to be discovered by trading in power exchange, the determination by CERC of the floor and forbearance price being by way of an exception. For such exception to be applied, the Commission must reach a satisfaction that there is a case made out for its intervention in terms of proviso to Regulation 9(1). As a natural corollary, every time the Commission decides to change the floor and forbearance prices, it must base its determination on market study and pick up the methodology suitable to the prevailing market conditions bearing in mind the objectives of the law and Regulations occupying the field.

75. Though referred to in the setting of the argument of CPPs that the fixation of the floor price at ZERO is reflective of the conclusion of the Commission that there is no need to fix any floor price (given the market conditions), the following passage from Appendix-1 ("*Proposal for Determination of Forbearance Price and Floor Price of RECs*") of the preliminary order dated 31.03.2020 (proposal order) has been relied upon:

> "*4.1.2 Floor Price for Non-solar REC*
>
> i. Floor price is determined on the difference between the project viability requirement and APPC determined for different RE technologies across states. The highest difference for each technology is the Technology Specific Floor Price for each non-solar technology. This Technology specific Floor Price is mapped with the respective capacity share of the technology to arrive at the weighted average Technology Specific Floor Price for each technology.

> ii. This approach for floor price is considered necessary given the current state of demand-supply of REC market. The Commission in its Order dated 30.03.2017, had directed the staff to examine the need of determining the floor price of REC and whether going forward the floor price can be removed. Based on the aforesaid analysis, it is evident that the market has matured and to encourage sale of RECs and promote trade, floor price is no longer required. Accordingly, the Commission has considered Scenario 2 and proposes to remove the floor price. ..."
>
> (Emphasis supplied)

76. Curiously, by directions issued in the impugned order dated 17.06.2020, the Commission also directed (vide para 71.4) "*the Staff to undertake review of REC mechanism in the light of the prevailing market developments, including inter alia review the floor and forbearance price for Rec mechanism and vintage or technology multiplier*". This demonstrates that the *review* of the REC mechanism from the particular viewpoint of proposal to remove the floor price by the staff assisting CERC, in terms of directions in order dated 30.03.2017, has not been completed. If the requirement of such review at the staff level was still felt incumbent (and, therefore, reiterated), it is questionable as to why the Commission should have resorted to such radical change without awaiting the result of proper in-house study.

77. Be that as it may, if the Commission was satisfied that the market had matured to the extent that fixing of floor price was "*no longer required*", it being our view that *floor price* and *forbearance price* go together, we

wonder as to why should it (the Commission) persist with intervention by exercising its power under proviso to Regulation 9(1). If the need to determine price does not exist any further for one, there cannot be determination of the other. We reiterate that, under the REC mechanism, given shape by REC Regulations, the general rule is that the market be allowed to have a free hand for discovery of price of REC. The intervention by CERC under proviso to Regulation 9(1) is by way of an exception. The Commission decided in 2010 to intervene, the objective being to protect the competing stakeholders – RE generators and the Obligated entities. It has been revisiting the subject by orders passed *from time to time*. In our view, each time the Commission revisits the subject, it must first compulsorily address the basis issue as to whether there is (continued) need for such intervention. That question precedes the actual determination of floor *and* forbearance price. It seems such threshold scrutiny was not undertaken.

78. We agree with the appellants that CERC has fallen into grave error by relying upon the competitive bid tariffs adopted by some ERCs because of the declining trend of bid discovered tariff on assumption that such phenomena could only be due to a reduction in cost of generation and for the reason that various Commissions have stopped passing generic tariff orders. Such approach is more in breach, than compliance, of Regulation 9(2) of the REC Regulations. The appellants are right in pointing out that Regulation 9(2)(a) by way of a purposeful omission mandates the Central

Commission to arrive at the (normative) "*Cost of Generation*" and not *some tariff* paid to the RE generators. The reference to projects under Sections 62 and 63, and under the REC mechanism, is made only for determining the "*Expected Generation of Power*" under Regulation 9(2)(c). Pertinently, the RE generators under the REC Mechanism must supply, in terms of Regulation 5 of the REC Regulations, their brown component at par with the conventional sources of energy without any concessional or promotional benefits. In fact, the availing of such benefits renders them ineligible for REC mechanism. Therefore, they cannot be compared with the RE generators under the Preferential mechanism or under competitive bidding mode which indisputably receive such concessions or promotional benefits. To complete the discussion, reference is made to exemptions afforded to competitive projects like inapplicability of Inter State Transmission System (ISTS) charges and losses which are generally more than 45% of the bid tariffs (statedly Rs. 1.36 per Unit approximately on average) discovered through various competitive bidding rounds. The error in the calculations is bound to creep in if bid-discovered price of procurement of RE is taken without factoring in the value of concessions availed, as has been done by CERC.

79. The National Tariff Policy, 2016 lays emphasis on the statutory principle that while determining tariff, safeguarding of consumers' interests

alongside recovery of the cost of electricity in a reasonable manner shall be ensured. We may quote the following passage from the said document:

> *"8.2 Framework for revenue requirements and costs*
> *8.2.1 The following aspects would need to be considered in determining tariffs:*
> *...*
> *(7) Section 61 of the Act mandates that the Appropriate Commission, while determining tariff, shall not only ensure safeguarding of consumer's interests but also the recovery of the cost of electricity in a reasonable manner. Section 62 of the Act further provides for periodic tariff adjustment during a year to take care of the variation in fuel price, as may be specified."*
>
> (Emphasis Supplied)

80. The appellants rightly point out that the price discovery methodology through competitive bidding route functions on the principle of bidders placing the most competitive bid after considering the scale and size of their power projects and individual risk appetite and tends to ignore the above-mentioned objective of the declared State policy. The final price or tariff discovered under competitive bidding route is for specific and individual PPAs which are usually large-scale projects after considering the economies of scale. If the lowest bid made by one of the bidders (which may have ample risk appetite and ability to cross subsidize within its projects) is relied upon while determining the Forbearance and Floor Prices which are applicable to all the RE generators, it would likely have the potential of rendering small scale RE generators unviable and thereby

pushing them out of the RE industry making the dispensation anti-competitive, an anathema to the public policy reflected in the Electricity Act.

81. The 'competitive bid tariff' adopted by various State Commissions cannot be blindly and mechanically taken as a benchmark to accurately determine the variation in the cost of generation of different RE sources of electricity, across the country. Competitive bidding-tariff-based determination of REC prices would lead to an unjust treatment to REC based projects which have foregone the benefits of concessional charges on the basis of REC eligibility criterion established by the Commission. This means that REC based project will get the Floor and Forbearance prices on the basis of projects which are getting such concessional treatment. This leads to a discriminatory situation wherein unequals will be treated as equals. This breaches the rule against discrimination and arbitrariness.

82. The Central Commission has sought to defend the impugned decision submitting that "*the pricing of RECs was computed taking into account the market realities*" and that it (CERC) has "*determined the floor and forbearance price based on the market realities and with due regard to the need for balancing the interest of consumer and investors.*" The following observations in the impugned order, however, reflect a different approach:

> *"55. Some stakeholders have submitted that bid prices for projects which are yet to be commissioned have been considered. They have submitted that there have been instances where the bids considered in the tabulation have been scrapped or cancelled by agencies. Some stakeholders have requested to consider Scenario 1 for determining the floor price and forbearance price of Non-Solar RECs while others have suggested to compare the same with existing preferential tariffs determined by SERCs. In general, these stakeholders have submitted that methodology used for determining the floor price and forbearance price of RECs is to be reviewed and the methodology based on market transaction data may be considered as significant market price/ transactions data are available for several years now.*
>
> *56. The review of methodology entails an amendment in the REC Regulations which is beyond the scope of this exercise. The Commission has considered a balanced approach to safeguard the interests of the eligible RE generators and obligated entities."*
>
> (Emphasis Supplied)

83. It is trite that *unequals cannot be treated equally* [see *U.P. Power Corpn. Ltd. v. Ayodhya Prasad Mishra (2008) 10* SCC 139]. The problem with the reliance on cost of procurement under bid route is that the competitively bid projects are not at all comparable with entities eligible for RECs. As said before, the bid-discovered tariff does not include factors such as transmission losses and charges which, if added, would jack up the cost of procurement, the competitively bid projects, unlike REC projects, being entitled to such benefits as deemed generation/assured offtake, full (100%) grid availability, payment security by Central Govt etc. Having regard to the process involved, the price discovery through

competitive bidding route works on the principle that a bidder would place the most competitive bid factoring in the scale and size of its power project and individual risk appetite. The final price or tariff discovered under competitive bidding route is for specific and individual PPAs which are usually large-scale projects after considering the economies of scale. It cannot be denied that the lowest bid by one bidder with ample risk appetite and ability to cross-subsidize within its projects may not be an accurate parameter to determine the Forbearance and Floor Prices for universal application to all the RE generators, it possibly having the potential to push small scale RE generators out of the RE sector and be anti-competitive and, thus, against the law.

84. As already seen, Regulation 9 of REC Regulations provides for fixing of "*floor price and forbearance price*", should the Commission choose to do so in terms of the discretion given by the proviso, the general rule being that the price of REC "*shall be discovered*" by market in the power exchange where it can be traded. The definition of "*floor price*", as given in Regulation 2(1)(f), clarifies that it is meant to be "*the minimum price*" to be determined by the Commission in accordance with the regulations "*at and above which*" the REC can be traded in the power exchange. The trading may be "*at*" or "*above*" the floor price fixed. Seen in light of the express terms of the said statutory meaning, the determination of the floor price at ZERO makes the entire exercise questionable. The RECs represent the

green component which cannot be recovered if they are expected to be passed on to the obligated entities at ZERO value. Since there is no quarrel with the proposition that the Floor Price is the minimum REC price guaranteed to the RE generator so that its project is viable, fixing it at ZERO makes the working of the REC mechanism lopsided.

85. It was argued by the learned counsel for contesting respondents (representing the cause of the Obligated entities) that the fixing of ZERO floor price is only indicative of the decision *NOT TO FIX* any floor price, reference being made to the (already quoted) observations of CERC in the proposal order (dated 30.03.2017) to the effect that "*it is evident that the market has matured and to encourage sale of RECs and promote trade, floor price is no longer required*". Since no reiteration of this assumption in the impugned order has been pointed out to us, we asked the learned counsel for CERC to confirm if that is how the Commission would also project the impugned decision but did not get any clear reply. We do not find anything in the impugned order for such assumption to be made. That apart, this defence of ZERO determination of floor price, even otherwise, is unacceptable. It bears repetition to note that Regulation 9 of REC Regulations provides for fixing of "*floor price and forbearance price*". The *floor price* is to protect the interests of the RE generators, in compliance with the objectives of the law mandating promotional measures for this sector to be adopted. The *forbearance price*, on the other hand, is to

protect the interests of the Obligated entities such that they are not fleeced adding unduly to the cost of procurement which, in turn, is going to be the burden of the consumer at large whose interests are also to be protected. In this scheme of things, if the Commission intends to exercise its prerogative under proviso to Regulation 9(1), and proceed to determine the prices of RECs, it must fix both the *floor price* as well as the *forbearance price*.

86. It is a settled principle of law that "and" is conjunctive in nature and that provisions separated by the use of conjunction "and" must be read conjointly. In *Hyderabad Asbestos Cement Products and Ors. v. Union of India and Ors.* (2000) 1 SCC 426, the Supreme Court ruled thus:

> *"8. The language of the rule is plain and simple. It does not admit of any doubt in interpretation. Proviso (i) and (ii) are separated by the use of conjunction 'and'. They have to be read conjointly. The requirement of both the provisos has to be satisfied to avail the benefit. Clauses (a) and (b) of proviso (ii) are separated by the use of an 'or' and there the availability of one of the two alternatives would suffice. Inasmuch as cement and asbestos fibre used by the appellants in the manufacture of their finished excisable goods are liable to duty under different tariff items, the benefit of proforma credit extended by Rule 56A cannot be availed of by the appellants and/has been rightly denied by the authorities of the Department."*
>
> (Emphasis supplied)

87. The use of the word "and" between floor price and forbearance price, in the proviso, makes it clear that the Commission is bound by Regulations to fix both floor and forbearance prices. If the legislature had not intended

that both forbearance price and floor price be provided or if the legislature had envisaged a situation where only one can be provided then it would have used word "or" instead of "and". It bears repetition to say that the regulation mandates the determination of "*floor price and forbearance price*". The use of the word "*and*" between "*floor price*" & "*forbearance price*" leaves no scope for the Commission to choose to fix only one of them. If the Commission is satisfied that it must intervene in the market forces, it must do so on both fronts. Fixing the *forbearance price* but declining to do so for *floor price* amounts to pandering to the cause of only one side but not the other. This is neither fair nor just.

88. It is, however, also the argument of the Respondents that fixing the floor price at ZERO does not mean that the RE generators would not get any return on the RECs by trading in the power exchange. The submission is misconceived since the data shown demonstrates that the trading of the RECs has generally taken place at the Floor price, possibly because there has been supply of the RECs more than the demand.

89. It has been pointed out that POSOCO, one of the consultee agencies mentioned in Regulation 9 of REC Regulations, in its Report dated 31.07.2018, had recorded the above, as a fact, as under:

> "*7.3 Regulatory changes in REC Market design*
> *Modification in price discovery methodology and matching rules in Renewable Energy Certificate Market have been*

carried out by the Hon'ble Commission based on the market feedback. The changes carried out are briefly mentioned below

...

ii. During the last few years, in the REC market segment, the supply was much higher than the demand and the market was clearing at the floor price. The algorithm for determining equilibrium price and matching rules for selection of the order/volume in REC market segment was based on "Price time priority", i.e. when more than one order is having the same price, the order placed earlier in time would get the priority. It was observed that during the initial few trading sessions, sellers who placed their bids in the initial period of bidding window only were able to sell the RECs. The REC mechanism also intends to make up the additional revenue requirement for the 'green component' and thus, there was a need for making the mechanism more equitable.

...

14. Challenges and Way Forward

i. RPO Compliance

Non-compliance of the RPO by the obligated entities and subsequent buildup of the REC inventory is a cause of concern for the stakeholders. Therefore, strict enforcement of RPO compliance is sine qua non for vibrant REC market in the country.

As per, Electricity (Amendment) Bill 2014, obligated entities may be mandated to "procure electricity from or any market instrument representing the renewable energy sources for meeting their RPO". The focus on market instrument in the amended bill will also facilitate the purchase of RECs by the obligated entities.

Recently, MNRE has setup an RPO compliance cell, which will coordinate with the authorities concerned for periodic reporting and apprise the authorities for compliance of the RPO. The RPO compliance cell will help SERCs to enforce the compliance of RPO regulations.

ii. Mismatch between Demand and Supply of RECs

In the REC market, supply of RECs is more in comparison to demand. Accordingly, sell bids outnumber the buy bids; therefore, the floor price becomes the market clearing price both for solar RECs and non-solar RECs since June 2013 & September 2012 respectively. This has skewed the discovery of prices of REC at Power Exchange(s). With the

increasing instance of compliance of RPO by the obligated entities, it is expected that price discovery will improve at Power Exchanges i.e. MCP will be more than the floor price of the RECs in future."

(Emphasis Supplied)

90. The validity of the RECs is only for a period of 1,095 days. Therefore, the RE generators whose RECs are on the verge of lapse tend to sell the same at a price lower than the one prevailing on the exchange which, in turn, would further erode its market price. The total elimination of the floor price snatches away the benefit assured by REC Scheme from the hands of the RE generators enlisted thereunder.

91. There is not sufficient data shown to support the contention that there would be no loss to the REC project developer even when the Floor Price is set at ZERO. Reliance on statistics of bid-discovered tariff, treated as the cost of power, without comparing the same with the tariff actually received by the RE generators under the REC mechanism seems misleading. The RE generators under the REC Mechanism are obliged to sell their brown component at par with the conventional sources of energy without any concessional or promotional benefits and cannot be compared with the RE generators under the Preferential mechanism or under the competitive bidding mode which receive various concessions or promotional benefits.

92. This brings us to yet another error committed by the Commission. As has already been noticed, clause (2) of Regulation 9 of REC Regulations mandates that the Commission, in determining the floor and forbearance prices shall be guided, amongst others, by the "*Variation*" in "*cost of generation* (*of different renewable energy technologies*)" as also in "*Pooled Cost of Purchase* (or APPC)", the insistence being on such variations to be examined "*across States in the country*". A fortiori, the data required to be gathered in such respect must pertain to all the States of the Union and definitely not only some of the States, picked up randomly or selectively. The APPC data relied upon by CERC to compare with the '*bid-discovered tariff*' for the conclusions reached by the impugned order is quite clearly incomplete and incorrect. It is not in dispute that in its draft Order dated 31.03.2020, the CERC has considered the APPC Tariff of only a handful of State Commissions, instead of considering the APPC Tariff determined by all the State Commissions, without even attempting to provide a cogent rationale for ignoring the APPC determined by the other State Commissions. We accept the argument of the appellants that simply ignoring a large number of State Commissions and picking up APPC determined by just a handful of other State Commissions is manifestly arbitrary and contrary to the REC Regulations which are binding also on the Commission.

93. It is not a correct argument of the respondents that the challenge by these appeals cannot succeed because the appellants have not questioned the methodology. The appellants have challenged the underlying data relied upon by the Central Commission while determining the REC prices.

94. It is one of the contentions of the appellants that States like Tamil Nadu, Karnataka, Gujarat, Maharashtra and Rajasthan have capped the APPC price and the actual realization in such States to REC based RE generator is far less than the APPC figures considered by the Central Commission in its draft Order. It is averred that the actual realization to the RE generators by way of APPC is far less in these States than the figures which have been relied upon by the Central Commission in its determination. It is the case of the appellants that since certain States have capped their APPC, RE generators in such States do not have the benefit of the dynamic nature of the APPC which increases or decreases due to variation in purchase by the Distribution Licensee from conventional source of power. It is contended that the States in question (which have capped the APPC) have done it under the impression that the balance cost would be recovered by the RE generators through the REC prices. It is argued that ignoring the actual realization to the RE generators while determining the Forbearance Price and Floor Price of the RECs and to further reduce such prices - particularly the lowering of the Floor price to Rs.0/- when the

APPC has been capped by such State Commissions - constitutes a double jeopardy to the RE Generators, wholly contrary to the mandate under Section 66 read with Section 178 of the Electricity Act laying emphasis on promotion of RE based generation in the Country.

95. While there can be no quarrel with the submission that it is critical that the data used for determination of the floor and forbearance price should be realistic, given the course we choose, we do not wish to make any comment on the views canvassed by appellants vis-à-vis the analysis on comparison of APPC rates and actual realization. Suffice it to say that the arguments about the error committed by picking up data without considering the effect of capping and the assumptions on which it statedly has been done are weighty and could not be sidelined. The fact, however, remains that use of sample data from only seven States is a violation of the guiding principles ("*across States in the country*") provided by the Regulations and vitiates the end-product.

96. It does not make any sense to expect the RECs to be traded, sold or purchased *at* ZERO value, particularly when the impugned order applies such determination *retrospectively* to the RECs issued on or after 01.04.2017. But for the impugned order, the said previously issued RECs would command the floor price in terms of the order governing the subject

which the former order is to supersede. In other words, the minimum worth of the existing RECs is taken away and they are as good as rendered worthless papers for no fault of the RE generators.

97. The Central Commission has applied the new dispensation by the impugned order *retrospectively* only to the non-solar RECs and not to the solar RECs. This makes the exercise even more arbitrary particularly as cogent rationale for such distinct treatment must be discernible. The revised Floor price of non-solar REC to Rs.0/MWh even for RECs issued between 01.04.2017 and 17.06.2020 is sought to be justified on the reasoning that the Interim Order dated 08.05.2017 passed by the Hon'ble Supreme Court is not applicable on RECs issued after 01.04.2017. This is also misconceived.

98. The Electricity Act, and the REC Regulations, do not conceive of such retrospective operation of orders on the subject as at hand. The REC framework, as envisaged, is based on the principle that both the components, the brown (electricity generated by the RE generators) and the green (RECs) would be sold contemporaneously. There seems merit in the plea that due to non-compliance of the RPO targets by the Obligated Entities, the recovery of green component (RECs) by the RE generators have been seen generally to lag behind, adding to the reasons for huge

unsold inventory. Applying the lowered floor and forbearance prices *retrospectively* results in a scenario wherein the RECs issued towards a particular APPC tariff would have to be sold at reduced price, creating a viability gap. RE generators which have received RECs towards the electricity sold at much lower APPC tariff cannot be equated with the RE generators which have received RECs towards the electricity sold at much higher APPC tariff.

99. Revising the REC prices retrospectively is unreasonable. The price of RECs fixed earlier took into account their cost of generation under Regulation 9(2)(a) of the REC Regulations at the relevant time. However, applying the reduced price to prior RECs will result in a situation where the old projects in REC mechanism will never recover their cost of generation which is violative of Section 61(h) as well as 61(d) of the Electricity Act and the National Tariff Policy, 2016 which mandate recovery of cost of electricity in a reasonable manner. As pointed out, the National Tariff Policy, 2016 has suggested that the Central Commission ought to provide a vintage based multiplier for the old plants/ projects:

> *"6.4 (1)…*
> *…*
> *(iv) Appropriate Commission may also provide for a suitable regulatory framework for encouraging such other emerging renewable energy technologies by prescribing separate technology based REC multiplier (i.e. granting higher or lower number of RECs to such emerging*

technologies for the same level of generation). Similarly, considering the change in prices of renewable energy technologies with passage of time, the Appropriate Commission may prescribe vintage based REC multiplier (i.e. granting higher or lower number of RECs for the same level of generation based on year of commissioning of plant)."

(Emphasis supplied)

100. Noticeably, in the previous round of appellate scrutiny of the preceding order on the subject also the plea of promissory estoppel was raised by RE generators. Their plea was that if the Central Commission had not fixed the floor price, such generators would not have participated in the REC scheme so as to sell electricity on a real time basis at APPC and recover the renewable energy component of tariff on a deferred basis at the REC floor price. This argument, however, was not accepted in judgment dated 12.04.2018 by this tribunal on the reasoning that there "*cannot be a plea of Promissory Estoppel against legislation, more so against a provision providing discretionary power*", the provision of Floor Price and Forbearance Price being itself discretionary.

101. Unlike the tone, tenor and effect of the order dated 30.03.2017 under challenge then, the Commission has now (by the impugned order) reduced the price to be reduced to the level of ZERO and made it effective retrospectively. Since this dispensation adversely affects the value of the RECs issued on or after 01.04.2017 and even those issued prior to the

draft order dated 31.03.2020, the grievance founded on doctrines of *promissory estoppel* and *legitimate expectation* cannot be brushed aside. With due deference, we must say that this line of argument of the appellants is not directed, not at least in the proceedings before us, against the legislation or the regulatory framework giving discretionary power to CERC to determine the floor and forbearance prices. The expectation that the RE generators would get their due (towards green component) by sale of RECs at or above the floor price legitimately arises from the decision of CERC to intervene, in terms of the discretion given by the proviso to Regulation 9(1), rather than let the market decide on basis of demand and supply principles. By such intervention, an assurance is held out that CERC intends to ensure, by its determination, that the RE generators would get due and reasonable returns of the cost of generation and the Obligated entities would not be burdened unduly because of the RPO targets. Participation in REC scheme is voluntary. By participating therein, the RE generators expect due returns. The reduction of floor price to ZERO, even for the RECs issued prior to the date of proposal, is breach of the promise held out. This definitely attracts the doctrine of *promissory estoppel.*

102. In *Kusumam Hotels. v. KSEB & Ors.* 2008(13) SCC 213, the Supreme Court held as under:

"21. It is now a well settled principle of law that the doctrine of promissory estoppel applies to the State. It is also not in dispute that all administrative orders ordinarily are to be considered prospective in nature. When a policy decision is required to be given a retrospective operation, it must be stated so expressly or by necessary implication. The authority issuing such direction must have power to do so. The Board, having acted pursuant to the decision of the State, could not have taken a decision which would be violative of such statutory directions."

(emphasis supplied)

103. In *Transmission Corporation of AP & anr. v. Sai Renewable Power Pvt. Ltd. & Ors* 2011(11) SCC 34, it was held thus:

82. The principle of promissory estoppel, even if, it was applicable as such, the Government can still show that equity lies in favour of the Government and can discharge the heavy burden placed on it. In such circumstances, the principle of promissory estoppel would not be enforced against the Government as it is primarily a principle of equity. Once the ingredients of promissory estoppel are satisfied then it could be enforced against the authorities including the State with very few extra ordinary exceptions to such enforcement. In the United States the doctrine of Promissory Estoppel displayed remarkable vigor and vitality but it is still developing and expanding. In India, the law is more or less settled that where the Government makes a promise knowing or intending that it would be acted upon by the promissory and in fact the promissory has acted in reliance of it, the Government may be held to be bound by such promise.

83. It is a settled canon of law that doctrine of promissory estoppel is not really based on principle of estoppel but is a doctrine evolved by equity in order to prevent injustice. There is no reason why it should be given only a limited application by way of defence. It can also be the basis of a cause of action. Even if we assume that there was a kind of unequivocal promise or representation to the respondents, the reviews have taken place only after the period specified under the guidelines and/or in the

PPAs was over. This is a matter which, primarily, falls in the realm of contract and the parties would be governed by the agreements that they have signed. Once these agreements are singed and are enforceable in law then the contractual obligations cannot be frustrated by the aid of promissory estoppel."

(Emphasis supplied)

104. Clearly, the impugned decision ignores the public policy and cannot be upheld. In case of retrospective operation, the RE Generators will not be able to receive the minimum price of the green component of the Renewable Power sold by them at par with Conventional Power as assured at the relevant point of time, thereby causing grave loss and injury to such RE Generators. Equity lies in favour of the RE generators.

105. For the foregoing reasons, we find that the impugned order is vitiated since it is in gross violation of the guidance provided by Regulation 9(2) of REC Regulations.

Non-compliance with Regulation 9(1)

106. The case of the appellants founded on plea of non-compliance with Regulation 9(1) of REC Regulations is also resisted by the Respondents on the basis of the adjudication by this tribunal in previous round of appellate scrutiny of determination by CERC of floor and forbearance prices by Order dated 30.03.2017, challenged by appeals (nos. 95, 105 and 173 of 2017),

decided by judgment dated 12.04.2018. The observations in the judgment dated 12.04.2018, as relevant to the subject, are quoted as under:

> *"Per contra, the Central Commission has submitted that it derives its power to provide for floor and forbearance price from Regulation 9 which stipulates that the Central Commission shall determine the floor and forbearance price after consultation with the Central agency and Forum of Regulators and shall be guided, inter-alia, by principles provided under Regulation 9(2). The Central Commission has further brought out that before passing the impugned order, it had sought views, comments, suggestions etc. on the draft order from all stakeholders including State Commissions, Central Agency NLDC etc. The comments received from the Central Agency have been duly recorded in the stakeholder's comments in Section II of the Impugned Order. The relevant extract of Central Agency (POSOCO) is as " POSOCO submitted that revision in REC Forbearance and Floor Price is a much awaited step to increase the redemption of RECs by the buyers." The Central Commission has reiterated that it has passed the impugned order in accordance with the Electricity Act, National Electricity Policy, National Tariff Policy, REC Regulations etc. and as such, the question of any contravention of the existing statutory frameworks does not arise. Moreover, none of the appellants had demonstrated how the impugned order violates the statutory framework including REC Regulation 9(2).* [Para 12.2]
>
> *We have gone through the written submissions of the Appellants as well as the Central Commission and analysed the same with respect to the provisions of the statutory framework namely the Electricity Act, National Electricity Policy, National Tariff Policy, REC Regulations, etc. We have noted the deliberations and analysis brought out in the impugned order dated 30.03.2017 and found that the impugned order has been passed adhering to the REC Regulations and in a transparent manner. The Central Commission has invited views and suggestions from all stakeholders and duly analysed the same before arriving at the concluding remarks. The REC Regulations have been notified by the Central Commission in exercise of its powers under Section 66 read with Section 178(2) (y) of*

the Electricity Act, 2003 and the operating regulation provides as under:-

... [Para 12.2]

It would be evident from the above provisions under the regulations that the price of RE certificates is market driven and dynamic in nature. The fixation of floor and forbearance prices for solar as well as non-solar RE have to be provided by the Central Commission from time to time in consultation with POSOCO, the Central Agency and also viewing into market realities at the power exchange. As mentioned in the statement of reasons issued along with the regulations, the concept of REC seeks to address the mismatch between availability of RE sources and the requirement of obligated entities to meet their RPO. It has been clarified by the Central Commission that the REC mechanism is basically aimed at promoting the development of renewable energy sources and to provide an alternative mode to the RE generators for recovery of their project costs through brown & green components. In view of these facts, we observe that the Central Commission has passed the impugned order in accordance with various statutory framework such as the Act, Electricity / Tariff Policies, REC Regulations, etc. and does not cause to show any violation thereof. [Para 12.4]"

107. Clearly, the need for consultation with FOR was not considered by the tribunal in the previous round. On the contrary, the judgment proceeded on assumption that "*consultation with POSOCO, the Central Agency and also viewing into market realities at the power exchange*" were sufficient tests to be applied, the prime concerns being as to whether the order had been passed "*in a transparent manner*". Since the focus of argument pressed for our consideration vis-à-vis the impugned order is on mandate of proviso to Regulation 9(1) for "*consultation*" also with FOR, a plea not

examined in the previous judgment, we would reject the argument of *res judicata* in this respect as well.

108. The captive power producers, leading the defence of the impugned order, rely on their reply (filed as fifth respondent in first captioned appeal), particularly para 6 (i) and (ii) to argue that there is no case made out of non-compliance with regulation 9(1) of REC Regulations. In the said pleadings, all that has been averred is that in terms of Regulation 9(1), "*the price of an REC shall be as discovered in the Power Exchange*" and that the proviso thereto permits that "*the Commission may, in consultation with the Central Agency and Forum of Regulators from time to time provide for the Floor Price and Forbearance Price separately for solar and non-solar RECs*". Reference is then made to the guiding principles set out in Regulation 9(2). There is no assertion whatsoever that Regulation 9(1) was followed in letter or spirit.

109. As already noted, the proviso to Regulation 9(1) comes into play if the Commission decides to use its discretionary power to determine the floor and forbearance price, rather than leaving it entirely to the discovery of price of RECs at the power exchange. In such scenario, the first step is mandated as "*consultation with the Central Agency and Forum of Regulators*". As also already noted the "Central Agency" referred to in the

proviso is POSOCO which was invited to participate in the exercise leading to the impugned order being passed. The non-compliance is alleged in respect of the requirement to engage "*in consultation*" the other statutory body i.e. the *Forum of Regulators* ("FOR").

110. In *Cellular Operators Association of India & Ors. v. Telecom Regulatory Authority of India & Ors.* (2016) 7 SCC 703, the Supreme Court ruled that where a statute demands transparency and consultation with a specific authority or interested parties, such consultation must be carried out at the time when the proposal is at a formative stage and the authority must give an intelligent consideration and an intelligent response to the comments received:

> *"82. In fact, a judgment of the Court of Appeal in England, being R. v. North and East Devon Health Authority, ex p Coughlan [R. v. North and East Devon Health Authority, ex p Coughlan, 2001 QB 213 : (2000) 2 WLR 622 (CA)] , puts the meaning of "consultation" rather well as follows: (QB p. 258 C-D, para 108)*
>
> > *"108. It is common ground that, whether or not consultation of interested parties and the public is a legal requirement, if it is embarked upon it must be carried out properly. To be proper, consultation must be undertaken at a time when proposals are still at a formative stage; it must include sufficient reasons for particular proposals to allow those consulted to give intelligent consideration and an intelligent response; adequate time must be given for this purpose; and the product of consultation must be conscientiously taken into account when the ultimate decision is taken...."*
> >
> > *(emphasis supplied)*

No doubt in the facts of the present case, the Authority did hold due consultations with all stakeholders and did allow all stakeholders to make their submissions to the Authority. However, we find no discussion or reasoning dealing with the arguments put forward by the service providers, that call drops take place for a variety of reasons, some of which are beyond the control of the service provider and are because of the consumer himself. Consequently, we find that the conclusion that service providers are alone to blame and are consequently deficient in service when it comes to call drops is not a conclusion which a reasonable person can reasonably arrive at.

83. We are cognizant of the fact that ordinarily legislative functions do not require that natural justice be followed. However, it has been recognised in some of the judgments dealing with this aspect that natural justice need not be followed except where the statute so provides.

...

91. In Corpus Juris Secundum (March 2016 Update) it is stated:

> *"Under the informal rule-making requirements of the Federal Administrative Procedure Act, after a federal administrative agency considers the relevant matter presented, it must incorporate in the rules adopted a concise general statement of their basis and purpose. The purpose of the requirement is to enable courts, which have the duty to exercise review, to be aware of the legal and factual framework underlying the agency's actions. The requirement is a means of holding an agency accountable for administering the laws in a responsible manner, free from arbitrary conduct. The statement is not intended to be an abstract explanation addressed to an imaginary complaint but is intended, rather, to respond in a reasoned manner to the comments received, to explain how the agency resolved the significant problems raised by the comments, and to show how that resolution led the agency to the ultimate rule. The statement must identify what major issues of policy were ventilated and why the agency reacted to them as it did and should enable a reviewing court to ascertain such matters. The statement must respond to the major comments received, explain how they*

affected the regulation, and, where an old regulation is being replaced, explain why the old regulation is no longer desirable.

Agencies have a good deal of discretion in expressing the basis of a rule. The requirement is not to be interpreted over literally, but it should not be stretched into a mandate to refer to all specific issues raised in the comments on the proposed regulations. Although an agency must genuinely consider comments it receives from interested parties, there is no requirement that an agency discuss in great detail all comments, especially those which are frivolous or repetitive. Although the agency need not address every comment received, it must respond in a reasoned manner to those that raise significant problems, to explain how the agency resolved any significant problems raised by the comments, and to show how that resolution led the agency to the ultimate rule. Conclusory statements will not fulfil the administrative agency's duty to incorporate in adopted rules a concise general statement of their basis and purpose. The agency must articulate a satisfactory explanation for its action, including a rational connection between the facts it found and the choices it made. Under some circumstance, agencies must identify specific studies or data that they rely upon in arriving at their decision to adopt a rule.

...

94. The finding of the High Court that a transparent process was followed by TRAI in making the impugned Regulation is only partly correct. While it is true that all stakeholders were consulted, but unfortunately nothing is disclosed as to why service providers were incorrect when they said that call drops were due to various reasons, some of which cannot be said to be because of the fault of the service provider. Indeed, the Regulation, in assuming that every call drop is a deficiency of service on the part of the service provider, is plainly incorrect."

(Emphasis Suppled)

111. In In *State of Kerala and Ors. v. Kerala Rare Earth and Minerals Limited and Ors.* (2016) 6 SCC 323, the Supreme Court reiterated the following well-settled principle:

"16. It is well settled that if the law requires a particular thing to be done in a particular manner, then, in order to be valid the act must be done in the prescribed manner alone ..."

112. The Forum of Regulators, constituted under section 166 of Electricity Act has been fully alive to the *pros* and *cons* of the regulations governing REC mechanism and implications thereof for the stakeholders or competing interest groups. Reference has been made to the views formulated by FOR in the past (2009 to 2014). Since the CERC did not solicit views of FOR in the run up to the impugned order it did not have the opportunity to do so at that stage.

113. Section 79(3) of the Electricity Act stipulates that the "*Central Commission shall ensure transparency while exercising its powers and discharging its functions.*" As noticed above, Regulation 9(1) of the REC Regulations stipulates that the Central Commission while determining the REC Regulations shall *consult* with both, the Central Agency (POSOCO) and the Forums of Regulations. The contesting Respondents, relying on *State Bank of Patiala and others vs. S.K. Sharma* (1996) 3 SCC 364, have contended that the *substantial compliance* for consultation with the Central Agency and the Forum of Regulations has been made by the Central Commission, while passing the Impugned Order, as POSOCO and various State Commissions were called upon and had submitted their comments.

This submission is *ex-facie* misleading. There has been no consultation with FOR. The consultation with the SERCs cannot be taken as due compliance with requirement of consultation with FOR. Both are distinct bodies and one cannot be the substitute for the other, particularly as their roles and functions are different. The settled position of law that when a statute provides for a thing to be done in a particular manner it must be done in the manner prescribed and in no other way has been ignored. The test of *substantial compliance* is indeed as to whether prejudice has been caused to the affected party. Since we do find element of prejudice to the cause of RE generators by exclusion of FOR, the plea of *substantial compliance* is found to be specious.

114. The Central Commission has *recorded* submissions of some of the stakeholders, and one of the two mandatory consultees (i.e. POSOCO), but the impugned order does not seem to set out reasons for rejection of some of the important comments, some relevant part of summary of such inputs being as under:

> "*34. Comments on the methodology for computation of floor price and forbearance price*
>
> *Stakeholders Comments*
>
> - *Delhi Electricity Regulatory Commission (DERC) has stated that the Commission while computing the forbearance price and floor price has not considered*

parameters like actual availability of RECs and delay in SCOD of RE Plants whose PPAs have been signed. DERC has requested to consider these parameters for determination of floor price and forbearance price of RECs as these factors play a critical role in meeting RPO for States like Delhi which do not have much RE potential. Without consideration of these parameters for determination of forbearance price and floor price, the current exercise may prove futile.

- *Karnataka Electricity Regulatory Commission (KERC) has submitted that while computing the average bid price, CERC has first computed the average of maximum and minimum bid price under each bid and then, the average of this average of all bid is considered, which is not correct. KERC suggested that for each year, the weighted average of all bids put together should be considered. KERC has also stated that since in computation of floor price and forbearance price, APPC of FY19 is considered, the bid price should also be considered for FY19 only so that the comparison is for the same year.*

...

- *POSOCO has submitted that in previous six months i.e. from October 2019 to March 2020, Solar RECs are being traded at forbearance price which is Rs.2400/-. In such a scenario, reducing the forbearance price may reduce the interest of RE Generating companies to participate in REC Mechanism, which may create shortfall of RECs in the inventory.*

...

Analysis and Decision:

...

38. The Commission has noted the suggestions and would like to reiterate that the principles outlined in Regulation 9(2) of the REC Regulations have been followed while determining the forbearance price and floor price. Adoption of any other parameter(s) would be a deviation from the REC Regulations. The parameters as suggested by the stakeholders tantamount to an amendment in REC Regulations which is beyond the scope of this exercise.

...

67. Comments on Penal Provisions for non-compliance of RPO in extent SERC Regulations:

Stakeholders Comments

- *Delhi Electricity Regulatory Commission has submitted that if there is no floor price of RECs, then the provisions of penalty indicated by DERC in its Regulations, which plays a deterrent role, will fall flat since in absence of any Floor Price, it is difficult to consider the Power Purchase Cost projections towards RPO compliance while determining ARR of the DISCOMS.*
- *POSOCO has submitted that the RPO Regulations notified by the respective SERCs have provisions of linking the default in meeting of RPO with the forbearance price. Hence, reducing the forbearance price may be detrimental to the overall REC Mechanism.*

...

Analysis and Decision:

68. Several stakeholder have pointed out the linkage of forbearance price (and floor price) with penal provisions for non-compliance of RPO in Regulations notified by various State Electricity Regulatory Commissions while ensuring that the same will act as a deterrent against default in RPO. The Commission is of the view that at present RE power can be procured by the obligated entities at significantly low price to fulfil RPO, and as such the floor and forbearance price for REC would have to be aligned to the market realities. Deciding RPOs and providing for deterrence for non-compliance of RPOs is the domain of SERCs and they may, if deemed fit, review the basis of deterrent against default in RPO compliance."

(Emphasis supplied)

115. The process of *consultation* mandated by the Regulations is not an empty formality. The Commission has failed to show, either in the impugned order, or by proceedings drawn anterior thereto, conscientious

consideration of, or sufficient reasons cited for, either accepting or rejecting such comments as noted above. The requirement in Regulations of "*consultation*" with the two specified agencies – POCOSO and FOR – is, as observed in *Cellular Operators Association of India* (supra), a means of holding the statutory authority (CERC) "*accountable for administering the laws in a responsible manner, free from arbitrary conduct*". The ultimate decision of the authority after "*consultation*" mandated by law "*must articulate a satisfactory explanation for its action, including a rational connection between the facts it found and the choices it made*". The impugned order fails to pass this muster as well. We find the observations of CERC vis-à-vis the above-extracted comments of DERC, KERC, POCOSO rather vague.

116. In the above-noted facts and circumstances, we accept the plea of the appellants that the impugned order is vitiated because the CERC failed to abide by statutory mandate of *consultation* with FOR in terms of proviso to Regulation 9(1). This vitiates the exercise rendering it arbitrary. We are of the considered opinion that some of the errors in compliance with Regulation 9(2) of REC Regulations may not have been committed if the Commission had scrupulously abided by procedural requirements of *consultation* in terms of proviso to Regulation 9(1).

CONCLUSION

117. Having regard to the findings returned above, holding CERC in gross violation in the matter of compliance with Regulation 9(1) and 9(2) of REC Regulations in proceedings leading to, and the final result in, the impugned order, the deficiencies being not mere irregularities but illegalities that go to the root vitiating the end-product rendering it arbitrary, the appeals must succeed. Thus, we set aside the order dated 17.06.2020 passed in Petition no. 05/SM/2020, by the Central Electricity Regulatory Commission, revising the floor and forbearance price of solar and non-solar RECs at Rs. 0/MWh and Rs. 1000/MWh respectively.

118. To obviate any confusion, and for removal of doubts, if any, we direct, more as a consequence, and also for the reason that there cannot be a vacuum, that the order(s) governing the subject immediately prior to the passing of the impugned order would stand revived and continue to prevail to regulate the pricing and trading of the RECs so long as a fresh order on the subject is not issued, in accordance with law.

119. We are conscious that as a result of the impugned order being passed, retrospectively tinkering with the pricing of RECs issued on or after 31.03.2017, trading in their respect would have been unfairly and unjustly adversely affected. In order to do complete justice, we also direct that the

RECs which were still valid for trading at the power exchange under REC Regulations as on the date (17.06.2020) the impugned order was passed, and have remained unsold till date, shall continue to be valid and be good for sale or purchase for the then remainder period of their validity, computed with reference to the date of the impugned order, and that the purchase thereof, during the period of such extended validity, by the Obligated entities shall be treated as good compliance with RPO targets. The Central Commission shall issue formal orders to this effect and give the same due publicity for information of all stakeholders within two weeks hereof.

120. The appeals and pending applications are disposed of in above terms.

PRONOUNCED IN THE VIRTUAL COURT THROUGH VIDEO CONFERENCING ON THIS 09th DAY OF NOVEMBER, 2021.

(Sandesh Kumar Sharma)
Technical Member

(Justice R.K. Gauba)
Judicial Member

Monthwise REC : Period Nov 2021 to March -22 - Source : http://www.recregistryindia.nic.in

SN	Month, Year	Opening Balance			RECs Issued			RECs Redeemed through Power Exchanges			RECs Redeemed through			RECs retained by RE			RECs Revoked/Deleted			Closing Balance		
		Solar	Non Solar	Total	Solar	Non Solar	Total	Solar	Non Solar	Total	Solar	Non Solar	Total	Solar	Non Solar	Total	Solar	Non Solar	Total	Solar	Non Solar	Total
129	November,2021	11,60,602	74,67,022	86,27,624	79,636	4,27,611	5,07,247	3,16,244	32,01,020	35,17,264			0	0	15,586	15,586			0	9,23,994	46,78,027	56,02,021
130	December,2021	9,23,994	46,78,027	56,02,021	1,17,010	8,89,546	10,06,556	3,33,887	17,16,925	20,50,812			0	0	54,406	54,406			0	7,07,117	37,96,242	45,03,359
131	January,2022	7,07,117	37,96,242	45,03,359	1,16,922	5,05,494	6,22,416	2,54,018	12,32,865	14,86,883			0	0	6,039	6,039			0	5,70,021	30,62,832	36,32,853
132	February,2022	5,70,021	30,62,832	36,32,853	1,35,633	4,47,604	5,83,237	1,80,037	6,04,997	7,85,034			0	117	777	894			0	5,25,500	29,04,662	34,30,162
133	March,2022	5,25,500	29,04,662	34,30,162	90,955	3,49,408	4,40,363	2,78,343	3,42,067	6,20,410			0	1,211	23,754	24,965			0	3,36,901	28,88,249	32,25,150

RNI No. MAHBIL /2009/35527



महाराष्ट्र शासन राजपत्र

असाधारण भाग चार-क

वर्ष ५, अंक ८४] शुक्रवार, डिसेंबर २७, २०१९/पौष ६, शके १९४१ [पृष्ठे २०, किंमत : रुपये ९.००

असाधारण क्रमांक १३०

प्राधिकृत प्रकाशन

महाराष्ट्र शासनाव्यतिरिक्त इतर वैधानिक प्राधिकाऱ्यांनी तयार केलेले

(भाग एक, एक-अ व एक-ल यांमध्ये प्रसिद्ध केलेले वैधानिक नियम व आदेश यांव्यतिरिक्त इतर)

वैधानिक नियम व आदेश ; यात भारत सरकार, उच्च न्यायालय, पोलीस आयुक्त, आयुक्त (राज्य उत्पादन शुल्क), जिल्हादंडाधिकारी व निवडणूक आयोग, निवडणूक न्यायाधिकरण, निवडणूक निर्णय अधिकारी व निवडणूक आयोगाखालील इतर प्राधिकारी यांनी तयार केलेले वैधानिक नियम व आदेश यांचा समावेश होतो.

महाराष्ट्र विद्युत नियामक आयोग, मुंबई

[महाराष्ट्र विद्युत नियामक आयोग (नूतनशील ऊर्जा खरेदीचे बंधन, त्याचे पालन व नूतनशील ऊर्जा प्रमाणपत्र चौकटीचे कार्यान्वयन) विनियम, २०१९.]

विद्युत अधिनियम, २००३.

क्रमांक मविनिआ/तांत्रिक/२०१९/१२३२.— महाराष्ट्र विद्युत नियामक आयोग, विद्युत अधिनियम, २००३ च्या कलम ६१, ६६, ८६(१)(इ) आणि १८१ अन्वये प्रदान करण्यात आलेल्या आणि या संदर्भात त्यास समर्थ करणाऱ्या अन्य सर्व अधिकारांचा वापर करून व पूर्व-प्रसिद्धीनंतर, याद्वारे खालीलप्रमाणे विनियम करीत आहे :-

१ संक्षिप्त शीर्षक, व्याप्ती व प्रारंभ :-

१.१ या विनियमांना 'महाराष्ट्र विद्युत नियामक आयोग (नूतनशील ऊर्जा खरेदीचे बंधन, त्याचे पालन व नूतनशील ऊर्जा प्रमाणपत्र चौकटीचे कार्यान्वयन) विनियम, २०१९,' असे म्हणावे.

१.२ हे विनियम संपूर्ण महाराष्ट्र राज्यात आणि राज्य आयोगाच्या अखत्यारीत येणाऱ्या सर्व बाबींना लागू राहतील.

१.३ हे विनियम **शासकीय राजपत्रातील** त्यांच्या प्रसिद्धीच्या दिनांकापासून अंमलात येतील.

२. व्याख्या

२.१ संदर्भानुसार वेगळा अर्थ अपेक्षित नसेल तर, या विनियमांमध्ये :-

(ए) "अधिनियम" म्हणजे विद्युत अधिनियम, २००३, (२००३ चा ३६), त्यात करण्यात आलेल्या सुधारणांसह;

(बी) "स्व-वापरासाठी निर्माण करण्यात आलेल्या विजेचा उपयोगकर्ता" म्हणजे अधिनियमाच्या कलम २(८) अंतर्गत व्यक्ती किंवा सदस्य जो स्व-वापरासाठीच्या निर्मिती संयंत्रामध्ये मुख्यत्वे करून त्याच्या स्वतःसाठी निर्माण केलेल्या विजेचा वापर करतो आणि 'स्वतःसाठी वीज वापर', या शब्दांचा अर्थ त्यानुसार लावण्यात येईल;

(सी) "केंद्रीय अभिकरण" म्हणजे केंद्रीय आयोग वेळोवेळी पद-निर्देशित करील असे अभिकरण;

(डी) "केंद्रीय आयोग" म्हणजे अधिनियमाच्या कलम ७६ च्या उप-कलम (१) मध्ये उल्लेख केलेला केंद्रीय विद्युत नियामक आयोग;

(इ) "प्रमाणपत्र" म्हणजे वेळोवेळी सुधारणा केलेल्या केंद्रीय विद्युत नियामक आयोग (नूतनशील ऊर्जा निर्मितीसाठी नूतनशील ऊर्जा प्रमाणपत्र मान्यतेच्या व निर्गमित करण्यासाठीच्या अटी व शर्ती) विनियम, २०१० (केंद्रीय आयोगाचे आरईसी विनियम) मध्ये करण्यात आलेल्या तरतुदी आणि कार्यपद्धतीनुसार केंद्रीय अभिकरणाने निर्गमित केलेले नूतनशील ऊर्जा प्रमाणपत्र (किंवा आरईसी);

(एफ) "सामान्य (जेनेरिक) वीज दर" वेळोवेळी सुधारणा केलेल्या "महाराष्ट्र विद्युत नियामक आयोग (नूतनशील ऊर्जेच्या दर निश्चितीकरणाच्या अटी व शर्ती) विनियम, २०१५ नुसार वेगवेगळ्या नूतनशील ऊर्जा स्त्रोतांपासूनच्या वीजनिर्मितीसाठी आयोगाने मान्यता दिलेला आणि स्वीकारलेला सामान्य वीज दर;

(जी) "आंतर-जोडणी ठिकाण" म्हणजे नूतनशील ऊर्जा निर्मिती सुविधा पारेषण यंत्रणा किंवा वितरण यंत्रणेशी, जसे असेल तसे, जोडण्याचे ठिकाणः

एक : पवन ऊर्जा प्रकल्प आणि सौर फोटोव्हॉल्टॅक (पीव्ही) प्रकल्पांच्या संबंधात, संयुक्त उप-केंद्राच्या उच्च दाबाच्या बाजूला असलेल्या बहिर्गामी फीडरवरील लाईन आयसोलेटर हे आंतर-जोडणीचे ठिकाण राहील;

स्पष्टीकरण : संयुक्त उप-केंद्र म्हणजे पवनचक्की किंवा सौर विद्युत प्रकल्पाच्या जागेवरील उप-केंद्र, ज्यामध्ये स्टेप-अप ट्रान्सफॉर्मर आणि संलग्न स्विचगिअर असतील आणि त्याच्या कमी दाबाच्या बाजूला बहुविध निर्मिती संच (म्हणजे पयन टर्बाइन जनरेटर्स किंवा सौर पीव्ही मॉडयुल्स/आरेज् (arrays)/इन्व्हर्टर संच) जोडलेले असतील.

दोन : मिनि आणि मायक्रो जल विद्युत, लघु-जल विद्युत, बायोमास विद्युत, अ-खनिज इंधनावर आधारित सह निर्मिती विद्युत प्रकल्पांच्या आणि सौर औष्णिक विद्युत प्रकल्पांच्या संबंधात, जनरेटर ट्रान्सफॉर्मरच्या उच्च दाबाच्या बाजूला असलेल्या बहिर्गामी फीडरवरील लाईन आयसोलेटर हे आंतर-जोडणीचे ठिकाण राहील;

(एच) "एमएनआरई" म्हणजे भारत सरकारचे नवीन आणि नूतनशील ऊर्जा मंत्रालय;

(आय) "बंधन असलेल्या संस्था/व्यक्ती" म्हणजे महाराष्ट्र राज्यातील वितरण परवानाधारक, स्व-वापरासाठीच्या वीज निर्मिती प्रकल्पाची मालकी असणारा उपयोगकर्ता आणि मुक्त प्रवेश ग्राहक यांनी, विनियम ५ मधील अटींची पूर्तता करण्याच्या अधीन राहून, या विनियमांतर्गत नूतनशील स्रोतांपासूनच्या वीज खरेदीच्या बंधनाचे (आरपीओ) पालन करणे आवश्यक राहील;

(जे) "मुक्त प्रवेश ग्राहक" म्हणजे पारेषण मुक्त प्रवेश किंवा वितरण मुक्त प्रवेशासाठीच्या अटी आणि शर्तींचे नियमन करणाऱ्या राज्य आयोगाच्या विनियमांनुसार, मुक्त प्रवेशाचा वापर करून वीज घेणारी व्यक्ती;

(के) "पॉवर एक्सचेंज" म्हणजे केंद्रीय आयोगाने निर्गमित केलेल्या आदेशांनुसार विजेची खरेदी-विक्री करण्यासाठी चालविण्यात येणारा एक्सचेंज;

(एल) "नूतनशील ऊर्जेचे स्रोत" म्हणजे मिनि जल-विद्युत, मायक्रो जल-विद्युत, लघु जल-विद्युत, पवन, सौर, उसाच्या चिपाड्यांसह बायोमास, बायो इंधनावर आधारित सहनिर्मिती, नागरी किंवा नगरपालिका क्षेत्रातील कचरा आणि एमएनआरईने मान्यता किंवा मंजुरी दिलेले अन्य स्रोत;

(एम) "राज्य अभिकरण" (मेडा) म्हणजे महाराष्ट्र ऊर्जा विकास अभिकरण किंवा राज्य आयोगाकडून वेळोवेळी पद-निर्देशित करण्यात येईल असे अन्य अभिकरण, जे नूतनशील ऊर्जा प्रकल्पांना या विनियमांतर्गत सोपविलेली कार्ये हाती घेण्याकरिता नोंदणीसाठी अधिस्वीकृती देण्याचे व शिफारस करण्याचे काम करील;

(एन) "राज्य आयोग" म्हणजे महाराष्ट्र विद्युत नियामक आयोग;

(ओ) "वर्ष" म्हणजे एक आर्थिक वर्ष.

२.२ (ए) या विनियमांत वापरण्यात आलेले परंतु येथे व्याख्या न करण्यात आलेले शब्द व उक्ती ज्यांची व्याख्या केंद्रीय आयोगाने किंवा राज्य आयोगाने निर्गमित केलेल्या अधिनियमात किंवा विनियमांत करण्यात आलेली असेल तर अशा शब्द व उक्तींचा अर्थ, अधिनियमात किंवा अशा विनियमांत त्यांना देण्यात आलेल्या अर्थानुसार राहील.

(बी) या विनियमांच्या मराठी अनुवादातील व इंग्रजी विनियमांमधील कोणत्याही शब्दांचा/मजकुराचा अर्थ निश्चित करताना कोणताही वाद उद्‌भवल्यास आणि/किंवा कोणतीही विसंगती आढळल्यास मूळ इंग्रजीतील विनियम ग्राह्य धरण्यात येतील.

भाग-अ - सर्वसाधारण

३ विनियमांची व्याप्ती आणि लागू करण्याची मर्यादा

३.१ जेथे नूतनशील ऊर्जा स्त्रोतांपासून सह-निर्मिती करण्यास व नूतनशील ऊर्जा स्त्रोतांपासून विजेची निर्मिती करण्यास राज्य आयोगाने चालना द्यावयाची आहे आणि अशा स्त्रोतांपासून निर्माण होणारी वीज खरेदी करण्यासाठी वितरण परवानाधारकाच्या क्षेत्रातील एकूण विजेच्या वापराच्या आधारे राज्य आयोगाने किमान टक्केवारी विनिर्दिष्ट करावयाची आहे, अशा सर्व प्रकरणी हे विनियम लागू राहतील;

परंतु असे की, जल-विद्युत स्त्रोतापासून प्राप्त केलेली वीज विजेच्या एकूण वापरातून वगळण्यात येईल.

३.२ हे विनियम खालीलप्रमाणे लागू राहतील :-

(अ) महाराष्ट्र राज्यातील वितरण परवानाधारक.

(ब) विनियम ५ मधील अटींच्या अधीन राहून, महाराष्ट्र राज्यातील स्व-वापरासाठीच्या वीज निर्मितीचे उपयोगकर्ते.

(क) विनियम ५ मधील अटींच्या अधीन राहून, महाराष्ट्र राज्यातील मुक्त प्रवेश ग्राहक.

भाग-ब नूतनशील ऊर्जा खरेदीचे बंधन (आरपीओ)

४ पात्र नूतनशील उर्जा स्त्रोत

४.१ या विनियमांच्या प्रयोजनासाठी, एमएनआरईने मान्यता किंवा मंजुरी दिलेल्या सर्व प्रकारच्या नूतनशील ऊर्जा स्त्रोतांपासून निर्माण होणारी वीज विचारात घेण्यात येईल;

परंतु असे की, एमएनआरईने दिलेल्या मान्यतेच्या आधारे राज्य आयोगाने कोणत्याही नवीन तंत्रज्ञानाला मान्यता दिल्यानंतरच, असे नवीन तंत्रज्ञान 'नूतनशील' ठरण्यास पात्र होऊ शकेल.

४.२ पात्र नूतनशील ऊर्जा स्त्रोतांमध्ये खालील बाबींचा मर्यादारहित समावेश राहील :-

(ए) अ-खनिज इंधनावर (ऊसाच्या चिपाड्यासह) आधारित सह-निर्मिती प्रकल्प (अर्हताकारी असलेले व नसलेले दोन्ही सह-निर्मिती प्रकल्प).

(बी) पवन ऊर्जा.

(सी) रॅन्काइन सायकल तंत्रज्ञानावर आधारित बायोमास विद्युत.

(डी) लघु जल-विद्युत, मिनी जल-विद्युत, मायक्रो जल-विद्युत.

(इ) एमएनआरईने मान्यता दिलेल्या तंत्रज्ञानावर आधारित कचऱ्यापासून वीज निर्मिती.

(एफ) सौर विद्युत.

(जी) एमएनआरई आणि राज्य आयोगाने मान्यता दिलेल्या नूतनशील ऊर्जा तंत्रज्ञानावर आधारित हायब्रिड नूतनशील ऊर्जा.

(एच) औष्णिक विद्युत संयत्रातील बायोमासच्या सह-प्रज्वलनापासून निर्माण झालेली वीज.

(आय) एमएनआरई आणि राज्य आयोगाने मान्यता दिलेला अन्य कोणताही स्त्रोत.

४.३ वितरण परवानाधारक/महाराष्ट्र राज्य भार प्रेषण केंद्र (एमएसएलडीसी) यांच्याशी सुयोग्य मीटरींग आणि संपर्क व्यवस्था असलेल्या ग्रिडशी जोडलेल्या नूतनशील ऊर्जा स्रोतांपासूनची वीज निर्मिती पात्र नूतनशील ऊर्जा स्रोतांपासूनची निर्मिती म्हणून विचारात घेण्यात येईल;

परंतु असे की, वेळोवेळी सुधारणा केलेल्या, केंद्रीय विद्युत प्राधिकरण (मीटर बसविणे आणि प्रचालन) विनियम, २००६ नुसार सुयोग्य मिटरींग आणि संपर्क व्यवस्था असल्यास आणि वितरण परवानाधारक राज्य अभिकरणास अशा निर्मितीचा तपशील मासिक तत्त्वावर कळवित असेल तरच फक्त, वितरण परवानाधारकाने त्याच्यावरील सार्वत्रिक सेवा बंधनाची पूर्तता करण्यासाठी ऑफ-ग्रिड नूतनशील ऊर्जा स्त्रोतांपासून निर्माण केलेली वीज पात्र नूतनशील ऊर्जा स्रोतांपासूनची निर्मिती म्हणून विचारात घेण्यात येईल;

४.४ महाराष्ट्र राज्यातील आणि राज्याबाहेरील नूतनशील ऊर्जा निर्मितीसाठी दिलेल्या नूतनशील ऊर्जा प्रमाणपत्रांची (आरईसी) खरेदी विनियम ६ मध्ये विनिर्दिष्ट केलेल्या कार्य कालावधीत महाराष्ट्र राज्यातील बंधन असलेल्या संस्था/व्यक्तींनी आरपीओची पूर्तता करण्याच्या प्रयोजनासाठी पात्र दस्तावेज म्हणून विचारात घेण्यात येईल.

५ बंधन असलेल्या संस्था/व्यक्ती

५.१ विनियम ७.१ मध्ये विनिर्दिष्ट करण्यात आलेली टक्केवारी, महाराष्ट्र राज्यातील सर्व वितरण परवानाधारक, मुक्त प्रवेश ग्राहक आणि स्व-वापरासाठी निर्माण केलेल्या विजेचा वापर करणारे उपयोगकर्ते, यांना खाली नमूद केलेल्या अटींच्या अधीन राहून लागू राहील :-

(ए) १ मेगावॅट आणि अधिक किंवा राज्य आयोगाकडून वेळोवेळी ठरवून देण्यात येईल अशी अन्य स्थापित क्षमता असलेल्या पारंपरिक खनिज इंधनावर आधारित ग्रिडशी जोडलेल्या स्व-वापरासाठीच्या निर्मिती संयंत्राची मालकी असणारी कोणतीही व्यक्ती जी अशा संयंत्रापासून निर्माण होणाऱ्या विजेचा उपयोग स्व-वापरासाठी करते, अशा व्यक्तीने अशा खनिज इंधनावर आधारीत स्व-वापरासाठीच्या संयंत्राची वीज ज्या प्रमाणात वापरलेली असेल त्या प्रमाणात अशा व्यक्तीला आरपीओखालील टक्केवारी लागू राहील.

(बी) ज्या व्यक्तीची करारबद्ध मागणी १ मेगावॅटपेक्षा कमी नसेल आणि जी पारंपारिक खनिज इंधनावर आधारित निर्मितीमधून मुक्त प्रवेशाद्वारे खरेदी केलेल्या विजेचा वापर करते, अशा व्यक्तीने अशा खनिज इंधनावर आधारीत मुक्त प्रवेशाच्या माध्यमातून जितक्या विजेचा वापर केला असेल त्या वापराच्या प्रमाणात अशा व्यक्तीला आरपीओखालील टक्केवारी लागू राहील;

परंतु असे की, वरील उप-खंड (ए) आणि (बी) मध्ये उल्लेख केलेल्या किमान क्षमतेमध्ये राज्य आयोग आदेशाद्वारे वेळोवेळी सुधारणा करू शकेल;

परंतु आणखी असे की, वरील उप-खंड (ए) मधील अट, स्टॅण्डबाय (किंवा आणीबाणीच्या काळात वापरण्यासाठी असलेल्या) स्व-वापरासाठीच्या निर्मिती सुविधेला, लागू राहणार नाही.

६. कार्य - कालावधी

या विनियमांतर्गत विनिर्दिष्ट करण्यात आलेल्या आरपीओ चौकटीच्या कार्य कालावधीस दिनांक १ एप्रिल २०२० पासून सुरुवात होईल आणि ती दिनांक ३१ मार्च २०२५ पर्यंत वैध राहील.

७. नूतनशील वीज खरेदीच्या बंधनाचे लक्ष्यांक

७.१ प्रत्येक बंधन असलेली संस्था/व्यक्ती, एका वर्षात सर्व स्रोतांपासून खरेदी केलेल्या एकूण विजेपैकी, जल-विद्युत स्त्रोतापासूनची निर्मिती वगळून, पात्र नूतनशील ऊर्जा स्रोतांपासून निर्माण झालेल्या विजेची खरेदी, खालील तक्त्यात नमूद केलेल्या टक्केवारीच्या मर्यादेपर्यंत करील:

वर्ष	नूतनशील ऊर्जा स्रोतांपासून (युनिटमधील सममूल्य ऊर्जा) करावयाच्या वीज खरेदीचे परिमाण (टक्केवारीत)		
	सौर	बिगर-सौर (अन्य नूतनशील ऊर्जा)	एकूण
	(ए)	(बी)	(सी)
२०२०-२०२१	४.५०%	११.५०%	१६.००%
२०२१-२०२२	६.००%	११.५०%	१७.५०%
२०२२-२०२३	८.००%	११.५०%	१९.५०%
२०२३-२०२४	१०.५०%	११.५०%	२२.००%
२०२४-२०२५	१३.५०%	११.५०%	२५.००%

७.२ नूतनशील ऊर्जा खरेदीच्या बंधनाचे वर विनिर्दिष्ट केलेले लक्ष्यांक साध्य करावयाचे किमान लक्ष्यांक आहेत. बंधन असलेल्या संस्था/व्यक्ती केंद्र शासनाने वेळोवेळी अधिसूचित केलेले लक्ष्यांक साध्य करण्यासाठी प्रयत्नशील राहतील व त्यासाठी ते विनियम १२ नुसार प्रोत्साहन-अधिदान मिळण्यास पात्र राहतील.

७.३ बंधन असलेल्या संस्था/व्यक्ती बिगर सौर आरपीओ लक्ष्यांकामधील तूट भरून काढण्यासाठी एकूण आरपीओ लक्ष्यांकाच्या १५ टक्क्यांपर्यंत शिल्लक सौर ऊर्जेचा वापर करू शकतील आणि बंधन असलेल्या संस्था/व्यक्ती सौर आरपीओ लक्ष्यांकामधील तूट भरून काढण्यासाठी एकूण आरपीओ लक्ष्यांकाच्या १५ टक्क्यांपर्यंत शिल्लक बिगर सौर ऊर्जेचा वापर करू शकतील;

परंतु असे की, बंधन असलेल्या संस्था/व्यक्ति एका आरपीओ वर्गवारीतील तूट भरून काढण्यासाठी दुसऱ्या आरपीओ वर्गवारीतील १५ टक्क्यांपेक्षा जास्त शिल्लक ऊर्जा समायोजित करण्यासाठी, तपशीलवार समर्थन देऊन, आयोगाची पूर्व-मंजुरी घेऊ शकतील.

७.४ बंधन असलेल्या संस्था/व्यक्तींनी संबंधित वर्षासाठी त्यांना लागू असलेल्या आरपीओ लक्ष्याकांची (ऊर्जा युनिट किंवा मेगावॅट तास क्षमतेच्या बाबतीत) पूर्तता करण्यामधील +/- ५ टक्क्यांच्या मर्यादेतील कोणत्याही तफावतीस त्यानंतरच्या वर्षात पुढे ओढण्यास, सविस्तर छाननीच्या अधीन राहून, अपवादात्मक परिस्थितीमध्ये परवानगी देण्यात येईल.

७.५ परंतु आणखी असे की, १० मेगावॅटपेक्षा कमी सर्वोच्च मागणी असलेले वितरण परवानाधारक, १ मेगावॅट आणि त्यापेक्षा जास्त स्थापित क्षमता असलेल्या स्व-वापरासाठीच्या निर्मिती प्रकल्पाचे उपयोगकर्ते आणि १ मेगावॅट आणि त्यापेक्षा जास्त करारांतर्गत मागणी असलेले मुक्त प्रवेश ग्राहक, यांनी वरील तक्त्यातील रकाना (सी) मध्ये घालून दिलेल्या त्यांच्या फक्त संयुक्त आरपीओ लक्ष्यांकाची वार्षिक पूर्तता करणे आवश्यक राहील;

परंतु असे की, १ एप्रिल २०१६ पूर्वी कार्यान्वित झालेल्या स्व-वापरासाठीच्या वीज निर्मिती संयत्राच्या उपयोगकर्त्याच्या बाबतीत, अशा स्व-वापरासाठीच्या निर्मिती संयत्रापासून प्राप्त झालेल्या विजेच्या संबंधात संयुक्त आरपीओ लक्ष्यांक ९ टक्के राहील.

परंतु आणखी असे की, १ एप्रिल २०१६ रोजी व त्यानंतर कार्यान्वित झालेल्या स्व-वापरासाठीच्या वीज निर्मिती संयत्राच्या बाबतीत, संयुक्त आरपीओ लक्ष्यांक, प्रकल्प कार्यान्वित झाला त्या वर्षीसाठी लागू असलेल्या लक्ष्यांकाइतका राहील.

परंतु आणखी असेही की, स्व-वापरासाठीच्या वीज निर्मिती संयत्रामधील कोणत्याही क्षमता वाढीच्या बाबतीत, संयुक्त आरपीओ लक्ष्यांक, अशी वाढलेली क्षमता ज्या वर्षी कार्यान्वित झाली त्या वर्षीसाठी लागू असलेल्या लक्ष्यांकाइतका राहील.

परंतु असेही की, प्रत्येक वितरण परवानाधारक त्याच्या दीर्घ-कालिन वीज खरेदीच्या योजनेमध्ये, वर विनिर्दिष्ट केलेल्या आरपीओ लक्ष्यांकाची पूर्तता होईल अशा नूतनशील ऊर्जा स्रोतांपासून करावयाच्या वीज खरेदीच्या योजनेचा, समावेश करील.

७.६ प्रत्येक 'बंधन असलेली संस्था/व्यक्ती', तिने स्वतः केलेल्या विजेच्या निर्मितीद्वारे किंवा दुसऱ्या नूतनशील ऊर्जा प्रकल्पांमधून विजेची खरेदी करून किंवा परवानाधारकांकडून खरेदी करून किंवा नूतनशील ऊर्जा प्रमाणपत्रांची खरेदी करून किंवा या पर्यायांचे एकत्रीकरण (कॉम्बिनेशन) करून, आरपीओ लक्ष्यांकाची पूर्तता करू शकेल;

परंतु असे की, राज्य आयोगाने मान्यता दिलेल्या सामान्य वीज दराने किंवा आयोगाने यथोचित मान्यता दिलेल्या/स्वीकृत केलेल्या पारदर्शक स्पर्धात्मक बोली प्रक्रियेतून मिळालेल्या दराने वितरण परवानाधारकाने केलेली खरेदी अशा वितरण परवानाधारकाच्या नूतनशील ऊर्जा खरेदी बंधनांच्या पूर्ततेसाठी पात्र परिमाण म्हणून विचारात घेतले जाईल.

परंतु आणखी असे की, महाराष्ट्र विद्युत नियामक आयोग (नूतनशील ऊर्जा खरेदीचे बंधन, त्याचे पालन व नूतनशील ऊर्जा प्रमाणपत्र चौकटीचे कार्यान्वयन) विनियम, २०१० अधिसूचित करण्यापूर्वी स्वाक्षांकित केलेल्या करारानुसारची नूतनशील ऊर्जेची प्राप्ती अशा वितरण परवानाधारकाच्या आरपीओ बंधनाच्या पूर्ततेसाठी पात्र परिमाण म्हणून विचारात घेण्यात येईल.

८. केंद्रीय आयोगाच्या विनियमांतर्गत प्रमाणपत्रे

या विनियमांत असलेल्या अटी व शर्तींच्या अधीन राहून, केंद्रीय आयोगाच्या आरईसी विनियमांतर्गत निर्गमित करण्यात आलेली प्रमाणपत्रे ही, बंधन असलेल्या संस्था/व्यक्तींनी या विनियमांतर्गत त्यांच्यासाठी घालून देण्यात आलेल्या नूतनशील ऊर्जा स्त्रोतांपासून करावयाच्या वीज खरेदीसाठीच्या अनिवार्य बंधनाची पूर्तता करण्यासाठी, वैध दस्तावेज असतील;

परंतु असे की, बंधन असलेल्या संस्था/व्यक्तींनी आरपीओची पूर्तता जर प्रमाणपत्राच्या खरेदीने करण्याचे ठरविले तर, सौर निर्मितीपासून करावयाच्या वीज खरेदीच्या बंधनाची पूर्तता फक्त सौर प्रमाणपत्रांची खरेदी करूनच करण्यात येईल, आणि सौर निर्मिती व्यतिरिक्त अन्य नूतनशील ऊर्जा स्रोतांपासून करावयाच्या वीज खरेदीच्या बंधनाची पूर्तता फक्त बिगर-सौर प्रमाणपत्रे खरेदी करून करण्यात येईल.

९. राज्य अभिकरण

९.१ राज्य अभिकरण, राज्य आयोगाच्या निर्देशांनुसार काम करील आणि केंद्रीय आयोगाच्या आरईसी विनियमांतर्गत त्याची कार्ये पार पाडण्यासाठी केंद्रीय अभिकरणाने तयार केलेल्या कार्यपद्धती आणि नियमानुसार कृती करील.

९.२ राज्य अभिकरण, नूतनशील ऊर्जा निर्मिती कंपन्या, बंधन असलेल्या संस्था/व्यक्ती, महाराष्ट्र राज्य भार प्रेषण केंद्र, इ. कडून माहिती मागविण्यासाठी उचित कार्यपद्धती तयार करील आणि बंधन असलेल्या संस्था/व्यक्तींनी केलेल्या आरपीओ लक्ष्यांकांच्या पूर्ततेची परिगणना करील.

९.३ राज्य अभिकरण, बंधन असलेल्या संस्था/व्यक्तिंनी केलेल्या नूतनशील ऊर्जा खरेदीच्या बंधनाच्या पूर्ततेसंबंधीची तिमाही स्थिती, ठरवून देण्यात आलेल्या नमुन्यांमध्ये, राज्य आयोगाला सादर करील आणि अशा बंधनाची पूर्तता करण्यासाठी, आवश्यक असल्यानुसार, राज्य आयोगाला उचित उपाययोजना सुचवेल.

९.४ राज्य आयोग, या विनियमांखालील कार्ये पार पाडण्यासाठी राज्य अभिकरणाला देय असलेले शुल्क व आकार, वेळोवेळी ठरवून देईल.

९.५ जर, राज्य अभिकरण त्याची कार्ये समाधानकारकपणे पार पाडू शकत नसल्याची राज्य आयोगाची खात्री झाली तर, राज्य आयोग, सर्वसाधारण किंवा विशेष आदेशाद्वारे, अन्य कोणत्याही अभिकरणाला राज्य अभिकरण म्हणून काम करण्यासाठी पद-निर्देशित करू शकेल.

१० वितरण परवानाधारक

१०.१ प्रत्येक वितरण परवानाधारक त्याच्या बहु-वर्षीय वीज दराच्या याचिकेमध्ये कार्य कालावधीतील प्रत्येक वर्षासाठी नूतनशील ऊर्जा स्रोतांपासून करावयाच्या वीज खरेदीच्या परिमाणांचे अंदाज, पुराव्यासह, निर्देशित करील आणि त्यानुसार आरपीओच्या बंधनाची पूर्तता करण्यासाठी व्यवस्था करील.

१०.२ कार्य कालावधीतील प्रत्येक वर्षाकरिता मान्यता दिलेल्या वीज खरेदीच्या परिमाणाच्या संबंधात, नूतनशील वीज खरेदीच्या परिमाणाचे अंदाज या विनियम ७.१ नुसार असतील.

१०.३ प्रत्येक वितरण परवानाधारक वेगवेगळ्या नूतनशील ऊर्जा स्रोतांपासून खरेदी केलेल्या विजेच्या माहितीचे सारांश असलेले विवरणपत्र मासिक तत्त्वावर राज्य अभिकरणाला पाठवील.

१०.४ आर्थिक वर्ष संपल्यानंतर ६० दिवसांच्या आत, प्रत्येक वितरण परवानाधारक, विविध नूतनशील ऊर्जा स्रोतांपासून खरेदी केलेल्या विजेचे, वैधानिक लेखापरीक्षकाने यथोचितरित्या प्रमाणित केलेले सविस्तर विवरणपत्र सादर करील.

११. स्व-वापरासाठीच्या वीज निर्मितीचे उपयोगकर्ते आणि मुक्त प्रवेश ग्राहक

११.१ विनियम ५ मध्ये विनिर्दिष्ट केलेल्या अर्टीच्या अधीन राहून, स्व-वापरासाठीच्या वीज निर्मितीचे उपयोगकर्ते आणि मुक्त प्रवेश ग्राहक, त्यांचा वीज वापर आणि त्यांनी संबंधित आरपीओची पूर्तता करण्यासाठी केलेली नूतनशील ऊर्जा स्रोतांपासूनची वीज खरेदी, याबाबतची सविस्तर माहिती राज्य अभिकरणाला मासिक तत्त्वावर सादर करतील.

११.२ स्व-वापरासाठीच्या वीज निर्मितीचे उपयोगकर्ते आणि मुक्त प्रवेश ग्राहक विनियम ७.१ मध्ये नमूद केल्याप्रमाणे कार्य कालावधीच्या प्रत्येक वर्षासाठी, जल-विद्युत वगळून, वीज विक्री परिमाणाच्या अनुरुप नूतनशील ऊर्जेची खरेदी करतील आणि त्यानुसार त्यांच्या संबंधीत आरपीओची पूर्तता करण्यासाठी व्यवस्था करतील.

११.३ विनियम ५.१ (ए) मधील स्व-वापरासाठीच्या वीज निर्मितीच्या उपयोगाबाबतच्या आणि पात्रता निकषांच्या अर्टींची पूर्तता करण्याच्या अधीन राहून, नूतनशील ऊर्जेवर आधारित स्व-वापरासाठीच्या विद्युत प्रकल्पातील विजेचा स्वतःसाठी वापर केल्यानंतर उरलेल्या शिल्लक विजेची विक्री विनियम ८ मधील तरतुदींनुसार नूतनशील ऊर्जा प्रमाणपत्रे मिळण्यास पात्र राहील;

परंतु असे की, नुतनशील ऊर्जा प्रमाणपत्रे प्राप्त केल्यावर, अशी शिल्लक ऊर्जा, विनियम १२ मध्ये विनिर्दिष्ट केल्यानुसार, प्रोत्साहन-अधिदान मिळण्यास पात्र राहणार नाही.

१२ प्रोत्साहन-अधिदान आणि दंड

१२.१ बंधन असलेल्या संस्था/व्यक्तिने प्रत्येक वर्षात प्राप्त करावयाच्या नूतनशील ऊर्जेची किमान टक्केवारी विनियम ७ मध्ये देण्यात आली आहे.

१२.२ वितरण परवानाधारक केंद्र शासनाने वेळोवेळी अधिसूचित केलेले लक्ष्यांक साध्य करण्यासाठी प्रयत्नशील राहतील आणि हे लक्ष्यांक प्राप्त केल्यावर त्यांना विनियम ७ मध्ये विनिर्दिष्ट केलेल्या किमान टक्केवारीपेक्षा जास्त प्राप्त केलेल्या नूतनशील ऊर्जेसाठी रुपये ०.२५ प्रति युनिट ते केंद्र शासनाने खालीलप्रमाणे अधिसूचित केलेल्या टक्क्यांपर्यंत किंवा वेळोवेळी अधिसूचित करण्यात येईल त्याप्रमाणे प्रोत्साहन-अधिदान मिळेल:

वर्ष	सौर	बिगर सौर	एकूण
२०२०-२०२१	८.७५%	१०.२५%	१९.००%
२०२१-२०२२	१०.५०%	१०.५०%	२१.००%

परंतु असे की, वितरण परवानाधारकाने एकत्रित तत्त्वावर नूतनशील ऊर्जा खरेदीच्या बंधनाची पूर्तता केलेली नाही तर असे प्रोत्साहन-अधिदान लागू राहणार नाही;

परंतु आणखी असे की, मागील वर्षीच्या आरपीओची पूर्तता करण्यासाठी या वर्षात प्राप्त केलेली नूतनशील ऊर्जा प्रोत्साहन-अधिदानासाठी पात्र नूतनशील ऊर्जेचे परिमाण निश्चित करताना वजा करण्यात येईल.

१२.३ विनियम ७ मध्ये विनिर्दिष्ट केल्यानुसार नूतनशील ऊर्जेच्या किमान टक्केवारीची पूर्तता करण्यात येणारी आर्थिक वर्ष २०२०-२०२१ आणि आर्थिक वर्ष २०२१-२०२२ मधील कोणतीही तूट आर्थिक वर्ष २०२२-२०२३ मध्ये आणि आर्थिक वर्ष २०२३-२०२४ मधील तूट आर्थिक वर्ष २०२४-२०२५ मध्ये पुढे ओढण्यात येईल, आणि बंधन असलेली संस्था/व्यक्ती अशी तूट एकत्रित तत्त्वावर अनुक्रमे ३१ मार्च २०२३ आणि ३१ मार्च २०२५ पर्यंत भरून काढू शकेल.

परंतु असे की, एकूण नूतनशील ऊर्जेच्या प्राप्तीच्या प्रत्येक वर्षासाठीच्या लक्ष्यांकामधील एकत्रित तुटीकरिता वितरण परवानाधारकाच्या वार्षिक महसुली गरजेमध्ये रु. ०.१० प्रति युनिट दराने कपात करण्यात येईल.

परंतु आणखी असे की, बंधन असलेल्या अन्य संस्था/व्यक्तिंना एकूण नूतनशील ऊर्जेच्या प्राप्तीच्या प्रत्येक वर्षासाठीच्या लक्ष्यांकामधील एकत्रित तुटीकरिता रुपये ०.१० प्रति युनिट दंड आकारण्यात येईल;

परंतु आणखी असे की, ३१ मार्च २०२३ आणि/किंवा ३१ मार्च २०२५ रोजीची नूतनशील ऊर्जा प्राप्तीमधील कोणतीही एकत्रित तूट पुढील वर्षीसाठी ओढण्यात येणार नाही आणि वितरण परवानाधारकाच्या वार्षिक महसुली गरजेमध्ये कपात करुन आणि बंधन असलेल्या संस्था/व्यक्तींना त्या दिनांका रोजीच्या संबंधित आरईसीच्या किमान किंमतीच्या दराने दंड आकारणी करून, समायोजित करण्यात येईल;

परंतु आणखी असेही की, बंधन असलेल्या संस्था/व्यक्तिने जर, आरईसीच्या प्राप्तीसह, शक्य त्या सर्व उपाययोजना करुन देखील आरपीओ बंधनाची पूर्तता करणे शक्य झाले नसल्याचे दाखवून दिल्यास, आयोग, त्या आदेशामध्ये ठरवून दिलेल्या अटींच्या अधीन राहून, दंडाच्या रकमेत कपात करु शकेल.

१२.४ एकूण महसुली गरजेच्या निश्चितीकरण प्रक्रियेमध्ये, आयोगाकडून, वितरण परवानाधारकांसाठी प्रोत्साहन-अधिदान आणि दंड निश्चित करण्यात येईल/मान्यता देण्यात/आकारण्यात येईल.

१२.५ बंधन असलेल्या अन्य संस्था/व्यक्तिंकडून राज्य अभिकरणाद्वारे वेब-पोर्टलच्या माध्यमातून दंड वसूल करण्यात येईल;

परंतु असे की, राज्य अभिकरण या प्रयोजनासाठी आरपीओ निधी नावाने स्वतंत्र खाते ठेवील;

परंतु आणखी असे की, आयोगाच्या पूर्व मान्यतेसह, राज्य अभिकरण आरपीओ वेब-पोर्टलच्या निर्मितीचे आणि देखभालीचे खर्च भागविण्यासाठी अशी रक्कम वापरु शकेल आणि त्यानंतर शिल्लक राहिलेली कोणतीही रक्कम, "महाराष्ट्र विद्युत नियामक आयोग (तफावतीच्या हिशोबपूर्तीची कार्यपध्दती आणि संबंधित बाबी) विनियम, २०१९ नुसार निर्माण केलेल्या राज्य तफावत पूल खात्यात तिमाही तत्त्वावर जमा करील आणि त्या विनियमांतील विनियम १५ (ड) नुसार वापर करण्यात येईल;

परंतु आणखी असे की, प्रत्येक आर्थिक वर्षाच्या अखेरीस, राज्य अभिकरण आरपीओ निधी अंतर्गत होणाऱ्या सर्व व्यवहारांचा प्रमाणित तपशील सादर करील.

१३. संनियंत्रण आणि अंमलबजावणी चौकट

१३.१ या विनियमांच्या अधिसूचनेपासून तीन महिन्यांच्या आत, राज्य अभिकरण आरपीओच्या पूर्ततेच्या संनियंत्रण आणि माहितीकरिता आरपीओ वेब-पोर्टल विकसित करील.

१३.२ वेब-पोर्टल विकसित केल्यानंतर एक महिन्याच्या आत, बंधन असलेल्या सर्व संस्था/व्यक्ती या वेब-पोर्टलवर स्वतःची नोंदणी करतील आणि फक्त या वेब-पोर्टलच्या माध्यमातून मासिक किंवा अन्य विनिर्दिष्टित कालावधीसाठीची आवश्यक माहिती राज्य अभिकरणाकडे सादर करील.

१३.३ वितरण परवानाधारक आणि स्व-वापरासाठीच्या वीजनिर्मात्यांच्या आरपीओ पूर्ततेची पडताळणीकरिता सहाय्य करणारे अनुक्रमे राज्य भार प्रेषण केंद्र आणि मुख्य विद्युत निरीक्षक देखील एक महिन्याच्या आत आरपीओ वेब-पोर्टलवर त्यांची नोंदणी करतील.

१३.४ बंधन असलेली प्रत्येक संस्था/व्यक्ती महिन्याच्या अखेरीपासून ३० दिवसांच्या आत त्यांचा विजेचा वापर आणि महिन्यात प्राप्त केलेल्या नूतनशील ऊर्जेचा तपशील वेब-पोर्टलवर सादर करील.

१३.५ वितरण परवानाधारकाच्या वीज वापराच्या तपशीलाची पडताळणी एमएसएलडीसीकडून करण्यात येईल आणि बंधन असलेल्या अन्य संस्था/व्यक्तिंच्या तपशीलाची पडताळणी संबंधित वितरण परवानाधारक किंवा विद्युत निरीक्षकाकडून, लागू असेल त्याप्रमाणे, करण्यात येईल;

परंतु असे की, वेब-पोर्टलवरील अशा माहितीची पडताळणी महिन्याच्या अखेरीपासून ४५ दिवसांच्या आत पूर्ण करण्यात येईल;

१३.६ प्रत्येक तिमाहीपासून ६० दिवसांच्या आत, राज्य अभिकरण आरपीओ वेब-पोर्टलवर बंधन असलेल्या संस्था/व्यक्तिंच्या आरपीओ पूर्ततेची सद्यस्थिती प्रदर्शित करील.

१३.७ आर्थिक वर्षाच्या अखेरीस, बंधन असलेल्या संस्था/व्यक्ति आरपीओ वेब-पोर्टलच्या माध्यमातून नूतनशील ऊर्जा किंवा नूतनशील ऊर्जा प्रमाणपत्राच्या प्राप्तीचा कागदोपत्री पुरावा अपलोड/सादर करील;

परंतु असे की, असे दस्तऐवज आर्थिक वर्षाच्या अखेरीपासून ४५ दिवसांच्या आत सादर करण्यात येतील;

परंतु आणखी असे की, राज्य अभिकरण आर्थिक वर्षाच्या अखेरीपासून ६० दिवसांच्या आत पडताळणी प्रक्रिया पूर्ण करील.

१३.८ विनियम १३ मध्ये ठरवून दिलेली कार्ये पार पाडण्यात झालेल्या विलंबापोटी विलंबाच्या प्रति दिवशी रुपये १०० दंड लागू होईल;

परंतु असे की, कार्ये पार पाडण्यातील सातत्याने किंवा वारंवार होणारा विलंब विनियमांची अ-पूर्तता म्हणून मानण्यात येईल आणि विद्युत अधिनियमांच्या कलम १४२ अंतर्गत कारवाईस पात्र होईल.

१३.९ पडताळणी प्रक्रिया पूर्ण झाल्यानंतर, राज्य अभिकरण बंधन असलेल्या प्रत्येक संस्था/व्यक्तिंच्या आरपीओ पूर्ततेची माहिती आरपीओ वेब-पोर्टलवर प्रदर्शित करील.

१३.१० आर्थिक वर्षाच्या अखेरीपासून ६० दिवसांमधील आरपीओ पूर्ततेच्या स्थितीच्या आधारावर, राज्य अभिकरण आरपीओ वेब-पोर्टलच्या माध्यमातून बंधन असलेल्या संस्था/व्यक्तिंवर आकारण्यात यावयाच्या प्रोत्साहन-अधिदान किंवा दंडाची परिगणना करील;

परंतु असे की, वितरण परवानाधारकास लावावयाच्या प्रोत्साहन-अधिदान किंवा दंडास अंतिम स्वरुप देण्यात येईल आणि वार्षिक महसुली गरजेमध्ये समायोजित करण्यासाठी आरपीओ वेब-पोर्टलच्या माध्यमातून त्यास कळविण्यात येईल. ;

परंतु असेही की, बंधन असलेल्या अन्य संस्था/व्यक्तिंनी द्यावयाच्या दंडास अंतिम स्वरूप देण्यात येईल आणि आरपीओ वेब-पोर्टलच्या माध्यमातून १५ दिवसांच्या आत अदा करण्यासाठी कळविण्यात येईल, जो आरपीओ वेब-पोर्टलवर असलेल्या ऑनलाईन सुविधेच्या माध्यमातून आरपीओ निधीमध्ये जमा करण्यात येईल;

परंतु आणखी असे की, १५ दिवसांच्या आत दंड अदा केला नाही तर दंडाच्या रकमेवर विलंबाच्या कालावधीसाठी, भारतीय स्टेट बँकेने संबंधित महिन्याच्या १ तारखेस जाहीर केल्यानुसार निधीवर-आधारित व्याज दराने कर्जावर एक वर्षात होणारा सीमान्तिक खर्च (एमसीएलआर) अधिक ३५० बेसिस अंश मिळून येणाऱ्या दराने सरळ व्याजाच्या आधारे, विलंब भरणा आकार लावण्यात येईल.

१३.११ बंधन असलेल्या संस्था/व्यक्तिंनी दंडाची रक्कम अदा न करणे किंवा आवश्यक तपशील सादर न करणे ही बाब विनियमांचे पालन न करण्यात येण्याची मानण्यात येईल आणि आयोग स्वतःहून किंवा राज्य अभिकरणाने केलेल्या शिफारशीवरून अशा संस्था/व्यक्तिविरुद्ध अधिनियमाच्या कलम १४२ अंतर्गत कारवाई सुरू करील.

भाग सी : नूतनशील ऊर्जेचे दर ठरविणे

१४ कार्य कालावधीमध्ये कार्यान्वित झालेल्या नूतनशील ऊर्जा प्रकल्पांकरिता दर ठरविण्याबाबतची तत्त्वे

या विनियमांमध्ये विनिर्दिष्ट करण्यात आलेल्या कार्य कालावधी दरम्यान कार्यान्वित झालेल्या सर्व नूतनशील ऊर्जा प्रकल्पांना, अशा प्रकल्पातून निर्माण झालेल्या विजेचा दर ठरविण्यासाठी, स्पर्धात्मक बोली प्रक्रियेमध्ये सहभागी होण्याचा किंवा नूतनशील ऊर्जेच्या दर निश्चितीकरणाच्या अटी व शर्तींचे नियमन करणाऱ्या राज्य आयोगाच्या

विनियमांमध्ये विनिर्दिष्ट केलेली वीज दराची रचना आणि अन्य अटी अनुसरण्याचा किंवा नूतनशील ऊर्जा प्रमाणपत्राची (आरइसी) पध्दत स्वीकारण्याचा पर्याय असेल;

परंतु असे की, जे प्रकल्प पहिला किंवा दुसरा पर्याय स्वीकारतील त्यांना, नूतनशील ऊर्जेच्या दर निश्चितीकरणाच्या अटी व शर्तींचे नियमन करणाऱ्या राज्य आयोगाच्या विनियमांमध्ये ठरवून दिल्यानुसार, वीज दराच्या संपूर्ण कालावधी किंवा वीज खरेदी कराराच्या वैध कालावधी दरम्यान, जे नंतर होईल त्या कालावधीसाठी, तो पर्याय चालू ठेवावा लागेल;

परंतु असेही की, असे नूतनशील ऊर्जा प्रकल्प, वितरण परवानाधारकांबरोबर किंवा मुक्त प्रवेश ग्राहकाबरोबर, जसे असेल तसे, वीज खरेदी करार करण्यापूर्वी दर ठरविण्याच्या पद्धतीची निवड करतील.

भाग ड - इतर बाबी

१५ ग्रीडशी जोडणीची चौकट

विजेच्या निष्कासनाच्या पायाभूत सोयीसुविधा विकसित करण्याची जबाबदारी संबंधित निर्मिती कंपनीची राहील आणि वीज दराच्या निश्चितीकरणाच्या प्रयोजनासाठी ही बाब प्रकल्पाचा अंतर्गत भाग असल्याचे मानण्यात येईल.

१६ शिथील करण्याचे अधिकार

राज्य आयोग, स्वतःहून किंवा हितसंबंधित व्यक्तीने केलेल्या अर्जाच्या संदर्भात, या विनियमांतील कोणतीही तरतूद सर्वसाधारण किंवा विशेष आदेशाद्वारे शिथील करील किंवा लागू करणार नाही. मात्र त्यापूर्वी, यासंबंधीच्या कारणांची लेखी नोंद करण्यात येईल आणि बाधित होऊ शकणाऱ्या व्यक्तींना त्यांची बाजू मांडण्याची संधी देण्यात येईल.

१७ आदेश आणि कार्यप्रणाली निर्देश

अधिनियमातील तरतुदींच्या अधीन राहून, या विनियमांच्या अंमलबजावणी संबंधात आयोग आदेश व कार्यप्रणाली निर्देश देऊ शकेल.

१८ सुधारणा करण्याचे अधिकार

राज्य आयोग, कोणत्याही वेळी या विनियमांतील कोणत्याही तरतुदीमध्ये बदल, फेरफार, अल्प-बदल किंवा सुधारणा, त्यासंबंधीच्या कारणांची लेखी नोंद करून, करू शकेल.

१९ अडचणी दूर करण्याचे अधिकार

या विनियमांतील तरतुदी अंमलात आणताना जर कोणतीही अडचण उद्‌भवली तर राज्य आयोग, साधारण किंवा विशिष्ट आदेशाद्वारे, अधिनियमातील तरतुदींशी विसंगत नसेल व अडचण दूर करण्यासाठी त्यास आवश्यक वाटेल अशी तरतूद करू शकेल.

अभिजीत देशपांडे,
सचिव,
महाराष्ट्र विद्युत नियामक आयोग.

मुंबई,
दिनांक २७ डिसेंबर २०१९.

MAHARASHTRA ELECTRICITY REGULATORY COMMISSION

Maharashtra Electricity Regulatory Commission (RENEWABLE PURCHASE OBLIGATION, ITS COMPLIANCE AND IMPLEMENTATION OF RENEWABLE ENERGY CERTIFICATE FRAMEWORK) REGULATIONS, 2019

ELECTRICITY ACT, 2003.

No. MERC/Tech/Regulation/2019/1232- In exercise of the powers conferred under sections 61, 66, 86(1)(e) and 181 of the Electricity Act, 2003 and all other powers enabling it in this behalf, and after previous publication, the Maharashtra Electricity Regulatory Commission hereby makes the following Regulations:

1 Short title, extent and commencement

1.1 These Regulations may be called the Maharashtra Electricity Regulatory Commission (Renewable Purchase Obligation, its Compliance and Implementation of Renewable Energy Certificate Framework) Regulations, 2019.

1.2 These Regulations shall extend to the whole of the State of Maharashtra and to all matters within the jurisdiction of the State Commission.

1.3 These Regulations shall come into force from the date of their publication in the *Official Gazette*.

2 Definitions

2.1 In these Regulations, unless the context otherwise requires:

(a) "Act" means the Electricity Act, 2003 (36 of 2003), including amendments thereto;

(b) "Captive User" means a person or member within the meaning of Section 2(8) of the Act, being the end user of the electricity generated in a Captive Generating Plant primarily for his own use, and the term "captive use" shall be construed accordingly;

(c) "Central Agency" means such entity as the Central Commission may designate;

(d) "Central Commission" means the Central Electricity Regulatory Commission referred to in sub-section (*1*) of section 76 of the Act;

(e) "Certificate" means the Renewable Energy Certificate (or "REC") issued by the Central Agency in accordance with the procedures prescribed and under the provisions of the Central Electricity Regulatory Commission (Terms and Conditions for recognition and issuance of Renewable Energy Certificate for Renewable Energy Generation) Regulations, 2010, as amended from time to time ("the Central Commission's REC Regulations");

(f) "Generic Tariff" means the Generic Tariff approved or adopted by the Commission for generation from different Renewable Energy sources in accordance with the Maharashtra Electricity Regulatory Commission (Terms and Conditions for Determination of Renewable Energy Tariff) Regulations, 2015, or as amended from time to time;

(g) "Inter-connection Point" shall mean the interface point of a Renewable Energy generating facility with the transmission system or distribution system, as the case may be:

(i) in relation to Wind Energy Projects and Solar Photo Voltaic (PV) Projects, the inter-connection point shall be the line isolator on the outgoing feeder on the HV side of the Pooling Sub-station;

Explanation:-The Pooling Sub-station shall mean the sub-station at the site of the wind farm or Solar power plant, which shall include step-up transformer and associated switchgear, and to the LV side of which multiple Generating Units (*i.e.* Wind Turbine Generators or Solar PV modules/arrays/inverter units) are connected;

(ii) in relation to Mini and Micro Hydro power, Small Hydro power, Biomass power, non-fossil fuel-based Co-generation power and Solar Thermal power Projects, the inter-connection point shall be the line isolator on the outgoing feeder on the HV side of the generator transformer.

(h) "MNRE" refers to the Ministry of New and Renewable Energy, Government of India;

(i) "Obligated Entity" means a Distribution Licensee, a user owning a captive power plant, and Open Access Consumer in the State of Maharashtra required to comply with the Renewable Purchase Obligation ("RPO") under these Regulations subject to fulfilment of conditions in Regulation 5;

(j) "Open Access Consumer" means a person availing power using Open Access pursuant to the Regulations of the State Commission governing the terms and conditions for Transmission Open Access or Distribution Open Access;

(k) "Power Exchange" means an entity operating as a Power Exchange for electricity in terms of orders issued by the Central Commission;

(l) "Renewable Energy Sources" means the renewable sources such as mini hydro, micro hydro, small hydro, wind, Solar, biomass including bagasse, bio fuel cogeneration, urban or municipal waste and such other sources as are recognized or approved by MNRE;

(m) "State Agency" means the Maharashtra Energy Development Agency, or such other entity as may be designated by the State Commission to act as the agency for accreditation and recommending Renewable Energy Projects for registration and to undertake functions under these Regulations;

(n) "State Commission" means the Maharashtra Electricity Regulatory Commission;

(o) "Year" means a financial year ("FY").

2.2 Words and expressions used in these Regulations and not defined herein but defined in the Act or the Regulations of the Central Commission or the State Commission shall have the same meaning as assigned to them in the Act or such Regulations.

PART A: GENERAL

3 Scope of Regulations and extent of application

3.1 These Regulations shall apply in all cases where the State Commission is to promote Co-generation from renewable sources and generation of electricity from renewable sources and is to specify a minimum percentage for procurement of energy generated from such sources on the basis of total consumption of electricity within the area of a Distribution Licensee.

Provided that total consumption of electricity shall exclude the electricity procured from Hydro power.

3.2 These Regulations shall apply to :

(a) Distribution Licensees in the State of Maharashtra ;

(b) Captive Users in Maharashtra, subject to the conditions in Regulation 5 ;

(c) Open Access Consumers in Maharashtra, subject to the conditions in Regulation 5.

PART B: RENEWABLE ENERGY PURCHASE OBLIGATION

4 Eligible Renewable Energy sources

4.1 For the purposes of these Regulations, energy generation from all types of Renewable Energy ("RE") sources as recognised or approved by the MNRE shall be considered :

Provided that any new technology may qualify as 'renewable' only after the State Commission has approved such technology based on approval by the MNRE.

4.2 The eligible RE sources shall include without limitation the following :

(a) Non-fossil fuel (including bagasse) based Co-generation (both qualifying and non-qualifying Co-generation)

(b) Wind Energy

(c) Biomass Power based on Rankine Cycle technology

(d) Small Hydro, Mini Hydro, Micro Hydro Power

(e) Waste to Energy based on technologies approved by MNRE

(f) Solar Power

(g) Hybrid RE based on RE technologies and sources approved by MNRE and the State Commission

(h) Power generated from co-firing of biomass in the thermal power plants

(i) Any other source recognised or approved by MNRE and the State Commission.

4.3 Generation from grid-connected RE sources having suitable metering and communication arrangement with Distribution Licensee / Maharashtra State Load Despatch Centre ("MSLDC") shall be considered as generation from eligible RE sources ;

Provided that generation from off-grid RE sources setup by Distribution Licensee for meeting its universal service obligations, shall be considered as generation from eligible RE sources only if suitable metering and communication arrangement in accordance with CEA (Installation and Operation of Meters) Regulations, 2006 as amended from time to time exists and Distribution Licensee communicate details of such generation on monthly basis to State Agency.

4.4 Procurement of RECs issued for RE generation within and outside Maharashtra shall be considered as eligible instruments for the purpose of RPO compliance by Obligated Entities within Maharashtra over the Operating Period specified in Regulation 6.

5 Obligated Entities

5.1 The percentage specified in Regulation 7.1 shall be applicable to all Obligated Entities covering Distribution Licensees, Open Access Consumers and captive users within Maharashtra, subject to the following conditions :

(a) Any person who owns a grid-connected Captive Generating Plant based on conventional fossil fuel with installed capacity of 1 MW and above, or such other capacity as may be stipulated by the State Commission from time to time, and consumes electricity generated from such Plant for his own use shall be subject to RPO to the extent of a percentage of his consumption met through such fossil fuel-based captive source ;

(b) Any person having a Contract Demand of not less than 1 MW and who consumes electricity procured from conventional fossil fuel-based generation through Open Access shall be subject to RPO to the extent of a percentage of his consumption met through such fossil fuel-based Open Access source :

Provided that the State Commission may, by order, modify/revise the minimum capacity referred to in sub-clauses (a) and (b) above from time to time.

Provided further that the condition under sub-clause (a) above shall not be applicable in case of stand-by (or emergency back-up) captive generating facilities.

6 Operating Period

The Operating Period of the RPO framework specified under these Regulations shall commence from 1 April, 2020 and shall be valid until 31 March, 2025.

7 Renewable Purchase Obligation target

7.1 Every Obligated Entity shall procure electricity generated from eligible RE sources to the extent of the percentages, out of its total procurement of electricity from all sources excluding energy from Hydro power in a year, set out in the following Table :—

Year	Quantum of purchase (in %) from Renewable Energy sources (in terms of energy equivalent in kWh)		
	Solar	Non-Solar (other RE)	Total
	(a)	(b)	(c)
2020-2021	4.50%	11.50%	16.00%
2021-2022	6.00%	11.50%	17.50%
2022-2023	8.00%	11.50%	19.50%
2023-2024	10.50%	11.50%	22.00%
2024-2025	13.50%	11.50%	25.00%

7.2 RPO target stipulated above are minimum target to be achieved. Obligated Entity shall endeavour to achieve RPO target notified by the Central Government from time to time for which it will be eligible for incentive as per Regulation 12.

7.3 Obligated Entity can use surplus Solar energy upto 15% of total RPO target to meet short fall in non-Solar RPO target and vice-versa ;

Provided that Obligated Entity by providing detailed justification may seek prior approval of the Commission for adjusting more than 15% surplus energy from one category against short fall in other RPO category.

7.4 Any variation in the fulfilment of RPO targets by the Obligated Entity within a band of +/- 5% of the applicable RPO target (in terms of Energy Units or MWh) for the respective years shall be allowed for carry forward to subsequent year under exceptional circumstances subject to detailed scrutiny.

7.5 Distribution Licensee with peak demand less than 10 MW, a Captive User of a Captive Generating Plant with installed capacity of 1 MW and above, and Open Access Consumers with Contract Demand of 1 MW and above, shall be required to meet only their composite RPO target set out in column (c) of the Table above annually :

Provided that in case of Captive User of a Captive Generating Plant commissioned before 1 April 2016, the composite RPO target with respect to the energy procured from such Captive Generating Plant shall be 9% :

Provided further that in case of Captive Generating Plant commissioned on or after 1 April 2016, the composite RPO target shall be equal to the target applicable for the year in which project is commissioned :

Provided further that in case of any augmentation of the Captive Generating Plant, the RPO target for augmented capacity shall be equal to the RPO target applicable for the year in which such augmented capacity has been commissioned :

Provided also that each Distribution Licensee shall include its plan for procurement of power from RE sources in its long-term power procurement plan such as would meet the RPO target specified above.

7.6 An Obligated Entity may meet its RPO target by way of its own generation or procurement of power from another RE Project or by purchase from a Licensee or by purchase of RECs or by a combination of these options :

Provided that procurement of RE power by a Distribution Licensee at a Generic Tariff rate approved by the State Commission or at a rate discovered through transparent process of competitive bidding and duly approved/adopted by the Commission shall be considered as eligible quantum for fulfilment of the RPO of such Distribution Licensee :

Provided further that RE power procurement as per agreement signed before notification of MERC (Renewable Purchase Obligation, its compliance and implementation of REC) Regulations, 2010 shall be considered as eligible quantum for fulfilment of the RPO of such Distribution Licensee.

8 Certificates under the Regulations of the Central Commission

Subject to the terms and conditions contained in these Regulations, the Certificates issued under the Central Commission's REC Regulations shall be valid instruments for the discharge of the Obligations set out in these Regulations for the Obligated Entities to purchase electricity from RE sources :

Provided that, in the event of an Obligated Entity seeking to fulfil its RPO by purchase of Certificates, the obligation to purchase electricity from Solar generation may be fulfilled only by purchase of Solar Certificates, and the obligation to purchase electricity from generation based on RE other than Solar may be fulfilled only by purchase of non-Solar Certificates.

9 State Agency

9.1 The State Agency shall function in accordance with the directions of the State Commission and shall act in a manner consistent with the procedures and rules of the Central Agency for discharge of its functions under the Central Commission's REC Regulations.

9.2 The State Agency shall devise an appropriate protocol for collection of information from various sources such as RE Generating Companies, Obligated Entities, MSLDC, etc., and compute the compliance of RPO targets by Obligated Entities.

9.3 The State Agency shall submit to the State Commission the quarterly status of compliance of RPO by the Obligated Entities in the stipulated format and may suggest appropriate measures as may be necessary for compliance of such Obligation.

9.4 The State Commission may from time to time stipulate the fees and charges payable to the State Agency for discharge of its functions under these Regulations.

9.5 If the State Commission is satisfied that the State Agency is not able to discharge its functions satisfactorily, it may, by general or special order, designate any other entity to function as the State Agency.

10 Distribution Licensees

10.1 Each Distribution Licensee shall indicate, with evidence, the estimated quantum of purchase from RE sources for each year of the Operating Period in its Multi Year Tariff Petition and shall accordingly enter into arrangements to meet its RPO.

10.2 The estimated quantum of RE purchase shall be in accordance with Regulation 7.1 corresponding to the approved power purchase quantity excluding Hydro power for each year of the Operating Period.

10.3 Each Distribution Licensee shall furnish a summary statement of energy procured from different RE sources on a monthly basis to the State Agency.

10.4 Within 60 days of close of the financial year, each Distribution Licensee shall submit a detailed statement of energy procurement from various RE sources, duly certified by the statutory auditor.

11 Captive Users and Open Access Consumers

11.1 Subject to the conditions specified in Regulation 5, Captive Users and Open Access Consumers shall submit details of their consumption of electricity and power purchase from RE sources towards fulfilment of their respective RPO on a monthly basis to the State Agency.

11.2 Captive Users and Open Access Consumers shall purchase RE as specified in Regulation 7.1 corresponding to power purchase quantity excluding Hydro power for each year of the Operating Period and shall accordingly enter into arrangements to meet their respective RPO.

11.3 Subject to fulfilment of conditions for captive usage and eligibility criteria under Regulation 5.1 (a), the sale of surplus electricity from a RE-based Captive Power Project over and above the captive consumption will qualify for availing RECs as provided in Regulation 8 :

Provided that on availing REC, such surplus energy shall not be eligible for incentive as specified in Regulation 12.

12 Incentives and Penalty

12.1 Regulation 7 provides minimum percentage of RE to be procured in each year by Obligated Entity.

12.2 Distribution Licensee shall endeavour to achieve total RPO target notified by the Central Government and for doing so it will get incentive of Rs 0.25 per kWh for RE procured above the minimum percentage specified in Regulation 7 upto the percentage notified by the Central Government as under or as may be notified from time to time:

Year	Solar	Non-Solar	Total
2020-2021	8.75%	10.25%	19.00%
2021-2022	10.50%	10.50%	21.00%

Provided such incentive will not be applicable if Distribution Licensee have not fulfilled Renewable Purchase Obligations on cumulative basis;

Provided further that RE procured during the year for meeting RPO of previous years shall be deducted while determining eligible RE quantum for incentives.

12.3 Any shortfall in meeting the minimum percentage of RE as specified in Regulation 7 may be carried forward from FY 2020-21 and FY 2021-22 to FY 2022-23 and from FY 2023-24 to FY 2024-25 and Obligated Entity shall meet such shortfall on cumulative basis by 31 March 2023 and 31 March 2025, respectively;

Provided that Distribution Licensee shall be subjected to reduction in Annual Revenue Requirement at a rate of Rs 0.10 per kWh for cumulative shortfall in total RE procurement target for each year;

Provided further that other Obligated Entities shall be subjected to penalty of Rs. 0.10 per kWh for cumulative shortfall in total RE procurement target for each year;

Provided further that any cumulative shortfall in RE procurement as on 31 March 2023 and/or 31 March 2025 shall not be carried forward for next year and be adjusted by imposing reduction in ARR for Distribution Licensees and imposing penalty for other Obligated Entities, at rate of floor price of respective REC as on that date;

Provided further that if Obligated Entity is able to demonstrate that even after taking all possible measures including procurement of RECs, it is not able to meet RPO then the Commission may reduce the penalty amount subject to conditions as may be stipulated in that Order.

12.4 Incentives and Penalties for Distribution Licensees shall be determined and approved/levied by the Commission in ARR determination process.

12.5 Penalties for other Obligated Entities shall be collected by the State Agency through RPO Web-portal;

Provided that State Agency shall maintain separate account in the name of RPO Fund for this purpose;

Provided further that with prior approval of the Commission, the State Agency may utilise such amount for meeting its expenses for creating and maintaining RPO Web-portal, and any surplus left thereafter shall be deposited in to the State Deviation Pool Account created as per MERC (Deviation Settlement Mechanism and Related Matters) Regulations, 2019 on quarterly basis and shall be utilised as per Regulation 15(D) of those Regulations;

Provided further that at the end of each Financial Year, State Agency shall submit certified details of all transaction under RPO Fund.

13 Monitoring and Implementation Framework

13.1 Within three months from notification of this Regulations, State Agency shall develop RPO Web-portal for RPO compliance monitoring and reporting.

13.2 Within one month of development of RPO Web-portal, all Obligated Entities shall register themselves on RPO Web-portal and submit requisite information monthly or for any other specified period to State Agency through this Web-portal only.

13.3 State Load Despatch Centre and Chief Electrical Inspector who will be assisting the State Agency in verification of RPO compliance of Distribution Licensees and Captive Consumers, respectively, shall also register themselves on RPO Web-portal within a month.

13.4 Every Obligated Entity shall submit its electricity consumption and details of RE procured in a month within 30 days from end of the month on the Web based portal.

13.5 Details of electricity consumption of Distribution Licensee shall be verified by MSLDC and that of other Obligated Entities shall be verified by concerned Distribution Licensee or Electrical Inspector, whichever is applicable.

Provided such verification of the web based data shall be completed within 45 days from end of the month.

13.6 Within 60 days from end of each quarter, State Agency shall publish RPO compliance status of Obligated Entities on RPO Web-portal.

13.7 At the end of Financial Year, Obligated Entities shall upload/submit documentary evidence of procurement of RE or REC to State Agency through RPO Web-portal;

Provided that such document shall be submitted within 45 days from end of Financial Year;

Provided further that State Agency shall complete verification process within 60 days from end of Financial Year.

13.8 Any delay in performing activities stipulated in Regulation 13 shall attract penalty of Rs. 100 per day of delay;

Provided that continuous or repeated default or delay in performing activities shall be treated as non-compliance of the Regulations and may attract action under Section 142 of the EA.

13.9 Subsequent to completion of verification process, State Agency shall publish RPO compliance of each of Obligated Entity on RPO Web-portal.

13.10 Based on RPO compliance status within 60 days from end of Financial Year, State Agency shall compute incentive or penalty to be levied to Obligated Entity using RPO Web-portal;

Provided that incentive or penalty leviable to Distribution Licensee shall be finalised and communicated through RPO Web-portal for adjustment in Annual Revenue Requirement;

Provided further that penalty payable by Other Obligated Entity shall be finalised and communicated through RPO Web-portal for payment within 15 days which shall be deposited in RPO Fund though online payment facility on RPO Web-portal;

Provided further that non-payment of penalty within 15 days shall attract delayed payment charges on simple interest basis at the one-year Marginal Cost of Funds-based

Lending Rate ('MCLR') as declared by the State Bank of India applicable as on 1st of the respective month plus 350 basis points per annum on the penalty amount for the period of delay.

13.11 Non-payment of penalty or non-submission of required details by Obligated Entity shall be treated as non-compliance of Regulations and the Commission on suo motu or on the recommendation from the State Agency may initiate action against such Entity under Section 142 of the Act.

PART C: RENEWABLE ENERGY PRICING

14 Pricing Principles for Renewable Energy Projects commissioned during the Operating Period

All RE Projects commissioned during the Operating Period specified in these Regulations shall have the option of participate in competitive bidding process or following the Tariff structure and other conditions as specified in the Regulations of the State Commission governing the terms and conditions for determination of RE Tariff or adopt the REC mechanism for pricing of the electricity generated from such Projects:

Provided that Projects that choose one or the other option shall have to continue with that option during the entire Tariff Period or until validity of the Power Purchase Agreement, whichever is later;

Provided also that such RE Projects shall exercise their choice of pricing mechanism prior to execution of the PPA with a Distribution Licensee or an Open Access Consumer, as the case may be.

PART D: OTHER MATTERS

15 Grid Connectivity Framework

Development of evacuation infrastructure shall be responsibility of concerned Generating Company and it shall be treated as integral part of project for the purpose of tariff determination.

16 Power to Relax

The State Commission may, by general or special order, for reasons to be recorded in writing, and after giving an opportunity of hearing to the parties likely to be affected, relax or waive any of the provisions of these Regulations on its own motion or on an application made by an interested person.

17 Issue of Orders and Practice Directions

Subject to the provisions of the Act, the Commission may issue Orders and Practice Directions with regard to the implementation of these Regulations.

18 Power to Amend

The State Commission may, at any time, vary, alter, modify or amend any provisions of these Regulations, for reasons to be recorded in writing.

19 Power to Remove Difficulties

If any difficulty arises in giving effect to the provisions of these Regulations, the State Commission may, by general or specific order, make such provisions not inconsistent with the provisions of the Act as may appear to be necessary for removing the difficulty.

ABHIJIT DESHPANDE,
Secretary,
Maharashtra Electricity Regulatory Commission.

Mumbai,
Dated the 27th December 2019.

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The Gujarat Government Gazette

EXTRAORDINARY

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Separate paging is given to this Part in order that it may be filed as a Separate Compilation.

PART IV-C

Statutory Rules and Orders (Other than those published in Parts I, I-A and I-L) made by Statutory Authorities other than the Government of Gujarat including those made by the Government of India, the High Courts, the Director of Municipalities, the Commissioner of Police, the Director of Prohibition and Excise, the District Magistrates and the Election Commission, Election Tribunals, Returning Officers and other authorities under the Election Commission.

GUJARAT ELECTRICITY REGULATORY COMMISSION (GERC)

GUJARAT ELECTRICITY REGULATORY COMMISSION (PROCUREMENT OF ENERGY FROM RENEWABLE SOURCES) (SECOND AMENDMENT) REGULATIONS, 2018

Notification: No. 01 of 2018

In exercise of Powers conferred under Section 61, 86 and 181 of the Electricity Act, 2003 (Act No. 36 of 2003) and all other powers enabling it in this behalf, and after previous publication, the Gujarat Electricity Regulatory Commission hereby makes the following regulations, to amend Gujarat Electricity Regulatory Commission (Procurement of Energy from Renewable Sources) Regulations, 2010 (hereinafter referred to as "The Principal Regulations") namely:

1) Short Title Extent and Commencement:

(i) These regulations shall be called the Gujarat Electricity Regulatory Commission (Procurement of Energy from Renewable Sources) (Second Amendment) Regulations, 2018.

(ii) These Regulations shall extend to the whole of the State of Gujarat.

2) These regulations shall come into force with effect from the date of their publication in the Official Gazette.

3) Substitution of Table 1 of Regulation 4.1:

Table 1 provided in the Gujarat Electricity Regulatory Commission (Procurement of Energy from Renewable Sources) (First Amendment) Regulations, 2014 is substituted by following Table – I and II:

TABLE - I

Year	Minimum Quantum of purchase (in %) from renewable energy sources (in terms of energy in kWh).			
	Wind (%)	Solar (%)	Others (Biomass, Bagasse, Hydro and MSW) (%)	Total (%)
(1)	(2)	(3)	(4)	(5)
2010-11	4.5	0.25	0.25	5.0
2011-12	5.0	0.5	0.5	6.0
2012-13	5.5	1.0	0.5	7.0
2013-14	5.5	1.0	0.5	7.0
2014-15	6.25	1.25	0.5	8.0
2015-16	7.0	1.5	0.5	9.0
2016-17	7.75	1.75	0.5	10.0

TABLE – II

Year	Minimum Quantum of purchase (in %) from renewable energy sources (in terms of energy in kWh).			
	Wind (%)	Solar (%)	Others (Biomass, Bagasse, MSW and Hydro) (%)	Total (%)
(1)	(2)	(3)	(4)	(5)
2017-18	7.75	1.75	0.5	10.00
2018-19	7.95	4.25	0.5	12.70
2019-20	8.05	5.5	0.75	14.30
2020-21	8.15	6.75	0.75	15.65
2021-22	8.25	8.0	0.75	17.00

4) Substitution of para 2 of Principal Regulation 4.1:

If the above mentioned minimum quantum of power purchase either from Solar or Wind or Others (including Biomass, Bagasse, Hydro and MSW) is not available in a particular year of FY 2017-18 to 2021-22, then in such cases, additional renewable energy available either from Solar or Wind or Others shall be utilised for fulfilment of RPO in accordance with Column 5.

5) Addition in Regulation 4.1 of the Principal Regulation:

A new third para is added after second para of Regulation 4.1 of the Principal Regulations as under:

Distribution Licensee(s) shall compulsorily procure 100% power produced from all the Waste-to-Energy Projects in the State of Gujarat, in the ratio of their procurement of power from all sources including their own, at the tariff discovered through a Competitive Bidding Process as envisaged in the Gujarat Waste to Energy Policy, 2016 subject to ceiling of generic tariff as determined by the Commission.

ROOPWANT SINGH, IAS
Secretary
Gujarat Electricity Regulatory Commission
Gandhinagar, Gujarat

Place: Gandhinagar.
Date: 21/04/2018.

Government Central Press, Gandhinagar

पंजीकरण संख्या–यू0ए0 / डी0ओ0 / डी0डी0एन0 / 30 / 2018–2020



सरकारी गजट, उत्तराखण्ड

उत्तराखण्ड सरकार द्वारा प्रकाशित

रुड़की, शनिवार, दिनांक 22 सितम्बर, 2018 ई0 (भाद्रपद 31, 1940 शक सम्वत्)

भाग 1–क

नियम, कार्य–विधियां, आज्ञाएं, विज्ञप्तियां इत्यादि जिनको उत्तराखण्ड के राज्यपाल महोदय, विभिन्न विभागों के अध्यक्ष तथा राजस्व परिषद् ने जारी किया

UTTARAKHAND ELECTRICITY REGULATORY COMMISSION

NOTIFICATION

September 06, 2018

UERC (Tariff and Other Terms for Supply of Electricity from Renewable Energy Sources and non-fossil fuel based Co-generating Stations) Regulations, 2018

No. F-9 (28)/RG/UERC /2018/815—In exercise of the powers conferred under section 61(h), 86(1)(e) read with section 181 (zd) & (zp) of the Electricity Act, 2003, and all other powers enabling it in this behalf, and after previous publication, the Uttarakhand Electricity Regulatory Commission hereby makes the following regulations, namely:

CHAPTER 1
PRELIMINARY

1. Short title and commencement

(1) These regulations may be called the Uttarakhand Electricity Regulatory Commission (Tariff and Other Terms for Supply of Electricity from Renewable Energy Sources and non-fossil fuel based Co-generating Stations) Regulations, 2018.

(2) These regulations shall come into force with effect from the date of notification, and unless reviewed earlier or extended by the Commission, shall remain in force for a period of 5 years from the date of commencement.

2. Scope and extent of application

(1) These regulations shall apply in all cases where supply of electricity is being made from Renewable Energy Based Generating Stations, commissioned after coming effect of these Regulations, to the distribution licensees or local rural grids within the State of Uttarakhand:

Provided that in cases of Wind, Small Hydro projects, Biomass power based on Rankine cycle, Non-Fossil Fuel based cogeneration projects, Solar PV, Canal Bank & Canal Top solar PV, Solar Thermal power projects, Grid Interactive Roof Top and Small Solar PV plants, Biomass gasifier and Biogas, Municipal Solid Waste and Refuse Derived Fuel based power project these Regulations shall apply subject to the fulfillment of eligibility criteria specified in Regulation 4 of these Regulations;

Provided further that Regulations in Chapter 4 & 5 (except clause (B) & (C) of sub-Regulation (1) of Regulation 26) of these Regulations shall not be applicable for generating stations commissioned prior to coming into effect of these Regulations and their existing tariffs shall continue to be applicable;

Provided also that clause (d) of sub-Regulation (3) of Regulation 10, 2nd & 3rd proviso of sub-Regulation 7 of Regulation 14 shall be applicable to such stations commissioned prior to coming into effect of these Regulations;

Provided that the tariff computation norms shall be in accordance with the Regulations prevalent during the year of commissioning of those stations;

Provided also that normative levelised tariff of 12 paise/unit, over and above the generic tariff, for solar thermal/PV generating stations as specified in Regulation 15(1)(c) shall also be applicable to such stations commissioned prior to coming into effect of these Regulations;

Provided also that the Regulations other than those in Chapter 4 and 5 shall apply to other generating stations located in the State of Uttarakhand, which are based on Renewable Sources of Energy including non-fossil fuel based Co-generation and which transmit and/or supply electricity to any person other than the distribution licensee of the State utilizing State Transmission and/or Distribution System.

(2) The existing projects, which are at present supplying power to third party shall have the option to switch over to supply to the distribution licensee subject to provisions of Regulation 7 of these Regulations or the local rural grid, at generic tariffs as was applicable at the time of commissioning of their project or seek determination of project specific tariff from the Commission. The option shall be for the balance life of the project and shall not be allowed to be changed once it is exercised.

(3) The generic tariff specified for Wind, Solar PV and Solar Thermal power projects under these Regulations shall be the maximum tariff and the distribution licensee/UREDA shall invite tariff based competitive bids from generators/developers for procurement of power from these generators/developers. The distribution licensee shall enter into a PPA with the generators/developers bidding lower tariff.

Provided that implementation of Canal Bank and Canal Top Solar PV Plants by the eligible government organization (as specified by MNRE) and implementation of solar PV plants by eligible government organization shall be done through tariff based competitive bidding process. In such cases PPA for sale of power from these plants shall be signed with distribution licensee at a tariff which shall be 10% higher than the tariff quoted by L-1 bidder;

Provided further that in no case PPA for purchase of power by the distribution licensee shall be executed at a tariff exceeding the ceiling tariff as specified by the Commission in accordance with the regulations.

(4) The generating stations covered under these Regulations shall be deemed to be the generating station of a generating company and all functions, obligations & duties assigned to such generating company under the Electricity Act, 2003 shall apply to these generating stations.

3. Definitions

(1) Unless the context otherwise requires, the words used in these Regulations shall have the following meaning:

(a) **"Act"** means the Electricity Act, 2003 (36 of 2003);

(b) **"Auxiliary energy consumption" or 'AUX'** in relation to a period in case of a generating station means the quantum of energy consumed by auxiliary equipment of the generating station and transformer losses within the generating station, expressed as a percentage of the sum of gross energy generated at the generator terminals of all the units of the generating station;

(c) **"Banking"** means the process under which a captive generating station supplies power to the grid not with the intention of selling it either to a third party or to a licensee, but with the intention of exercising his eligibility to draw back this power from the grid for its own use.

(d) **"Billing cycle or Billing period"** means a period of one month for which electricity bills shall be prepared for each Eligible Consumers by the licensee;

(e) **"Biomass"** means waste produced during agricultural and forestry operations (for example straws, stalks, pine needle and lantana) or produced as a by-product of processing operations of agricultural produce (e.g., husks, shells, de-oiled cakes, etc); wood produced in dedicated energy plantations or recovered from wild bushes/weeds; and the wood waste produced in some industrial operations.

(f) **"Biomass gasification"** means a process of incomplete combustion of biomass resulting in production of combustible gases consisting of a mixture of Carbon monoxide (CO), Hydrogen (H2) and traces of Methane (CH4), which is called producer gas;

(g) "**Biogas**" means a gas created when organic matter like crop residues, sewage and manure breaks down in an oxygen-free environment (ferments);

(h) "**Capacity Utilisation Factor (CUF)**" shall mean the total energy sent out during the period expressed as a percentage of installed capacity reduced by the normative auxiliary consumption in that period.

$$CUF = \frac{ESO \times 10^7}{IC \times (100 - AUX) \times H}\%$$

Where,

ESO-Energy Sent Out Ex-bus, i.e. at interconnection point, in MU during the period,

IC- Installed capacity in MW,

AUX - % Normative Auxiliary Consumption

H - Number of hours in the period

(i) "**Capital Cost**" means capital cost as defined under Regulation 15(1) of these Regulations.

(j) "**Captive Generating Plant**" means a power plant set up by any person to generate electricity primarily for his own use and includes a power plant set up by any cooperative society or association of persons for generating electricity primarily for use of members of such cooperative society or association where not less than twenty six percent of the ownership is held by the captive user(s), and not less than fifty one percent of the aggregate electricity generated in such plant, determined on an annual basis, is consumed for the captive use.

(k) "**Captive User**" means the end user of the electricity generated in a Captive Generating Plant primarily for his own use and the term "captive use" shall be construed accordingly.

(l) "**Commission**" means the Uttarakhand Electricity Regulatory Commission;

(m) "**Control Period or Review Period**" means the period during which the norms for determination of tariff specified in these Regulations shall remain valid;

(n) "**Date of commercial operation or Commissioning (CoD)**" Date of commercial operation or Commissioning (CoD)" in relation to a unit means the date declared by the

generator on achieving maximum continuous rating through a successful trial run and in relation to the generating station, the date of commercial operation means the date of commercial operation of the last unit or block of generating station and expression 'commissioning' shall be construed accordingly.

Provided that in case of Small Hydro Plants the date of commissioning shall not be linked to achieving maximum continuous rating, nevertheless the generator will have to demonstrate the same within three years of commissioning.

Provided further that in case of Solar PV plant, date of commercial operation or Commissioning (CoD) shall be considered as the date of first injection of power into the licensee's grid after completion of project in all respect subsequent to compliance of all the following pre-requisites:

(a) Installation of energy meter as certified by the concerned Executive Engineer of the distribution licensee.

(b) Project completion report as verified by UREDA, the State nodal agency.

(c) Issuance of Clearance Certificate by the Electrical Inspector.

(d) Further, such generator has to demonstrate minimum 75% Performance Ratio based on the rated installed capacity in kW or MW at the time of inspection for initial commissioning.

(o) **"Design Energy"** means the quantum of energy which can be generated in a 90% dependable year with 95% installed capacity of the hydro generating station;

(p) **"Distribution Code"** means the UERC (Distribution Code) Regulations, 2018 specified under Section 14 of the Electricity Act 2003, read with Section 181 of the said Act and clause 18 of Distribution and Retail Supply Licence as amended from time to time;

(q) **"Eligible Consumer"** means a consumer of electricity, in the area of supply of the distribution licensee, who has a rooftop or small solar system in its premises to offset part or all of its electrical requirements;

(r) **"Expenditure incurred"** means the fund, whether the equity or debt or both, actually deployed and paid in cash or cash equivalent for creation or acquisition of a useful asset and does not include commitments or liabilities for which no payment has been released.

(s) **"Force Majeure Event"** with respect to any event or circumstance which is not within the reasonable control of, or due to an act or omission of, that party and which,

by the exercise of reasonable care and due diligence, that party is not able to prevent, including, without limiting the generality of the foregoing:

i. Acts of God like lightning, landslide, storm, action of the elements, earthquakes, flood, drought and natural disaster or exceptionally adverse weather conditions;

ii. Any act of public enemy, wars (declared or undeclared), blockades, embargo, insurrections, riots, revolution, sabotage, terrorist or military action, vandalism and civil disturbance;

iii. Unavoidable accident, fire, explosion, radioactive contamination and toxic dangerous chemical contamination;

iv. Any shutdown or interruption of the grid, which is required or directed by the State or Central Government or by the Commission or the State Load Despatch Centre; and any shut down or interruption, which is required to avoid serious and immediate risks of a significant plant or equipment failure.

(t) **"Grid interactive roof top and small solar PV plants"** means Solar PV plants installed on the roof of buildings or premises thereof and connected to the grid.

(u) **"Gross Calorific Value" or "GCV"** in relation to a fuel used in generating station means the heat produced in kCal by complete combustion of one kilogram of solid fuel or one litre of liquid fuel or one standard cubic meter of gaseous fuel, as the case may be;

(v) **"Gross Station Heat Rate" or "GSHR"** means the heat energy input in kCal required to generate one kWh of electrical energy at generator terminals of a thermal generating station;

(w) **"Hybrid Solar Thermal Power Plant"** means the solar thermal power plant that uses other forms of energy input sources alongwith solar thermal energy for electricity generation, and wherein not less than 75% of electricity is generated from solar energy component.

(x) **"Hybrid Wind Solar Power Plant"** means the hybrid plant where Solar photovoltaic (PV) array coupled with a wind turbine and configured to operate at the same point of grid connection.

(y) **"Indian Electricity Grid Code (IEGC)"** means the Grid Code specified by the Central Electricity Regulatory Commission under clause (h) of sub-section (1) of section 79 of the Act;

(z) **"Infirm Power"** means electricity generated during trial runs prior to commercial operation of a unit of a generating station;

(aa) **"Installed Capacity" or "IC"** means the summation of the name plate capacities of the units in the generating station or the capacity of the generating station (reckoned at the generator terminals);

(bb) **"Inter-connection Point"** in respect of all the RE based generating stations, except Grid interactive Roof Top & Small Solar PV Power Projects, shall mean interface point of line isolator on outgoing feeder on HV side of generator transformer in the switching year of renewable energy generating facility with the transmission system or distribution system.

Provided that in respect of Grid interactive rooftop & Small Solar PV projects, Inter-connection Point shall mean the interface of solar power generation facility under net metering arrangement with the network of licensee and shall normally be the point where export/import meter is installed to measure the energy transfer between the licensee and the eligible consumer.

(cc) **"MNRE"** means the Ministry of New and Renewable Energy of the Government of India;

(dd) **"Municipal solid waste"** means and includes commercial and residential wastes generated in a municipal or notified areas in either solid or semi-solid form excluding industrial hazardous wastes but including treated bio-medical wastes;

(ee) **"Non-fossil Fuel Based Co-generation"** means the process in which more than one form of energy (such as steam and electricity) are produced in a sequential manner by use of biomass provided the project may qualify to be a co-generation project if it fulfills the eligibility criteria as specified in Regulation 4(2)(e).

(ff) **"Open Access"** means the non-discriminatory provision for the use of transmission lines or distribution system or associated facilities with such lines or system by any licensee or consumer or a person engaged in generation in accordance with the regulations specified by the Appropriate Commission;

(gg) **"Open Access Regulations"** means the Uttarakhand Electricity Regulatory Commission (Terms and Conditions of Intra-State Open Access) Regulations, 2015 as amended from time to time;

(hh) **"Operation and Maintenance Expenses" or "O&M Expenses"** means the expenditure incurred in operation and maintenance of the generating station or part thereof, including the expenditure on manpower, repairs, spares, consumables, insurance and overheads;

(ii) **"Peak Hours/Off Peak Hours"** means particular hours of the day as may be decided by the Commission from time to time;

(jj) **"Performance Ratio"** (PR) means the ratio of plant output versus installed plant capacity at any instance with respect to the radiation measured.

$$PR = \frac{\text{Measure output in kW}}{\text{Installed Plant capacity in kW}} \times \frac{1000\ W/m^2}{\text{Measured radiation intensity in } W/m^2}$$

(kk) **"Power Purchase Agreement" or "PPA"** means a long term agreement between a generating company and a distribution licensee for supply of power on the terms and conditions specified therein and with the provision that the tariff for sale of power shall be as determined by the Commission from time to time;

(ll) **"Premises"** means the land, building or infrastructure or part or combination thereof including the rooftops or/and elevated areas owned by the Eligible Consumer;

(mm) **"Project/Plant"** means a generating station and the evacuation system upto inter-connection point, as the case may be, and in case of a small hydro generating station includes all components of generating facility such as dam, intake water conductor system, power generating station and generating units of the scheme, as apportioned to power generation;

(nn) **"Refuse Derived Fuel"** or RDF means segregated combustible fraction of solid waste other than chlorinated plastics in the form of pellets or fluff produced by drying, de-stoning, shredding, dehydrating, and compacting combustible components of solid waste that can be used as fuel;

(oo) **"Renewable Energy"** means grid quality electricity generated from renewable energy sources.

(pp) **"Renewable Energy Based Generating Stations and Non-fossil Fuel Based Co-generating Stations"** means the power plants other than the conventional generating stations generating grid quality electricity from Renewable Energy Sources.

(qq) **"Renewable Energy Sources"** means renewable sources such as small hydro, wind, solar including integration with combined cycle biomass, bio fuel co-generation, urban or municipal waste and other such sources as approved by MNRE.

(rr) "**Small Hydro Plant**" means Hydro Power projects with station capacity/installed capacity upto and including 25 MW.

(ss) "**Solar Photo Voltaic (PV) Power Project**" means the project that uses sunlight for direct conversion into electricity through photovoltaic (PV) technology.

(tt) "**Solar PV power plants on Canal Bank**" means the Solar PV power plants installed on the banks of the canals.

(uu) "**Solar PV Power Plants on Canal Top**" means the Solar PV power plants installed on the top of the canals.

(vv) "**Solar Thermal Power Project**" means the project that uses sunlight for conversion into electricity through concentrated Solar Power Technology based on either line focus or point focus principle.

(ww) "**Saleable Energy**" means the quantum of energy available for sale (ex-bus) after allowing for free energy, if any, to the home State;

(xx) "**State Grid Code**" means the Uttarakhand Electricity Regulatory Commission (State Grid Code) Regulations, 2016 specified by Uttarakhand Electricity Regulatory Commission under clause (h) of sub-section (1) of section 86 of the Act;

(yy) "**Tariff period**" means the period for which tariff is to be determined by the Commission on the basis of norms specified under these Regulations;

(zz) "**Third party owner**" means a developer who generates solar energy from its plant established in the Premises of Eligible Consumer and who has entered into a lease/commercial agreement with such Eligible Consumer;

(aaa) "**Useful Life**" in relation to a unit of a generating station including evacuation system shall mean the following duration from the date of commercial operation (CoD) of such generation facility, namely:-

(i)	Wind energy power project	25 years
(ii)	Biomass power project including Municipal Solid Waste (MSW) and Refuse Derived Fuel (RDF) based power projects With rankine cycle technology.	20 years

(iii)	Non-fossil fuel cogeneration project	20 years
(iv)	Small Hydro Plant	35 years
(v)	Solar PV/Solar thermal/Grid interactive Rooftop and small Solar PV plants/ Solar PV power plants on Canal bank/Canal top.	25 years
(vi)	Biomass Gasifier based power project	20 years
(vii)	Biogas based power project	20 years

(bbb) **"Year"** means a financial year.

(2) Save as aforesaid and unless repugnant to the context or if the subject matter otherwise requires, words and expressions used in these regulations and not defined, but defined in the Electricity Act, 2003 or the UERC (State Grid Code) Regulations or the Commission's Regulations on determination of Tariff shall have the meanings assigned to them respectively in the Act or the State Grid Code or the Commission's Regulations as amended from time to time on determination of Tariff.

CHAPTER 2

GENERAL CONDITIONS

4. Eligibility Criteria for qualifying as Generating Station based on Non-Conventional/ Renewable Energy Source

(1) For the purposes of these Regulations, generation from all types of Renewable Energy Sources and non-fossil fuel based Co-generating Plants, as approved by Ministry of New and Renewable Energy (MNRE), Government of India shall be considered and such generating stations shall be collectively referred to as RE Based Generating Stations and Co-generating Stations.

(2) At present, generation from following sources and technologies shall qualify to be covered under these Regulations:

(a) Small hydro project- Generating Stations being developed in accordance with the prevalent policies of the State Government in this regard and using new plant and machinery with capacity lower than or equal to 25 MW, at single location.

(b) Wind power project - located at the wind sites having minimum annual mean Wind Power Density (WPD) of 200 Watt/m2 measured at hub height of 50 meters and using new wind turbine generators.

(c) Solar PV, Canal bank & Canal top Solar PV, Solar Thermal and Grid interactive Roof Top and Small Solar PV Power Projects - Based on Technologies approved by MNRE.

(d) Biomass/Biogas power project - Biomass power projects using new plant and machinery based on Rankine Cycle technology and using biomass fuel sources, without use of fossil fuel;

(e) Non-fossil fuel based Co-generating Stations - The project shall qualify to be termed as a non-fossil fuel based co-generation project, if it is using new plant and machinery and is in accordance with the definition and also meets the qualifying requirement outlined below:

Topping cycle mode of co-generation – Any facility that uses non-fossil fuel input for the power generation and also utilizes the thermal energy generated for useful heat applications in other industrial activities simultaneously.

Provided that for the co-generation facility to qualify under topping cycle mode, the sum of useful power output and one half the useful thermal output be greater than 45% of the facility's energy consumption, during season.

Explanation- For the purposes of this clause,

(i) 'Useful power output' is the gross electrical output from the generator. There will be an auxiliary consumption in the cogeneration plant itself (e.g. the boiler feed pump and the FD/ID fans). In order to compute the net power output it would be necessary to subtract the auxiliary consumption from the gross output. For simplicity of calculation, the useful power output is defined as the gross electricity (kWh) output from the generator.

(ii) 'Useful Thermal Output' is the useful heat (steam) that is provided to the process by the cogeneration facility.

(iii) 'Energy Consumption' of the facility is the useful energy input that is supplied by the fuel (normally bagasse or other such biomass fuel).

(iv) 'Topping cycle' means a cogeneration process in which thermal energy produces electricity followed by useful heat application in industrial activities.

(f) Biomass Gasifier based Power Project - The project shall qualify to be termed as a biomass gasifier based power project, if it is using new plant and machinery and having a Grid connected system that uses 100% producer gas engine, coupled with gasifier technologies approved by MNRE.

(g) Biogas based Power Project - The project shall qualify to be termed as a biogas based power project, if it is using new plant and machinery and having grid connected system that uses 100% Biogas fired engine, coupled with Biogas technology for co-digesting agriculture residues, manure and other bio waste as may be approved by MNRE.

(h) Municipal solid waste based power projects - The project shall qualify to be termed as a Municipal solid waste based power project, if it is using new plant and machinery based on Rankine cycle technology and using Municipal solid waste as fuel sources.

(i) Refuse derived fuel based power projects - The project shall qualify to be termed as a Refuse derived fuel based power project, if it is using new plant and machinery based on Rankine cycle technology and using Refuse derived fuel as fuel sources.

(j) Hybrid Wind-Solar power Plant- The project shall qualify to be termed as a hybrid Wind-Solar power plant, if Solar photovoltaic (PV) array coupled with a wind turbine and configured to operate at the same point of grid connection.

(3) Any new source or technology would qualify as 'renewable energy', only after such source/ technology is based on scientifically proven technology approved by MNRE or any competent authorities under the central ministry. Further, the Commission shall determine tariffs separately for each technology after the approval of such scientifically proven technology by competent authority under the central ministry.

5. Environmental and other Clearances

(1) The RE Based Generating Stations and Co-generating Stations shall abide by the emission standards/environmental norms as may be set by the Union/State Government, and for that purpose it shall obtain all the required environmental and pollution clearances from the Central/State Pollution Control authorities, wherever applicable.

(2) The RE Based Generating Stations and Co-generating Stations shall obtain necessary clearances from the State Government/Uttarakhand Renewable Energy Development Agency (UREDA), wherever necessary.

6. Obligations and Duties of the Generating Station

(1) RE Based Generating Stations and Co-generating Stations shall indicate the capacity of its generating plant in the 'Detailed Project Report' (DPR) keeping in view the potential of electricity generation available from such source and its optimal utilization. It shall further be obliged to submit the DPR, progress of construction and details regarding commissioning of the generating plant or any other related information to the Commission in such form and manner as may be required by the Commission.

(2) The RE Based Generating Stations and Co-generating Stations shall:

(a) Ensure that all the Government and other statutory dues are paid by it within the stipulated time.

(b) Submit the technical details concerning the generation and/or transmission as may be specified by the Authority/Commission for carrying out studies relating to cost and efficiency.

(c) Submit the information in respect to generation, demand met, capacity availability, capacity utilization factor, auxiliary consumption, specific heat rate and specific oil consumption or on any other parameters etc. yearly basis or as may be directed by the Commission from time to time.

(d) Submit audited annual accounts alongwith the copy of income tax returns filed on yearly basis to the Commission.

Provided that in case the generator is having more than one generating station in operation, it shall maintain and submit plant wise details of O&M expenses alongwith the audited accounts on yearly basis to the Commission.

(e) Shall establish a communication and data transfer system with State Load Dispatch Centre and Co-ordinate with State Load Dispatch Centre and the Regional Load Dispatch Center in respect to:

(i) Scheduling;

(ii) Exchange of data of quantity of electricity transmitted through the grid;

(iii) Real time grid operation and dispatch of electricity in accordance with IEGC and State Grid Code.

(3) The RE Based Generating Stations and Co-generating Stations shall abide by the grid discipline and install adequate protection equipment for safety of its system and human life. It shall not be entitled for any compensation in the event of grid failure or any interruptions or damage to the plant or its associated sub-station and transmission line on account of any occurrence in the grid.

(4) The RE Based Generating Stations and Co-generating Stations shall establish, operate and maintain generating station, the associated substation and dedicated transmission lines, if it exercises the option to establish the line. These shall be in accordance with:

(a) The technical standards for construction of electrical plants, electric lines and connectivity with the grid as specified by the Authority (section 73 (b) of the EA 2003).

(b) Safety requirements for construction, operation and maintenance of electrical plants and electric lines as specified by the Authority (section 73 (c) of the EA 2003).

(c) Grid standards for operation and maintenance of transmission lines as specified by Central Electricity Regulatory Commission/Central Electricity Authority or the State Transmission Utility (section 73 (d) of the EA 2003).

(d) The conditions for installation of meters for supply of electricity as specified by the Authority or the State Transmission Utility (section 73 (e) of the EA 2003).

(5) The RE Based Generating Stations and Co-generating Stations shall ensure the compliance of the 'IEGC', the State Grid Code and the Distribution Code as amended from time to time.

(6) The RE Based Generating Stations and Co-generating Stations shall ensure compliance of any general or specific direction issued and regulations made by the Commission for the generating companies.

(7) All Power Purchase Agreements (PPAs) signed by the generating stations existing on the date of notification of these regulations shall be amended in accordance with these regulations, if inconsistent with these Regulations, and such amended PPAs shall be valid for entire life of the RE Based Generating Stations and Co-generating Stations.

(8) The RE Based Generating Stations and Co-generating Stations shall coordinate with State Transmission Utility/Distribution Licensee for the purpose of planning and coordination relating to intra-state transmission/distribution system as provided under the Act.

(9) The RE Based Generating Stations and Co-generating Stations shall be under obligation to comply with the directions issued to it by the State Load Dispatch Centre failing which the plant shall be liable for appropriate action under the Act.

(10) The RE Based Generating Stations and Co-generating Stations shall pay fee and charges to the State Load Dispatch Centre as may be specified or directed by the Commission from time to time.

(11) In case of dispute with reference to quality of electricity or safe, secure and integrated operation of the grid or in relation to any direction issued by the State Load Dispatch Centre, the matter shall be referred to the Commission for adjudication.

7. Sale of Power

(1) All RE Based Generating Stations and Co-generating Stations shall be allowed to sell power, over and above the capacity required for their own use, to the distribution licensee provided that distribution licensee is willing to enter into a PPA or to local rural grids at the rates determined by the Commission or to any consumer/person within the State or outside the State at mutually agreed rates (provided that such consumer has been allowed Open Access under Open Access Regulations).

(2) The distribution licensee on an offer made by the said RE based Generating Stations and Co-generating Stations may enter into a power purchase agreement in conformity with these Regulations and relevant provisions of other Regulations and the Act. However, if the distribution licensee intends to purchase power from such generator it shall sign the PPA within two months of offer made by the generating company. Otherwise, if the

distribution licensee is not willing to purchase power from such generator it shall intimate the same to the generating company within one month of offer made by it.

Provided that where a grid interactive roof top and small Solar PV plant, is installed in the Premises, by a third party who intends to sell net energy (i.e. after adjustment of entire consumption of owner of the premise) to the distribution licensee, a tripartite agreement will have to be entered into amongst the third Party, the Eligible Consumer and such Distribution Licensee.

(3) The distribution licensee shall make an application for approval of power purchase agreement entered into with the generating company in such form and manner as specified in these regulations and UERC (Conduct of Business) Regulations, 2014 as amended from time to time within one month of the date of signing the PPA.

8. Open Access

(1) Non-discriminatory Open access in State Transmission/Distribution System shall be allowed to all RE based Generating stations and Co-generating Stations for captive use and to those covered under Regulation 7(1), which shall be subject to the provisions of the Open Access Regulations.

Provided that the 'open access' shall be allowed subject to the availability of surplus capacity in the State Transmission/Distribution System.

(2) Such open access shall be subject to payment of transmission/wheeling charges and adjustment of average transmission/distribution losses in kind as determined in accordance with the Regulation 40 of these Regulations.

(3) If any question arises as to the availability of surplus capacity in the State transmission system or the State distribution system, the matter shall be adjudicated and decided by the Commission.

CHAPTER 3

RENEWABLE PURCHASE OBLIGATION (RPO)

9. Minimum Quantum of electricity to be purchased by distribution licensees from 'non-fossil fuel based co-generation and generation of electricity from renewable energy sources'

(1) In line with the provisions of the Act, National Electricity Policy, the Tariff Policy to promote development of renewable and non-conventional sources of energy, all existing and future distribution licensees, captive users and open access customers, hereinafter referred to as "Obligated Entity", in the State shall be obliged to procure minimum percentage of their total electricity requirement for own consumption, as indicated below, from eligible renewable energy sources as defined under Regulation 4. The same shall be called the Renewable Purchase Obligation (RPO) of the Obligated Entities.

Year	*Renewable Purchase Obligation -Non-Solar*	*Renewable Purchase Obligation-Solar*
2018-19	10.25%	6.75%
2019-20	10.25%	7.25%
2020-21	10.25%	8.75%
2021-22	10.50%	10.50%
2022-23	11.00%	11.00%

Percentage RPO as stipulated above denotes Minimum Quantum of purchase from non-fossil fuel based co-generation and generation of electricity from renewable energy sources' as a percentage of total energy purchased from all sources/generated by the Obligated Entity during the year for own consumption.

Where, total energy purchased for different obligated entities shall be as under:

a. For Discoms, total energy purchased from all sources during the year for own consumption; and

b. For Open Access consumers and Captive users, total energy purchased shall be metered consumption recorded at drawl/consumption point during the year for own consumption.

Provided further that Non-Solar & Solar RPO shall be applicable on total energy purchased/generated of electricity by an obligated entity excluding energy purchased/generated from hydro sources of power;

Provided that on achievement of Solar RPO compliance to the extent of 85% and above, remaining shortfall if any, can be met by excess Non-Solar energy purchased beyond specified Non-Solar RPO for that particular year;

Provided further that on achievement of Non-Solar RPO compliance to the extent of 85% and above, remaining shortfall if any, can be met by excess Solar energy purchased beyond specified Solar RPO for that particular year.

(2) For the purpose of this RPO framework, for every obligated entity, own consumption would mean gross energy consumed or purchased by the obligated entity from all sources for its own use or for the purpose of supply to its consumers within its area of supply, excluding any inter-se sale of electricity amongst the Licensees or outside consumers.

(3) Distribution licensee shall be eligible to utilise the gross Solar energy generated from the rooftop or small solar power plants of non-obligated entities for meeting its Solar RPO compliance based on the gross energy generated meter reading of such rooftop or small solar power plant.

CHAPTER 4

TARIFF- GENERAL PRINCIPLES

10. Tariffs

(1) The tariff determined under these Regulations shall be applicable for sale of electricity to the distribution licensees and to local rural grids only. The Commission shall as far as possible be guided by the principles and methodologies, if any, specified by the CERC, National Electricity Policy and the Tariff policy.

(2) The RE Based Generating Stations and Co-generating Stations, except those mentioned under second Proviso to sub- Regulation (1) of Regulation 2, may opt for the generic tariff, as determined based on norms specified in these Regulations for different technologies, or may file a petition before the Commission for determination of "Project Specific Tariff". For this purpose, RE Based Generating Stations and Co-generating Stations shall give its option to the distribution licensee at least 3 months in advance of date of commissioning of the project or commissioning of the first unit, in case of multiple units. This option once exercised shall not be allowed to be changed during the validity period of the PPA.

Provided that the option of seeking projects specific tariff shall not be available to Grid interactive roof top and small solar PV plants, Solar PV Power Plants, Canal Top & Canal Bank based Solar PV Power Plants, Solar Thermal Plants, Wind Energy Power Plants and other RE based power projects having installed capacity upto 1 MW.

Provided that if generating company does not give its option to the distribution licensee within above stipulated time, generic tariff shall be applicable based on the date of commissioning of the project or commissioning of the first unit, in case of multiple units.

(3) Project Specific Tariff, on case to case basis, shall be determined by the Commission in the following cases:

(a) For projects opting to have their tariffs determined on the basis of actual capital cost instead of normative capital cost as specified for different technologies under Chapter 5 subject to 1st Proviso of Regulation 10(2) above, the CUF (generation) for recovery of fixed charges shall be taken as that envisaged in the approved DPR or the normative CUF specified under Chapter 5 for the relevant technology, whichever is higher;

(b) Other hybrid projects include renewable-renewable or renewable-conventional sources, for which renewable technology is approved by MNRE;

(c) Projects having old plant and machinery or equipment;

(d) The RE generating company for meeting the expenditure on Renovation, Modernisation and Up-gradation (RMU) for the purpose of extension of life beyond the useful life of its RE based power plant shall make an application before the Commission for in-principle approval of the proposal alongwith a DPR giving complete scope, cost-benefit analysis, estimated life extension from a reference date, financial package, phasing of expenditure, schedule of completion and other details as required by the Commission and the Commission while fixing their tariffs, shall be guided by the tariff norms specified in the Regulations based on actual capital cost subsequent to the completion of the RMU activities and such other factors considered relevant by the Commission;

(e) Any other new renewable energy technologies approved by MNRE.

Provided that the Commission while determining the Project Specific Tariff shall be guided by the provisions of Chapter 4 & 5 of these Regulations for technologies specifies therein.

11. Control Period or Review Period

(1) The Control Period or Review Period under these Regulations shall be of five years, of which the first year shall be the financial year 2018-19.

Provided that the benchmark capital cost of Solar PV, Canal Bank & Canal Top Solar PV, Solar Thermal, Municipal Solid Waste based power projects, Refuse Derived Fuel based power projects and Grid interactive Roof Top and Small Solar PV projects may be reviewed annually by the Commission.

Provided further that the tariff determined as per these Regulations for the RE projects commissioned during the Control Period, shall continue to be applicable for the entire Tariff Period.

12. Tariff and PPA Period

(1) The Tariff Period for Renewable Energy power projects shall be equal to Useful life of the Project as specified in Regulation 3(1)(aaa) of these Regulations.

(2) Tariff period under these Regulations shall be considered from the date of commercial operation or commissioning of the renewable energy plant.

(3) The PPA shall be required to be executed with distribution licensee for the entire Tariff Period.

13. Petition and proceedings for determination of Project Specific Tariff

(1) The RE Based Generating Stations and non-fossil fuel based Co-generating Stations may make an application for fixation of Project Specific Tariff based on actual Capital Cost in respect of the completed units of the RE Based Generating Stations and Co-generating Stations in such formats and alongwith such information as the Commission may require from time to time.

Provided that for Project Specific Tariff determination, the RE Based Generating Stations and Co-generating Stations shall submit the DPR and the break-up of Capital Cost items along with its petition.

(2) Till fixation of final tariffs a RE Based Generating Stations or Co-generating Stations may either accept the generic tariff as provisional tariff or make an application for determination of provisional tariff in advance of the anticipated date of completion of the project based on the capital expenditure actually incurred up to the date of making the application or a date prior to making of the application, duly audited and certified by the statutory auditors. The provisional tariff as may be determined by the Commission may be charged from the Commercial Operation Date (CoD) of the respective unit of the generating station.

Provided that the RE Based Generating Stations and Co-generating Stations shall be required to make a fresh application for determination of final tariff based on actual capital expenditure incurred up to the date of commercial operation or commissioning of the generating station within 18 months from the actual CoD.

(3) A petition for determination of project specific tariff shall be accompanied by such fee as specified in the UERC (Fee and Fines) Regulations, 2002, as amended from time to time, and shall be accompanied by:

(a) Information in forms 1.1, 1.2, 2.1 and 2.2 as the case may be, and as appended in these regulations;

(b) Detailed project report outlining technical and operational details, site specific aspects, premise for capital cost and financing plan etc;

(c) A Statement of all applicable terms and conditions and expected expenditure for the period for which tariff is to be determined;

(d) A statement containing full details of calculation of any subsidy and incentive received, due or assumed to be due from the Central Government and/or State Government. This statement shall also separately include the proposed tariff calculated with and without consideration of the subsidy and incentive;

(e) Auditor's certificate indicating year wise and component/asset wise expenditure incurred towards project cost and IDC & IEDC alongwith duly audited and certified copies of annual accounts by the statutory auditors.; and

(f) Details of loans including statements of the financial institutions from the date of first drawal and the certificate from the lender(s) that the project has not been classified as NPA and in case the project has been classified as NPA, determination of project specific tariff will be denied;

(g) Any other information that the Commission requires the Petitioner to submit.

(4) The proceedings for determination of tariff shall be in accordance with the UERC (Conduct of Business Regulations), 2014.

14. Tariff Structure

(1) The tariff for renewable energy technologies shall be single part tariff (in Rs./kWh) and ex-bus, i.e. after auxiliary consumption and transformation losses at the interconnection point as defined in Regulation 3(1)(bb).

Provided that for renewable energy technologies having fuel cost component, like biomass/biogas/biomass gasifier power projects, Refuse derived fuel and non-fossil fuel based cogeneration, tariff with two components, namely fixed cost component and fuel cost component, shall be determined.

(2) The Tariff shall consist of the following fixed cost components:

(a) Return on equity;

(b) Interest on loan capital;

(c) Depreciation;

(d) Interest on working capital;

(e) Operation and maintenance expenses;

(3) The generic tariff is being determined separately for each kind of renewable source and for each type of renewable technology for which norms have been specified in these Regulations.

(4) The generic tariff is based on normative parameters as per the norms specified in these Regulations for each type of source and the year of commissioning of the plant. Tariff in respect of a RE Based Generating Stations and Co-generating Stations under these Regulations shall be applicable for the whole generating station.

Provided that the generic tariff for supply of electricity from the plant, having more than one unit commissioned during currency of different control period, shall be based on weighted average of the tariffs specified under different Regulations for the total capacity of the plant.

(5) The levelised tariffs for the useful life of the project shall be specified for the RE Based Generating Stations and Co-generating Stations.

Provided that for renewable energy technologies having tariff (in Rs./kWh) with two components, for fixed cost component tariff may be determined on levelised basis considering the year of commissioning of the project while the fuel cost component shall be specified on year of operation basis.

(6) For the purpose of levelised tariff computation, the discount factor equivalent to weighted average cost of capital shall be considered. For determination of weighted average cost of capital, the pre-tax return on equity would be adjusted for tax at the applicable rates.

(7) The tariffs determined under these regulations being levelised, any shortfall or gain due to performance or other reasons is to be borne/retained by the RE Based Generating Stations and Co-generating Stations and no true up of any parameter, including additional capitalisation for whatsoever reasons, shall be taken up during the validity of the tariff for projects opting generic tariff or those opting project specific tariff. The tariff for supply of electricity between the period of synchronization and the commissioning of the unit (Infirm Power) shall be equal to 50% of fixed cost component of levelised generic tariff for the useful life of the project. However, renewable energy technologies having fuel cost component, like biomass/biogas/biomass gasfier power projects, Refuse derived fuel and non-fossil fuel based cogeneration, shall also be entitled to get the fuel cost component of tariff for that year in addition to 50% of the levelised generic tariff:

Provided that where project specific tariff is being determined the revenue generated from infirm power shall be used to reduce the capital cost of the project after giving credit for cost of fuel consumed, wherever applicable;

Provided that any additional expenditure of capital nature which becomes necessary for restoration works only on account of damages caused by natural calamities (but not due to flooding of power house attributable to the negligence of the generating company), after prudence check by the Commission, shall be allowed as additional

capitalisation after duly adjusting the proceeds from any insurance scheme for all the generating stations covered under these Regulations. For additional capital expenditure admitted, as above, appropriate adjustment in tariff shall be allowed for balance life of that project based on the norms given in Chapters 4 & 5 of the Regulations;

Provided that additional capitalisation on this account would only be allowed if appropriate and adequate insurance cover was available for the generating station at the time of occurrence of natural calamities referred to above. The generating company shall intimate the Commission and Distribution Licensee within seven days from the occurrence of any such force majeure event resulting into shut down of plant. The Commission may in such case direct the distribution licensee and State nodal agency to visit the damaged plant and assess the nature & type of damages and restoration works required in coordination with the generator/developer.

15. Financial Principles

(1) Capital Cost

(a) The norms for the Capital Cost as specified in the subsequent technology specific provisions in Chapter 5 shall include the expenditure incurred or projected to be incurred, initial spares, interest during construction (IDC) and financing charges, incidental expenditure during construction (IEDC), any gain or loss on account of foreign exchange risk variation during construction on loans arrived in the manner specified in sub-regulation (2) below upto the date of commercial operation or commissioning of the project, as admitted by the Commission after prudence check. The capital cost shall also include the expenditure incurred or projected to be incurred towards the switchyard etc. upto the point of interconnection (i.e. it does not include cost of dedicated line and associated equipment from point of interconnection upto the nearest sub-station of transmission or distribution licensee to which generating station is connected).

(b) In case of additional costs on account of IDC, Finance charges and IEDC due to delay in achieving the Schedule CoD, the generating company shall be required to furnish detailed justification with supporting documents for such delay including the details of IDC, Finance Charges and IEDC during the period of delay and liquidated damages recovered or recoverable corresponding to the delay:

Provided that if the delay is not attributable to the generating company and is due to uncontrollable factors, such expenditures may be allowed after due prudence check;

Provided further that where the delay is attributable to an agency or contractor or supplier engaged by the generating company, the liquidated damages recovered from such agency or contractor or supplier shall be kept in view while computing the capital cost.

(c) In case individual generating company opts to construct, at its own cost, the evacuation infrastructure from point of inter-connection to the nearest sub-station of transmission or distribution licensee to which the generating station is connected, it shall be allowed a normative levelised tariff of 5 paise/unit over and above the generic tariff determined at the point of inter-connection. However, in case of a solar generating company a normative levelised tariff of 12 paise/unit over and above the generic tariff determined at the point of inter-connection shall be allowed.

The said normative tariff for evacuation infrastructure has been arrived at considering the cost of normative line length of 10 kms. (including cost of terminal equipments) for different capacities of generating stations as per normative cost given below:

(i) Upto 3MW, 11 kV S/C - Rs. 44 lakh

(ii) Above 3MW and upto 13 MW, 33 kV S/C - Rs. 85 lakh

(iii) Above 13 MW and upto 25 MW, 33 kV 2 x S/C or DC - Rs. 170 lakh

Provided that in case more than one generating stations construct, at its own cost, a common evacuation infrastructure including pooling switching station, in accordance with Regulation 41 of these Regulations, for evacuation of power of their generation, then the above normative levelised tariff shall be apportioned among all such generating stations on the basis of their installed capacity.

(d) The distribution licensee will have to pay the additional tariff, specified above to, the generating company(s) provided ownership of such lines remains with such generating company(s). However, the first option shall be given to the distribution licensee for either buying the evacuation infrastructure of the generating company(s) at the depreciated cost indicated in the latest audited accounts of the said company(s), or pay additional tariff as per these regulations:

Provided that the distribution licensee will be required to exercise the option within one year from the date of commissioning of the generating station(s).

(2) Debt-Equity Ratio

The debt-equity ratio for generic and project specific tariff shall be as follows:

(a) For generic tariff debt-equity ratio shall be 70:30.

(b) For project specific tariff, the following provisions shall apply:

If the equity actually deployed is more than 30% of the capital cost, equity in excess of 30% shall be treated as normative loan:

Provided that where equity actually deployed is less than 30% of the capital cost, the actual equity shall be considered for determination of tariff;

Provided further that the equity invested in foreign currency shall be designated in Indian rupees on the date of each investment;

(3) Subsidy available from MNRE, to the extent specified under Regulation 24, shall be considered to have been utilized towards pre-payment of debt leaving balance loan and 30% equity to be considered for determination of tariff:

Provided further that it shall be assumed that the original repayments shall not be affected by this prepayment.

(4) The amount of subsidy shall be considered for each renewable source as per the applicable policy of MNRE. If the amount of subsidy is increased or reduced by MNRE, then necessary corrections in tariffs would be carried out by the Commission provided the reduction in subsidy amount is not due to the inefficiency of the generating company.

16. Interest on loan capital

(1) The loans arrived at in the manner indicated in Regulation (2) shall be considered as gross normative loan for calculation of interest on loan. The normative loan outstanding as on 1st April of every year shall be worked out by deducting the cumulative repayment up to 31st March of previous year from the gross normative loan.

(2) For the purpose of computation of generic tariff, the normative interest rate shall be considered as average State Bank of India (SBI) Marginal Cost of Funds based Lending Rate (MCLR) (one year tenor) prevalent during the last available six months from the date of Petition plus 300 basis points.

For the purpose of computation of project specific tariff, interest rate shall be considered as lower of the actual interest payable to the financial institutions or the average State Bank of India (SBI) Marginal Cost of Funds based Lending Rate (MCLR) (one year tenor) prevalent during the last available six months plus 300 basis points.

(3) Notwithstanding any moratorium period availed by the generating company, the repayment of loan is being considered from the first year of commercial operation of the project and shall be equal to the annual depreciation allowed.

While calculating project specific tariff, notwithstanding any moratorium period availed by the generating company, the repayment of loan shall be considered from the first year of commercial operation of the project and shall be equal to the annual depreciation allowed or actual repayment made, whichever is higher.

(4) Normative period of loan repayment shall be taken as 13 years.

17. Depreciation

(1) For the purpose of tariff, depreciation shall be computed in the following manner, namely:

(a) The value base for the purpose of depreciation shall be the capital cost of the project as admitted by the Commission in accordance with sub-regulation (2) below.

(b) The Salvage value of the asset shall be considered as 10% and depreciation shall be allowed up to maximum of 90% of the Capital Cost of the asset.

(c) The depreciation rate for the first 13 years of the Tariff Period shall be 5.38% per annum and the remaining depreciation shall be spread over the remaining useful life of the project from 14th year onwards considering salvage value of the project as 10% of the project cost.

(d) Depreciation shall be chargeable from the first year of commercial operation.

(2) 75% of the Capital subsidy received by the generator shall be reduced from the capital cost for depreciation purposes.

18. Return on Equity

(1) The value base for the equity shall be as determined under Regulation (2).

(2) The Return on Equity (Post tax) shall be 16% for the Renewable energy source based power projects.

(a) Pre-tax RoE shall be 20% per annum for the first 10 years considering Average MAT rate as on 1st April, 2018.

(b) Pre-tax RoE shall be 22% per annum from 11th year onwards considering Average Corporate Tax as on 1st April, 2018.

19. **Interest on Working Capital**

(1) The Working Capital requirement in respect of Wind energy projects, Small hydro power, Solar PV, Canal Bank and Canal Top Solar PV, Solar thermal and Grid interactive Roof Top and Small solar PV power projects shall be computed in accordance with the following:

(a) Operation & Maintenance expenses for one month;

(b) Receivables equivalent to 2 (Two) months of energy charges for sale of electricity calculated on the normative CUF:

Provided that for determination of project specific tariff, sale of electricity will be calculated based on the CUF envisaged in the approved DPR or the normative CUF specified for the relevant technology under Chapter 5, whichever is higher.

(c) Maintenance spare @ 15% of operation and maintenance expenses.

(2) The Working Capital requirement in respect of biomass power projects, municipal solid waste based power projects, refused derived fuel based power projects and non-fossil fuel based co-generation projects shall be computed in accordance with the following:

(a) Fuel costs for four months equivalent to normative CUF;

(b) Operation & Maintenance expense for one month;

(c) Receivables equivalent to 2 (Two) months of fixed and variable charges for sale of electricity calculated on the normative CUF:

Provided that for determination of project specific tariff, CUF will be taken as the CUF envisaged in the approved DPR or the normative CUF specified for the relevant technology under Chapter 5, whichever is higher.

(d) Maintenance spare @ 15% of operation and maintenance expenses;

(3) Interest on Working Capital shall be at interest rate equivalent to the average State Bank of India (SBI) Marginal Cost of Funds based Lending Rate (MCLR) (one year tenor) prevalent during the last available six months from the date of Petition plus 350 basis points.

20. **Operation and Maintenance expenses**

(1) Operation and maintenance expenses for the year of commissioning shall be determined based on normative O&M expenses specified by the Commission under Chapter 5 for different technologies for the first Year of Control Period, i.e. for FY 2018-19. These expenses shall be escalated@ 5.72% p.a. to arrive at O&M expenses for the ensuing years.

(2) Normative O&M expenses allowed for the year of commissioning shall be escalated at the rate of 5.72% p.a. to determine the O&M expenses for the different years of the Tariff Period.

21. CDM benefits

(1) The proceeds of carbon credit from approved CDM project shall be shared between generating company and concerned beneficiaries in the following manner, namely-

(a) 100% of the gross proceeds on account of CDM benefit to be retained by the project developer in the first year after the date of commercial operation or commissioning of the generating station;

(b) In the second year, the share of the beneficiaries shall be 10% which shall be progressively increased by 10% every year till it reaches 50%, where after the proceeds shall be shared in equal proportion, by the generating company and the beneficiaries.

(c) The CDM benefits shall not be considered for determination of levelised or yearly tariff and total amount of proceeds shall be remitted directly by the generating company to the distribution licensee for each financial year within one month of its receipt alongwith auditor's certification in accordance with above provisions.

22. Rebate

(1) For payment of bills through the letter of credit on presentation or if payment made within 5 working days, a rebate of 2% shall be allowed.

(2) Where payments are made by a mode other than through the letter of credit but within a period of one month of presentation of bills by the generating company, a rebate of 1% shall be allowed.

23. Late Payment Surcharge

In case the payment of bills is delayed beyond a period of 60 days from the date of billing, a late payment surcharge at the rate of 1.25% per month or part thereof shall be levied by the generating company.

24. Subsidy or incentive by the Central / State Government

The Commission shall take into consideration any incentive or subsidy offered by the Central or State Government, including accelerated depreciation benefit if availed by the generating

company, for the renewable energy power plants while determining the tariff under these Regulations.

Provided that only 75% of the capital subsidy for the financial year of commissioning as per applicable scheme of MNRE shall be considered for tariff determination.

Provided that the following principles shall be considered for ascertaining income tax benefit on account of accelerated depreciation, if availed, for the purpose of tariff determination:

(a) Assessment of benefit shall be based on capital cost admitted, accelerated depreciation rate as per relevant provisions under Income Tax Act and corporate income tax rate.

(b) Capitalisation of RE projects during second half of the fiscal year. Per unit benefit shall be derived on levelised basis at discount factor equivalent to Post Tax weighted average cost of capital.

(c) It shall be assumed that the generating company shall avail the benefit of accelerated depreciation and the onus of establishing, to the satisfaction of distribution licensee, that it is not entitled for this benefit shall be that of such generating company. The auditor's certificate in this regard shall be considered sufficient for this purpose.

Provided further that where Central Government or the State Government has notified any Generation Based Incentive Scheme for a particular kind of renewable technology such technology based generating stations shall be assumed to have availed the benefit of such a scheme and their tariffs shall automatically be treated as reduced by the amount of GBI per unit.

25. Taxes and Duties

Tariff determined under these regulations shall be including direct taxes on income but exclusive of other taxes and duties as may be levied by the appropriate Government.

Provided that the taxes, duties and cess levied by the appropriate Government other than direct taxes shall be allowed as pass through on actual incurred basis.

26. Applicability of Tariff

(1) The tariff shall be allowed to be recovered in the following manner:

A. For generators opting generic tariff:

(a) Till the actual CUF is less than or equal to annual CUF of 40%, tariffs would be payable at the levelised generic rates specified in the Regulations arrived at based on the normative CUF of 40%.

(b) For generation beyond annual CUF of 40%, following will apply:

(i) For generation beyond annual CUF of 40% but upto annual CUF of 45%, tariff shall be Rs. 1.50/kWh.

(ii) For generation beyond annual CUF of 45%, incentive shall be equal to the levelised generic rates specified in the Regulations at CUF of 45% reduced by Rs. 0.75 per kWh. Such reduction of Rs. 0.75/kWh shall be made from the subsequent monthly bills only till the actual annual CUF reaches 55%.

(iii) For generation beyond actual annual CUF of 55%, incentive shall be equal to the levelised generic rates specified in the Regulations at CUF of 45%.

B. For generators opting for project specific tariffs, the tariff for generation beyond the applicable CUF (i.e. the CUF envisaged in the approved DPR or the normative CUF specified for the relevant technology under Chapter 5, whichever is higher), shall be allowed to be recovered at the project specific tariff approved by the Commission.

C. For additional capitalization as allowed by the Commission for restoration work, the tariff for generation beyond the applicable CUF to the generating station shall be allowed to be recovered at the project specific tariff approved by the Commission for such restoration work.

The annual CUF shall be calculated in accordance with the principles specified in Regulation 3(1)(h) of the Regulations.

27. Applicability of Merit Order to RE Sources

Since RE Sources are dependent on vagaries of nature and are of small capacities, the principle of merit order dispatch/purchase shall not be applicable to supply of power from such sources to the distribution licensee or local rural grids within the State, i.e. they shall be treated as must run stations.

CHAPTER 5

TECHNOLOGY SPECIFIC PARAMETERS

28. Small Hydro Generating Plant

The technology specific parameters for determination of generic tariffs for Small Hydro Generating Stations commissioned or to be commissioned on or after 01.04.2018 shall be as follows:

Project Size	Capital Cost	O&M Expenses for year of commissioning	Capacity Utilization Factor*	Auxiliary Consumption
	(Rs. Lakh/MW)	(Rs. Lakh/MW)	(%)	(%)
Upto 5 MW	1000	45.00	Generic Tariff- 40% Project Specific- 45%	1%
> 5 MW & upto 15 MW	950	40.38		
> 15 MW & upto 25 MW	900	36.00		

** for the recovery of Annual Fixed Charges.*

NOTE: For the purpose of this Regulation, normative CUF is based on Energy Sent Out at interconnection point and for tariff purposes energy net of free power to the home State, if any, committed by the developer shall be factored. For generic tariff determination, home State share has been taken as 18% from 16th year onwards.

29. Biomass Power Projects based on Rankine Cycle Technology

(1) The technology specific parameters for determination of generic tariffs for Biomass Power Projects based on Rankine Cycle Technology commissioned or to be commissioned on or after 01.04.2018 shall be as below:

(a) Capital Cost:

Biomass Rankine Cycle Projects	Capital Cost for the year of commissioning of project (Rs. Lakh/MW)
Projects [other than rice straw and juliflora (plantation) based projects] with water cooled condenser	559.03
Projects [other than rice straw and juliflora (plantation) based projects] with air cooled condenser	600.44
For rice straw and juliflora (plantation) based projects with water cooled condenser	610.80
For rice straw and juliflora (plantation) based projects with air cooled condenser	652.20

(b) Operation and Maintenance expenses

Normative O&M expenses for the first year of the Control period shall be Rs. 42.29 Lakh/MW. The Normative O&M expenses allowed for the year of commissioning shall be escalated at the rate of 5.72% per annum for subsequent years.

(c) Station Heat Rate

The Station Heat Rate of biomass power projects shall be

(i) For projects using travelling grate boilers: 4200 kCal/kWh,

(ii) For projects using AFBC boilers: 4125 kCal/kWh

(d) Capacity Utilisation Factor

(1) Threshold CUF for determining fixed charge component of Tariff shall be:

(i) During Stabilisation: 60%,

(ii) During the remaining period of the first year (after stabilization): 70%

(iii) From 2nd year onwards: 80%

(2) The stabilization period shall not be more than 6 months from the date of commissioning of the project.

(e) Auxiliary Consumption

(1) For the projects using water cooled condenser:

(i) During first year of operation: 11%

(ii) From 2nd year onwards: 10%

(2) For the project using air cooled condenser:

(i) During first year of operation: 13%

(ii) From 2nd year onwards: 12%

(f) Use of Fossil Fuel and Monitoring Mechanism for the use of fossil fuel

(1) The use of fossil fuels shall not be allowed.

Provided that for the biomass power projects commissioned on or before 31.03.2018, the use of fossil fuels to the extent of 15% in terms of calorific value on annual basis shall be allowed for the tariff period from the date of commissioning.

(2) The Project developer shall furnish a monthly fuel usage statement and monthly fuel procurement statement duly certified by Chartered Accountant to the beneficiary (with a copy to appropriate agency appointed by the Commission for the purpose of monitoring the fossil and non-fossil fuel consumption) for each month, alongwith the monthly energy bill.

(3) Non-compliance with the conditions of fossil fuel usage by the project developer, during any financial year, shall result in withdrawal of applicability of tariff as per these Regulations for such biomass based power project. However, such defaulting biomass power project shall continue to sell power to the distribution licensee and the rate during the financial year in which default occurred shall be the rate lower by Rs. 1/kWh of the applicable variable tariff specified by the Commission.

(g) Calorific Value

The Calorific Value of the biomass fuel used for the purpose of determination of tariff shall be at 3100 kCal/kg.

(h) Fuel Cost

Biomass Fuel Price for the first year of the Control Period, i.e FY 2018-19 shall be taken as Rs. 2355/MT, unless specifically reviewed by the Commission. For each subsequent year of the Tariff Period, the normative escalation factor of 5% on previous year's fuel cost shall be applicable to determine the fuel cost for different years of the Tariff Period.

30. Non-fossil fuel based Cogeneration Projects

(1) A project shall qualify as a non-fossil fuel based Co-generation project, if it is in accordance with the eligible criteria as specified under Regulation 4(2)(e).

(2) The technology specific parameters for determination of generic tariffs for Non-fossil fuel based Cogeneration Projects commissioned or to be commissioned on or after 01.04.2018 shall be as follows:

Capital Cost	O&M Expenses for year of commissioning	Station Heat Rate	Calorific value of fuel	Auxiliary Consumption	Capacity Utilization Factor
(Rs. Lakh/ MW)	(Rs. Lakh/MW)	(kCal / kWh)	(kCal/kg)		
492.50	22.35	3600	2250	8.5%	45%

(3) Fuel Cost (P) for the first year of the Control Period, i.e. FY 2018-19 shall be taken as Rs. 1954/MT, unless specifically reviewed by the Commission. For each subsequent year of Tariff Period, the normative escalation factor of 5% on previous year's fuel shall be applicable to determine the fuel cost for different year of Tariff Period.

(4) For use of biomass other than bagasse in co-generation projects, the biomass prices as specified under Regulation 29(1)(h) shall be applicable.

31. Biomass Gasifier Power Projects

(1) The technology specific parameters for determination of generic tariffs for Biomass Gasifier Power Projects commissioned or to be commissioned on or after 01.04.2018 shall be as follows:

Type of Project	Capital Cost (Rs. Lakh/MW)	O&M Expenses for year of commissioning (Rs. Lakh/MW)	Specific Fuel Consumption Kg/kWh	Auxiliary Consumption	Capacity Utilization Factor
Pine leaves based Biomass Gasifier projects	625.00	100.00	1.50	10%	85%
Other Biomass Gasifier Projects	592.88	55.85	1.25		

(2) Fuel Price (P) for the first year of the Control Period, i.e. FY 2018-19 shall be taken as Rs. 2355/MT for all type of Biomass Gasifier based power projects, unless specifically reviewed by the Commission. For each subsequent year of the Tariff Period, the normative escalation factor of 5% on previous year's fuel cost shall be applicable to determine the fuel cost for different years of the Tariff Period.

(3) Fuel Mix

(a) The Biomass Gasifier based Power Plant shall be designed in such a way that it uses different types of non-fossil fuels available within the vicinity of Biomass Power Project such as crop residues, agro-industrial residues, forest residues etc. and other biomass fuels as may be approved by MNRE.

(b) The Biomass Gasifier based Power Generating Companies shall ensure fuel management plan to ensure adequate availability of fuel to meet the respective project requirements.

32. Biogas based Power Projects

(1) The norms for tariff determination specified hereunder are for grid connected Biogas based Power Projects that uses 100% Biogas fired engine, coupled with Biogas technology for co-digesting agriculture residues, manure and other bio waste as may be approved by MNRE. The technology specific parameters for determination of generic tariffs for Biogas based Power Projects commissioned or to be commissioned on or after 01.04.2018 shall be as follows:

Capital Cost (Rs. Lakh/MW)	O&M Expenses for year of commissioning (Rs. Lakh/MW)	Specific Fuel Consumption (kg/kWh)	Auxiliary Consumption	Capacity Utilization Factor
1185	55.85	3.00	12%	90%

(2) Feed stock price (P) for the first year of the Control Period, i.e. FY 2018-19 shall be taken as Rs. 1327/MT (net of any cost recovery from digester effluent), unless specifically reviewed by the Commission. For each subsequent year of the Tariff Period, the normative escalation factor of 5% on previous year's fuel cost shall be applicable to determine the fuel cost for different years of the Tariff Period.

33. Solar PV Power Project

Norms for Solar Photovoltaic (PV) power project under these Regulations shall be applicable for grid connected PV systems that directly convert solar energy into electricity and are based on the technologies such as crystalline silicon or thin film etc. as may be approved by MNRE. The technology specific parameters for determination of generic tariffs for Solar PV Power Projects commissioned or to be commissioned on or after 01.04.2018 shall be as follows:

Capital Cost	O&M Expenses for year of commissioning	Capacity Utilization Factor
(Rs. Lakh/MW)	(Rs. Lakh/MW)	
388.19	12.30	19 %

34. Canal bank Solar PV Power Plants and Canal top Solar PV Power Plants

Norms for canal bank Solar PV Power Plants and canal top Solar PV Power Plants under these Regulations shall be applicable for grid connected PV systems that directly convert solar energy into electricity and are based on the technology specific parameters for determination of generic tariffs for such power projects commissioned or to be commissioned on or after 01.04.2018 shall be as follows:

Type Solar PV Plant	Capital Cost	O&M Expenses for year of commissioning	Capacity utilization Factor
	(Rs. Lakh/ MW)	(Rs. Lakh/MW)	
Canal Bank Solar PV Plant	600.00	12.30	19%
Canal Top Solar PV Plant	625.00		

35. Solar Thermal Power Project

Norms for Solar thermal power under these Regulations shall be applicable for Concentrated solar power (CSP) technologies viz. line focusing or point focusing, as may be approved by MNRE, and uses direct sunlight, concentrating it several times to reach higher energy densities and thus higher temperatures whereby the heat generated is used to operate a conventional power cycle to generate electricity. The technology specific parameters for determination of generic tariffs for Solar Thermal Power Projects commissioned or to be commissioned on or after 01.04.2018 shall be as below:

Capital Cost	O&M Expenses for year of commissioning	Capacity Utilization Factor	Auxiliary Consumption
(Rs. Lakh/MW)	(Rs. Lakh/MW)		
1200	16.77	23%	10%

36. Grid interactive roof top and small solar PV plants

(1) The technology specific parameters for determination of generic tariff for Grid interactive roof top and small solar PV plants commissioned or to be commissioned on or after 01.04.2018 shall be as below:

Project Size	Capital Cost (Rs./kW)	O&M Expenses for year of commissioning (Rs./kW)	Capacity Utilization Factor
Upto 10 kW	47153	1627	19 %
>10 kW & upto 100 kW	43224	1448	
>100 kW & upto 500 kW	40612	1320	
>500 kW and upto 1 MW	39135	1230	

(2) Roof-top Grid Interactive Roof-top and small solar PV plants can be installed for injecting power into the distribution system of a licensee by any Eligible consumer:

Provided that the maximum Rooftop Solar PV and Small Solar PV plants installed capacity at any Eligible Consumer's premises shall be upto a maximum of 80% of consumer's sanctioned load/contract demand;

Provided that in case of Domestic Consumer, such installed capacity of Roof Top and Small Solar PV Plants shall be irrespective of consumer's sanctioned load/contract demand;

Provided, the maximum installed capacity of rooftop PV solar power plant & small solar PV plant at the premises of eligible consumer shall not be more than 1 MW.

(3) Injection from Roof-Top Solar PV plant owned by the Eligible consumer or by third party shall be settled on Net Energy basis at the end of each Billing period.

(4) The tariff, as per tariff orders of the Commission, in respect of the supply of electricity to the consumers by the distribution licensee shall be applicable for the Net Energy supplied by the licensee in a billing period if the supplied energy by the licensee is more than the energy injected by the Roof-Top Solar PV plant of the consumer or by third party:

Provided that such eligible consumer shall be exempted from payment of monthly minimum charges/monthly minimum consumption guarantee charges, if any, equivalent to the capacity of Roof Top Solar PV plant installed at the premises;

Provided further that no open access charges including surcharges shall be leviable on such eligible consumers for the captive use of power.

(5) If in a billing period the supplied energy by the licensee is less than the energy injected by the Roof-Top Solar PV Plant of the consumer or the third party, subject to provisions in sub-Regulation (3) above, the licensee would be billed at the generic tariff as may be specified by the Commission or at the rate discovered through tariff based bidding process whichever is lower for such Net Energy supplied to it.

37. Wind Energy Project

(1) The technology specific parameters for determination of generic tariffs for Wind Projects commissioned or to be commissioned on or after 01.04.2018 shall be as below:

Capital Cost (Rs. Lakh/MW)	O&M Expenses (Rs. Lakh/MW)	Annual Mean Wind Power Density (W/m^2)	Capacity Utilization Factor
515	9.51	Upto 220	22%
		221-275	24%
		276-330	28%
		331-440	33%
		>440	35%

NOTE:

(a) For applicability of tariff, the generating company shall provide duly validated information on annual mean wind power density. The annual mean wind power density specified above, shall be measured at 100 meter hub-height.

(b) For the purpose of classification of wind energy project into particular wind zone class, as per MNRE guidelines for wind measurement, wind mast either put-up by National Institute of Wind Energy (NIWE) or a private developer duly validated by NIWE would be normally extended 10 km from the mast-point to all directions for uniform terrain and limited to appropriate distance in complex terrain with regard to complexity of the site. Based on such validation by NIWE, State Nodal Agency should certify zoning of the proposed wind farm complex.

38. Municipal Solid Waste based Projects

(1) The norms for tariff determination specified hereunder are for power projects which use Municipal Solid Waste (MSW) and Refuse Derived Fuel (RDF) and are based on Rankine cycle technology application, combustion or incineration, Bio-methanation, Pyrolysis and High end gasifier technologies. Norms regarding Capital Cost, Plant Load Factor, Auxiliary Consumption etc. shall be for the projects commissioned or to be commissioned on or after 01.04.2018 shall be as follows:

Project	Capital Cost (Rs. Lakh/ MW)	O&M Expenses for year of commissioning (Rs Lakh/MW)	Plant Load Factor	Auxiliary Consumption	Station Heat Rate kcal/ kWh	Calorific value kcal/ kg
MSW	1500	6% of the project cost for 1st year and shall be escalated @ 5.72% per annum	65% during stabilization & first year. 75% from second year onwards.	15%	4200	-
RDF	900	6% of the project cost for 1st year and shall be escalated @ 5.72% per annum	65% during stabilization & first year. 80% from second year onwards.	15%	4200	2500

NOTE:

(a) No fuel cost shall be considered for determination of tariff for the power projects using Municipal Solid Waste.

(b) RDF Fuel Price (P) for the first year after notification of these Regulations shall be taken as Rs. 1800/MT, unless specifically reviewed by the Commission. For each subsequent year of the Tariff Period, the normative escalation factor of 5% on previous year's fuel cost shall be applicable to determine the fuel cost for different years of the Tariff Period.

39. Generic Tariffs

The generic tariffs for the above-mentioned technologies are given in Annexure 1.

CHAPTER 6

MISCELLANEOUS

40. Transmission Charges, Wheeling Charges and Losses

(1) Transmission Charges: For non-discriminatory 'open access' to the intra-State transmission system for carrying the electricity generated by the RE Based Generating Stations or Co-generating Stations to the destination of use, the RE generator or the consumer, as the case may be, shall have to pay the transmission charges and wheeling charges for use of intra-state transmission system and distribution system which shall be calculated based on the principles specified in UERC (Terms and Conditions of Intra-State Open Access) Regulations, 2015 read with amendments from from time to time:

Provided that no Transmission and Wheeling Charges are payable for sale of electricity to distribution licensee or to local rural grid within the State;

Provided further that where a generating company proposes to supply electricity outside the State, such generating company, in addition to transmission/wheeling charges specified above, shall have to bear the transmission/wheeling charges determined by the Commission on case to case basis for the dedicated lines and substation of the transmission/distribution licensee used only for evacuation of such power;

Provided further that where more than one generating company proposes to supply electricity outside the State over common dedicated transmission/distribution system of transmission/distribution licensee for evacuation of their power, such generating companies, in addition to transmission/wheeling charges specified above, shall have to bear the full transmission/wheeling charges determined by the Commission on case to case basis for such dedicated lines and substation of the transmission/distribution licensee used only for evacuation of such power on pro-rata basis of installed capacity.

(2) In addition to Transmission and Wheeling Charges, the losses in the intra-State Transmission/ Distribution System and dedicated lines and sub-stations, if applicable as above, shall be adjusted in kind based on the principles specified in UERC (Terms and Conditions of Intra-State Open Access) Regulations, 2015 read with amendments from time to time.

Provided further that no losses shall be adjusted in kind for sale of electricity to distribution licensees within the State or to local rural grid.

41. Evacuation of Power

(1) Distribution Licensees shall provide connectivity to the RE Based Generating Stations having capacity upto 25 MW at its nearest distribution sub-station preferably within a range of 10 kilometers from the location of such generating station. They may further mutually agree to provide connectivity at appropriate voltage level subject to technical feasibility and technical standards for construction of electrical lines and connectivity with the grid as may be specified by CEA.

(2) Transmission Licensee shall provide connectivity to the RE Based Generating Stations having installed capacity more than 25 MW, at its nearest transmission sub-station preferably within a range of 10 kilometers from the location of such generating station. They may further mutually agree to provide connectivity at appropriate voltage level subject to technical feasibility and technical standards for construction of electrical lines and connectivity with the grid as may be specified by CEA:

Provided that any RE based Generating Station having capacity upto 25 MW is willing to connect and evacuate power through 132 kV & above transmission system, it may do so subject to consent of the Transmission Licensee.

Provided further that where more than one RE based Generating Stations having cumulative installed capacity more than 25 MW are located in a cluster/area and for the purpose of evacuation, these generating stations agree to pool their generation at a common pooling switching station to be constructed by them at their own cost and further beyond such pooling switching station, the Transmission Licensee shall provide connectivity at its nearest sub-station. They may further mutually agree to provide connectivity at appropriate voltage level subject to technical feasibility and technical standards for construction of electricity lines and connectivity with the grid as may be specified by CEA.

(3) In case RE based Generating Stations exercise the option to construct the evacuation system including the line upto the nearest substation of Transmission/Distribution Licensee, the required bay, terminal equipments, associated synchronization equipments and above pooling switching station, if any, etc. the cost of such evacuation system shall be borne by such generating stations:

Provided that such Generating Stations may also get the work of construction of the power evacuation system carried out by State transmission/distribution licensee;

Provided further that the land for extending the bay shall be provided by the owner of the transmission or distribution sub-station, as the case may be, free of cost.

42. Maintenance of Transmission lines and Equipment

(1) The Generating Stations shall be responsible for the maintenance of terminal equipment at the generating end and the dedicated transmission lines including pooling Switching station, if any, owned by such generating stations. However, transmission/distribution licensees, as the case may be, may carry out maintenance of the dedicated transmission line including pooling switching station, if any, if so desired by the generating company(s), on mutually agreed charges.

(2) The Distribution Licensee or the Transmission Licensee or the state transmission utility, as the case may be, shall be responsible for maintenance of the terminal equipment(s) at the sub-station of the concerned licensee.

43. SLDC Charges

For sale to person other than the Distribution Licensees or to Local Rural Grid principles of optimum scheduling and dispatch as per IEGC and State Grid Code scheme shall apply and for this purpose RE based Generating Stations shall be required to pay such fee to the SLDC as specified under UERC (Terms and Conditions of Intra-State Open Access) Regulations, 2015.

44. Connectivity and Metering arrangement for Grid interactive Roof Top and Small Solar PV plants

(1) Grid interactive Roof-Top and Small Solar PV plants shall be allowed connectivity at the following voltage level in the distribution system of the licensee:

(i) Load upto 4 kW: low voltage single phase supply.

(ii) Load >4 kW and upto 75 kW: low voltage three phase supply.

(iii) Load >75 kW and upto 1000 kW: at 11 kV.

(2) If any dispute arises about connectivity of such sources with the grid, the matter shall be referred to the Commission whose decision in this regard shall be final.

(3) Supply of electricity to the consumer(s) from the licensee's sources and that to the licensee's distribution system from the roof-top Solar PV sources shall be measured

either by two separate meters, the readings of which shall be used in each billing period for settlement on Net basis or alternatively by an export-import type meter suitable for directly measuring the Net exchange.

(4) The cost of switch gear, metering and protection arrangement at generator end shall have to be borne by the owner of solar generators. However, Check Meter with same specification of Main Meter shall be provided by distribution licensee:

Provided that Check Meter and related equipments can be procured by such plant owner. However, the cost of Check Meter shall be refunded by the licensee to such plant owner. The cost of the check meter to be refunded would be, lower of the following:

a. Actual cost of meter; or

b. Highest rate discovered through Competitive Bidding Process of licensee escalated by 25%.

(5) For interconnection of Grid interactive Roof Top and Small Solar PV Plants with the distribution licensee's grid, the relevant provisions of the Central Electricity Authority (Measures relating to Safety and Electric Supply) Regulations, 2010 as amended from time to time shall apply.

(6) The Grid interactive Roof Top and Small Solar PV Plants shall be responsible for safe operation, maintenance and rectification of defect of its system up to the interconnection point beyond which the responsibility of safe operation, maintenance and rectification of any defect in the system including the meters shall rest with the distribution licensee.

(7) The eligible consumer shall be solely responsible for any incidents/accident to human being/ animals whatsoever (fatal/nonfatal/departmental/non-departmental/damages to material of the licensee) that may occur due to back feeding from the solar plant when the grid supply is off and such consumer shall not only bear the cost of the damages to the material of the licensee but also compensate for the life of any human being/animals in case of such incidents/accidents. The distribution licensee reserves the right to disconnect the consumer's installation at any time in the event of such exigencies to prevent accident or damage to man and material.

45. Metering Arrangement

(1) For sale to Distribution Licensees or Local rural Grid, RE based Generating Station shall provide meters at the point of interconnection (as defined under Regulation 3(1)(bb) complying with the Regulations on installation of meters specified by CEA.

(2) For sale to person other than the Distribution Licensees or Local Rural Grid RE based

Generating Station shall provide ABT compatible Special Energy Meters at the point of interconnection complying with the Regulation on installation of meters specified by CEA.

46. Energy Accounting and Billing

The State Load Dispatch Centre shall carry out scheduling and accounting of energy sent out by the generators and the same shall be communicated to the utilities interacting with the grid as per the scheme framed by SLDC in pursuance of the provisions of IEGC, State Grid Code and Open Access Regulations. Billing for open access transactions shall be done in accordance with the Open Access Regulations.

Provided that in case of sale to the distribution licensee of the area, the power purchase agreement may provide for joint meter reading and in such cases, energy accounting and billing shall be done by the generating station in coordination with the concerned distribution licensee.

47. Purchase of Electricity by the Generating station including Start up Power

(1) Any person, who establishes, maintains and operates a generating station and normally does not need power from the licensee round the year, may purchase electricity from a generating company or a distribution licensee in case his plant is not in a position to generate electricity to meet the requirement of his own use or for start up and consequently power is required to be drawn from distribution licensee:

Provided that in case electricity generated from the plant is being exclusively sold to the State Distribution Licensee, the electricity (in kWh) procured by the Generating Station from the State Distribution Licensee to meet its requirement of his own use or for startup power, will be adjusted from the electricity sold to the Distribution Licensee on month to month basis. The Distribution Licensee shall make the payment for net energy sold to it by the Generating Company, i.e. difference of the total energy injected into the grid and energy drawn from the grid by the Generating Company. In case the energy supplied by the distribution licensee is more than the energy injected by the generating company, the net energy (in kWh) thereof shall be billed by the distribution licensee in accordance with 2nd proviso below;

Provided further that in case electricity generated from the plant is sold to third party other than the Distribution Licensee, then such purchase of electricity by the generating company from the distribution licensee, shall be charged as per the tariff determined by the Commission for temporary supply under appropriate "Rate Schedule of tariff" for Industrial Consumers considering maximum demand during the month as

the contracted demand for that month. The Fixed/Demand charges for that month shall be payable for the number of days during which such supply is drawn. Such Generating Company shall, however, be exempted from payment of monthly minimum charges or monthly minimum consumption guarantee charges or any other charges.

48. Banking of Power (Applicable only in case of Captive RE sources Generating Plants & Non-fossil fuel based Co-generating Stations)

(1) The Generating Stations shall be allowed to bank power within a period of one calendar month, for the purpose of withdrawal of the banked power in the event of emergency or shut down or maintenance of the plant, subject to following conditions:

(a) Banking of energy upto 100%, as agreed between the plant and the distribution licensee, shall be allowed during the period declared by the Commission as peak hours from time to time in its Tariff Orders.

(b) Withdrawal of power shall be allowed only during the period other than the period declared by the Commission as peak hours from time to time in its Tariff Orders.

(c) The plants shall provide ABT compliant Special Energy Meters and the monthly settlement of energy sales shall be done based on Power supplied during the peak hours as per SEM meter readings shall be considered as banked power.

(d) Upon introduction of intra-state ABT in the State, the banking as well as withdrawal of banked energy shall be subject to day ahead scheduling.

(e) The power withdrawn by the plant as ascertained by SEM readings, which could not be considered as withdrawal from banked power, shall be considered as power purchased by the plant.

(f) The purchase of power by these plants under clause (e) or otherwise shall be charged as per the provisions of Regulation 47 above.

(g) A Generating Station shall be allowed to withdraw power that was banked during a particular financial year in the same year.

(h) The banked power remaining unutilized on the expiry of the financial year would be treated as sale and the financial settlement shall be made at the tariff determined by the Commission in its Tariff Order for the year during which the power was banked or at the generic tariff specified by the Commission in case of a Non-fossil fuel based Co-generating Stations. No banking charges shall be deducted from such unutilized banked energy.

(i) Banking charges shall be 12.5% of the energy banked.

(j) In case of a Non-fossil fuel based Co-generating Stations, which is not a captive generating plant, the facility of banking shall apply only if it has a PPA with the distribution licensee in the State.

49. Deemed Generation

(Applicable only in case of Small Hydro Generating Plants & Solar PV & Solar Thermal Projects)

(1) After the COD of the Project, loss of generation at the Station on account of reasons attributed to the following, or any one of the following, shall count towards Deemed Generation:

- Non availability of evacuation system beyond the Interconnection Point; and
- Receipt of backing down instructions from the SLDC.

Provided that the following shall not count towards Deemed Generation:

(i) The loss of generation at the Station on account of aforesaid factor(s) but attributed to the Force Majeure event(s);

(ii) The loss of generation at the Station due to the interruptions/outages attributed to the aforesaid factor(s) during the period in which the total duration of such outages/ interruptions, other than that excluded under above, is within the limit of:

- 48 hours in a month in case of small hydro project, and
- 50 hours in a year in case of solar PV and Solar Thermal Project.
- Provided that for working out the ceiling of 50 Hrs. in a year for Solar PV and Solar Thermal Projects, the interruptions/outages occurring during 18.00 hours in the evening to 6.00 hours in the morning shall not be counted;
- Provided further that till 01.04.2019, the above limit for Solar PV and Solar Thermal Projects shall remain at 60 hours in a month.

(2) The distribution licensee shall be required to maintain the voltages at the point of interconnection with the project within the limits stipulated hereunder, with reference to declared voltage:

- In the case of High Voltage, +6% and -9%; and,
- In the case of Extra High Voltage, +10% and -12.5%.

Any loss in generation due to variations in the voltage beyond the limits specified above shall be reckoned as deemed generation provided such loss of generation results in reduction of more than 25% of capacity output.

(3) The period of outage/interruption on account of such factor(s) specified in sub-Regulation 1 and 2 above, shall be reconciled on monthly basis and the loss of generation at the station towards Deemed Generation after accounting for the events specified under sub-Regulation 1 (i) & (ii) above, shall be computed on following considerations:

(i) The recovery on the above account shall be admissible if the actual energy generated during the year is less than the normative CUF specified in the Regulation for small hydro projects and Solar PV and solar thermal projects (in case of project opting for generic tariff) or the CUF considered for recovery of fixed charges (in case of project specific tariff is applicable) for small hydro projects and solar PV and solar thermal projects. In case the sum of actual energy generated and the deemed generation during the year exceeds the CUF at which the recovery of fixed charges has been envisaged, then the deemed generation alongwith the actual energy generated will be allowed only upto the CUF considered.

(ii) The generation loss towards the Deemed Generation in accordance with sub-Regulation (1) above, if any, during the month shall be considered on the pro-rata basis on the number of hours lost based on the actual average generation achieved during that month divided by the total number of hours available during the month reduced by the number of hours outage/interruption occurred in the system.

(iii) The generation loss towards the Deemed Generation (in MWh) in accordance with sub-Regulation (2) above, if any, during the month shall be considered as the summation of the product of number of hours the variations in voltage beyond the specified limit existed and the Generation lost (in MW) due to the variation in the voltage beyond the specified limit. The Generation lost (in MW) would be the difference between the following:

(a) Minimum of the generation (in MW) before the variation in voltage occurred and the generation (in MW) achieved after 90 minutes immediately after variation in voltage was restored within the specified limit would be treated as the "Actual Generation" during the period when voltage variations occurred; and

Provided that if such variation in voltage continues for the entire month, generation (in MW) before such variation in voltage occurrence would be treated as the "Actual Generation".

(b) The generation achieved during the period when variation in voltages took place.

(4) The distribution licensee shall pay for the saleable deemed generation, on annual basis, for Small Hydro projects and Solar PV and Solar Thermal projects worked out on the basis of the deemed generation on the above lines, at the generic/project specific tariffs as applicable in accordance with the applicable RE Regulations. The settlement of payment towards deemed generation charges shall be carried out within 3 months of the completion of the financial year.

Provided that any charges paid by the distribution licensee towards deemed generation shall not be allowed as an expense to be pass through in tariffs. The distribution licensee will have to bear such charges;

Provided further that the deemed generation conditions stipulated above shall be applicable only on those Small Hydro projects and Solar PV and Solar Thermal projects who have signed a long term PPA with the distribution licensee;

Provided also that the deemed generation conditions shall be applicable only on the Small Hydro projects and Solar PV and Solar Thermal projects where the evacuation line is connected to 11 kV or higher voltage Grid Sub-station.

50. Savings

Nothing in these regulations shall, expressly or impliedly, bar the Commission dealing with any matter or exercising any power under the Act for which no regulations have been framed, and the Commission may deal with such matters, powers and functions in a manner, as it considers just and appropriate.

51. Power to Remove Difficulties

If any difficulty arises in giving effect to these regulations, the Commission may, of its own motion or otherwise, by an order and after giving a reasonable opportunity to those likely to be affected by such order, make such provisions, not inconsistent with these regulations, as may appear to be necessary for removing the difficulty.

52. Power to Relax

The Commission, for reasons to be recorded in writing, may vary any of the provisions of these regulations on its own motion or on an application made before it by an interested person.

Annexure-I

1. **Levelised rate of Fixed Charges (RFC) in Rs./kWh for SHPs (upto 25 MW) commissioned on or after 01.04.2018:**

Particulars	Upto 5 MW	Above 5 MW & upto 15 MW	Above 15 MW & upto 25 MW
Gross Tariff (CUF@ 40%)	6.33	6.08	5.70
Gross Tariff (CUF @ 45%)	5.63	5.40	5.07

2. **Levelised rate of Fixed Charges (RFC) in Rs./kWh for Municipal Solid Waste (MSW) based Power Projects:**

Particular	Rate of Fixed Charges (Rs./kWh)
Gross Tariff	6.89
Less: Acc. Dep. Benefit	0.30
Net Tariff	6.59

3. **Levelised rate of Fixed Charges (RFC) & Variable Charges in Rs./kWh for Refuse Derived Fuel (RDF) based Power Projects:**

Particular	Rate of Fixed Charges (Rs./kWh)
Gross Tariff	4.44
Less: Acc. Dep. Benefit	0.17
Net Tariff	4.27

Year	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Variable Charges where 1st year is year of commissioning (Rs./kWh)	3.56	3.74	3.92	4.12	4.32	4.54	4.77	5.01	5.26	5.52	5.80	6.08	6.39	6.71	7.04	7.40	7.77	8.15	8.56	8.99

4. **Levelised rate of Fixed Charges (RFC) & Variable Charges in Rs./kWh for Non-Fossil fuel based Co-generation Projects:**

Particular	Rate of Fixed Charges (Rs./kWh)
Gross Tariff	3.67
Less: Acc. Dep. Benefit	0.15
Net Tariff	3.52

Year	1	2	3	4	5	6	7	8	9	10	11	12	13	14	16	16	17	18	19	20
Variable Charges where 1st year is year of commissioning (Rs./kWh)	3.42	3.59	3.77	3.96	4.15	4.36	4.58	4.81	5.05	5.30	5.57	5.84	6.14	6.44	6.77	7.10	7.46	7.83	8.22	8.63

5. **Levelised rate of Fixed Charges (RFC) & Variable Charges in Rs./kWh for Biomass Gasifier Projects:**

A. For Pine leaves based Biomass Gasifier projects

Particular	Rate of Fixed Charges (Rs./kWh)
Gross Tariff	4.27
Less: Acc. Dep. Benefit	0.11
Net Tariff	4.16

Year	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Variable Charges where 1st year is year of commissioning (Rs./kWh)	3.27	3.43	3.61	3.79	3.98	4.17	4.38	4.60	4.83	5.07	5.33	5.59	5.87	6.17	6.48	6.80	7.14	7.50	7.87	8.27

B. For Other Biomass Gasifier projects:

Particular	Rate of Fixed Charges (Rs./kWh)
Gross Tariff	2.93
Less: Acc. Dep. Benefit	0.10
Net Tariff	2.82

Year	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Variable Charges where 1st year is year of commissioning (Rs./kWh)	3.27	3.43	3.61	3.79	3.98	4.17	4.38	4.60	4.83	5.07	5.33	5.59	5.87	6.17	6.48	6.80	7.14	7.50	7.87	8.27

6. Levelised rate of Fixed Charges (RFC) & Variable Charges in Rs./kWh for Biogas Projects:

Particular	Rate of Fixed Charges (Rs./kWh)
Gross Tariff	4.30
Less: Acc. Dep. Benefit	0.21
Net Tariff	4.09

Year	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Variable Charges where 1st year is year of commissioning (Rs./kWh)	4.52	4.75	4.99	5.24	5.50	5.77	6.06	6.37	6.68	7.02	7.37	7.74	8.12	8.53	8.96	9.40	9.88	10.37	10.89	11.43

7. Levelised rate of Fixed Charges (RFC) for Canal Bank Solar PV and Canal Top Solar PV Power Projects:

Particular	Canal bank Solar PV Power Plants	Canal top Solar PV Power Plants
	(Rs./kWh)	
Gross Tariff	6.69	6.92
Less: Acc. Dep. Benefit	0.39	0.41
Net Tariff	6.29	6.51

8. Levelised rate of Fixed Charges (RFC) for Solar PV and Solar thermal Power Projects:

Particular	Solar PV Projects	Solar Thermal Projects
	(Rs./kWh)	
Gross Tariff	4.73	14.04
Less: Acc. Dep. Benefit	0.25	0.79
Net Tariff	4.48	13.26

9. Levelised rate for Fixed charges (RFC) for Grid-interactive rooftop and small Solar PV Power Plants:

A. For Projects having capacity upto 10 kW

Level of Subsidy	0%	30%	70%	90%
Particulars	Rate of Fixed Charges (Rs./kWh)			
Gross Tariff	5.93	5.18	4.18	3.76
Less: Acc. Dep. Benefit	0.31	0.26	0.18	0.13
Net Tariff	5.62	4.92	4.00	3.63

B. For Projects having capacity above 10 kW and upto 100 kW

Level of Subsidy	0%	30%	70%	90%
Particulars	Rate of Fixed Charges (Rs./kWh)			
Gross Tariff	5.37	4.62	3.64	3.29
Less: Acc. Dep. Benefit	0.28	0.23	0.16	0.10
Net Tariff	5.09	4.39	3.48	3.19

C. For Projects having capacity above 100 kW and upto 500 kW

Level of Subsidy	0%	30%	70%	90%
Particulars	Rate of Fixed Charges (Rs./kWh)			
Gross Tariff	4.99	4.35	3.49	3.13
Less: Acc. Dep. Benefit	0.27	0.22	0.16	0.11
Net Tariff	4.72	4.12	3.33	3.01

D. For Projects having capacity above 500 kW and upto 1 MW

Level of Subsidy	0%	30%	70%	90%
Particulars	Rate of Fixed Charges (Rs./kWh)			
Gross Tariff	4.77	4.15	3.32	2.97
Less: Acc. Dep. Benefit	0.26	0.22	0.15	0.11
Net Tariff	4.51	3.93	3.17	2.86

10. Levelised rate of Fixed Charges (RFC) for Wind Energy based Power Projects:

Particular	Rate of Fixed Charges (Rs./kWh)				
	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5
Gross Tariff	4.85	4.44	3.81	3.23	3.05
Less: Acc. Dep. Benefit	0.47	0.43	0.37	0.31	0.29
Net Tariff	4.38	4.02	3.44	2.92	2.75

11. Levelised rate of Fixed Charges (RFC) in Rs./kWh for Biomass Rankine Cycle based Power Project

A Projects [other than rice straw and juliflora (plantation) based projects] with water cooled condenser based on Travelling grate boilers.

Particular	Rate of Fixed Charges (Rs./kWh)
Gross Tariff	3.05
Less: Acc. Dep. Benefit	0.10
Net Tariff	2.95

Year	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Variable Charges where 1st year is year of commissioning (Rs./kWh)	3.58	3.76	3.95	4.15	4.36	4.58	4.80	5.04	5.30	5.56	5.84	6.13	6.44	6.76	7.10	7.45	7.83	8.22	8.63	9.06

B. Projects [other than rice straw and juliflora (plantation) based projects] with water cooled condenser based on AFBC Boilers.

Particular	Rate of Fixed Charges (Rs./kWh)
Gross Tariff	3.04
Less: Acc. Dep. Benefit	0.10
Net Tariff	2.94

Year	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Variable Charges where 1st year is year of commissioning (Rs./kWh)	3.52	3.70	3.88	4.08	4.28	4.49	4.72	4.95	5.20	5.46	5.74	6.02	6.32	6.64	6.97	7.32	7.69	8.07	8.47	8.90

C. Projects [other than rice straw and juliflora (plantation) based projects] with air cooled condenser based on Travelling grate boilers.

Particular	Rate of Fixed Charges (Rs./kWh)
Gross Tariff	3.23
Less: Acc. Dep. Benefit	0.11
Net Tariff	3.12

Year	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Variable Charges where 1st year is year of commissioning (Rs./kWh)	3.67	3.85	4.04	4.25	4.46	4.68	4.91	5.16	5.42	5.69	5.97	6.27	6.59	6.92	7.26	7.62	8.01	8.41	8.83	9.27

D. Projects [other than rice straw and juliflora (plantation) based projects] with air cooled condenser based on AFBC Boilers

Particular	Rate of Fixed Charges (Rs./kWh)
Gross Tariff	3.23
Less: Acc. Dep. Benefit	0.11
Net Tariff	3.11

Year	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Variable Charges where 1st year is year of commissioning (Rs./kWh)	3.60	3.78	3.97	4.17	4.38	4.60	4.83	5.07	5.32	5.59	5.87	6.16	6.47	6.79	7.13	7.49	7.86	8.26	8.67	9.10

E. For rice straw and juliflora (plantation) based projects with water cooled condenser based on Travelling grate boilers.

Particular	Rate of Fixed Charges (Rs./kWh)
Gross Tariff	3.19
Less: Acc. Dep. Benefit	0.11
Net Tariff	3.08

Year	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Variable Charges where 1st year is year of commissioning (Rs./kWh)	3.58	3.76	3.95	4.15	4.36	4.58	4.80	5.04	5.30	5.56	5.84	6.13	6.44	6.76	7.10	7.45	7.83	8.22	8.63	9.06

F. For rice straw and juliflora (plantation) based projects with water cooled condenser based on AFBC Boilers.

Particular	Rate of Fixed Charges (Rs./kWh)
Gross Tariff	3.18
Less: Acc. Dep. Benefit	0.11
Net Tariff	3.07

Year	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Variable Charges where 1st year is year of commissioning (Rs./kWh)	3.52	3.70	3.88	4.08	4.28	4.49	4.72	4.95	5.20	5.46	5.74	6.02	6.32	6.64	6.97	7.32	7.69	8.07	8.47	8.90

G. For rice straw and juliflora (plantation) based projects with air cooled condenser based on Travelling grate boilers.

Particular	Rate of Fixed Charges (Rs./kWh)
Gross Tariff	3.38
Less: Acc. Dep. Benefit	0.12
Net Tariff	3.25

Year	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Variable Charges where 1st year is year of commissioning (Rs./kWh)	3.67	3.85	4.04	4.25	4.46	4.68	4.91	5.16	5.42	5.69	5.97	6.27	6.59	6.92	7.26	7.62	8.01	8.41	8.83	9.27

H. For rice straw and juliflora (plantation) based projects with air cooled condenser based on AFBC Boilers.

Particular	Rate of Fixed Charges (Rs./kWh)
Gross Tariff	3.37
Less: Acc. Dep. Benefit	0.12
Net Tariff	3.25

Year	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Variable Charges where 1st year is year of commissioning (Rs./kWh)	3.60	3.78	3.97	4.17	4.38	4.60	4.83	5.07	5.32	5.59	5.87	6.16	6.47	6.79	7.13	7.49	7.86	8.26	8.67	9.10

Form-1.1: Form Template for (Wind Power or Small Hydro Project or Solar PV/Thermal)

Sl. No.	Assumption Head	Sub-Head	Sub-Head(2)	Unit	Values
1	Power Generation	Capacity	Installed Power Generation Capacity	MW	
			Capacity utilization Factor	%	
			Commercial Operation date	MM/YYYY	
			Useful Life	Years	
2	Project Cost	Capital Cost/MW	Normative Capital Cost	Rs. Lakh/MW	
			Capital Cost	Rs. Lakh	
			Capital subsidy, if any	Rs. Lakh	
			Net Capital Cost	Rs. Lakh	
3	Financial Assumptions		Tariff Period	Years	
		Debt Equity			
			Debt	%	
			Equity	%	
			Total Debt Amount	Rs. Lakh	
			Total Equity Amount	Rs. Lakh	
		Debt Component	Loan Amount	Rs. Lakh	
			Moratorium Period	Years	
			Repayment Period (incld Moratorium)	Years	
			Interest Rate	%	
		Equity Component	Equity Amount	Rs. Lakh	
			Return on Equity for first 10 years	% p.a.	
			Return on equity 11th Year onwards	% p.a.	
			Discount rate	%	
		Deprecation	Depreciation Rate for first 12 years	%	
			Depreciation Rate 13 years onwards	%	
			Generation based incentives, if any	RS L.p.a.	
		Incentives	Period for GBI	years	
4	Operation & Maintenance	Normative O&M Expenses		Rs. Lakh/MW	
		O&M Expenses per annum		Rs. Lakh	
		Escalation factor for O&M expenses		%	
5	Working Capital	O&M expenses		Months	
		Maintenance Spare	% of O&M expenses)	%	
		Receivables		Months	
		Interest on working capital		%p.a.	

Form – 2.1: Form Template for (Biomass Power, municipal solid waste, refuse derived fuel or Non-fossil fuel based Cogen) Parameter Assumptions

Sl.No.	Assumption Head	Sub-Head	Sub-Head (2)	Unit	Values
1	Power Generation	Capacity	Installed Power Generation Capacity	MW	
			Auxiliary Consumption factor	%	
			PLF (during stabilization upto 6 months)	%	
			PLF (during 1st year after stabilization)	%	
			PLF (2nd yr onwards)	%	
			Commercial Operation Date	mm/yyyy	
			Useful Life	Years	
2	Project Cost	Capital Cost/MW	Normative Capital Cost	Rs. Lakh/MW	
			Capital Cost	Rs. Lakh	
			Capital subsidy, if any	Rs. Lakh	
			Net Capital Cost	Rs. Lakh	
3	Financial Assumptions		Tariff Period	Years	
		Debt Equity			
			Debt	%	
			Equity	%	
			Total Debt Amount	Rs. Lakh	
			Total Equity Amount	Rs. Lakh	
		Debt Component	Loan Amount	Rs. Lakh	
			Moratorium Period	Year	
			Repayment Period (incld Moratorium)	Year	
			Interest Rate	%	
		Equity Component	Equity Amount	Rs. Lakh	
			Return on Equity for first 10 years	%p.a.	
			Return on Equity 11th year onwards	%p.a.	
			Discount Rate	%	
		Depreciation	Depreciation Rate for first 12 years	%	
			Depreciation Rate 13 years onwards	%	
		Incentives	Generation Based incentives, if any	Rs. L p.a.	
			Period for GBI	years	
4	Operation & Maintenance	Normative O&M expense		Rs. Lakh/MW	
		O&M expense per annum		Rs. Lakh	
		Escalation factor for O&M expense		%	
5	Working Capital	O&M expense		Months	
		Maintenance Spare	(% of O&M expenses)	%	
		Receivables		Months	
		Biomass stock		Months	
		Interest on working capital		% p.a.	
6	[Fuel related assumptions	Station Heat Rate	During stabilization	Kcal/kWh	
			Post stabilization	Kcal/kWh	
		Fuel types & mix	Biomass fuel type-1	%	
			Biomass fuel type-2	%	
			Municipal Solid Waste fuel	%	
			Refuse Derived Fuel	%	
			Fossil fuel (coal)	%	
			GCV of Biomass fuel type-1	kCal/kg	
			GCV of Biomass fuel type-2	kCal/kg	
			GCV of fossil fuel (coal)	kCal/kg	
			Biomass Price (fuel type-1):yr-1	Rs./MT	
			Biomass Price (fuel type-2):yr-1	Rs./MT	
			Fossil fuel price (coal) : yr-1	Rs./MT	
			Fuel price escalation factor	% p.a.	

Form 1.2 Form Template for (Biomass Power, municipal solid waste, refuse derived fuel or Non-fossil fuel based Cogen:

Determination of Tariff Components

		Year																																
Unit Generation	Unit	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35
Installed Capacity	MW																																			
Net Generation	MU																																			

		Year																																		
Unit Generation	Unit	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35
O&M Expenses	Rs. Lakh																																			
Deprecation	Rs. Lakh																																			
Interest on term loan	Rs. Lakh																																			
Interest on working Capital	Rs. Lakh																																			
Return on Equity	Rs. Lakh																																			
Total Fixed Cost	**Rs. Lakh**																																			

		Year																																		
Per Unit Tariff Components	Unit	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35
PU O&M Expenses	Rs./kWh																																			
PU Deprecation	Rs./kWh																																			
PU Interest on term loan	Rs./kWh																																			
PU Interest on working Capital	Rs./kWh																																			
PU Return on Equity	Rs./kWh																																			
Total Fixed PU Components	**Rs./kWh**																																			

		Year																																		
Levelised Tariff	Unit	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35
Discount Factor																																				
Discount Tariff Components	Rs./kWh																																			
Levelised Tariff	Rs./kWh																																			

Form 2.2 Form Template for (Biomass Power or Non-fossil based Cogen): Determination of Tariff Components

		Year																														
Unit Generation	**Unit**	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35
Installed Capacity	MW																																			
Net Generation	MU																																			

		Year																														
Tariff Components (Fixed charge)	**Unit**	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35
O&M Expenses	Rs. Lakh																																			
Deprecation	Rs. Lakh																																			
Interest on term loan	Rs. Lakh																																			
Interest on working Capital	Rs. Lakh																																			
Return on Equity	Rs. Lakh																																			
Total Fixed Cost	**Rs. Lakh**																																			

		Year																														
Tariff Components (Variable charge)	**Unit**	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35
Biomass fuel type-1	Rs. Lakh																																			
Biomass fuel type-2	Rs. Lakh																																			
Municipal Solid Waste	Rs. Lakh																																			
Refuse Derived Fuel	Rs. Lakh																																			
Fossil fuel (coal)	Rs. Lakh																																			
Sub-total (Fuel Costs)	**Rs. Lakh**																																			
Fuel cost allocable to power	%																																			
Total Fuel Cost	**Rs. Lakh**																																			

		Year																														
Per Unit Tariff (Components)	**Unit**	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35
PU & O&M Expenses	Rs./kWh																																			
PU Depreciation	Rs./kWh																																			
PU Interest on term loan	Rs./kWh																																			
PU Interest on working Capital	Rs./kWh																																			
PU Return on Equity	Rs./kWh																																			
PU Total Fixed Components (Fixed)	**Rs./kWh**																																			
PU Total Fixed Components (Variable)	**Rs./kWh**																																			
PU Total Fixed Components (Total)	**Rs./kWh**																																			

Levelised Tariff	Unit	Year																															
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35
Discount Factors	Rs./kWh																																			
Discount Tariff Components (fixed)	Rs./kWh																																			
Discount Tariff Components (variable)	Rs./kWh																																			
Discount Tariff Components (total)	Rs./kWh																																			
Levelised Tariff (fixed)	**Rs./kWh**																																			
Levelised Tariff (variable)	**Rs./kWh**																																			
Levelised Tariff (total)	**Rs./kWh**																																			

By Order of the Commission,

NEERAJ SATI,

Secretary,

Uttarakhand Electricity Regulatory Commission.

मुद्रक एवम् प्रकाशक–अपर निदेशक, राजकीय मुद्रणालय, उत्तराखण्ड, रुड़की।

UTTAR PRADESH ELECTRICITY REGULATORY COMMISSION

No. UPERC/Secy/Regulation/2019- 294

Lucknow: dated, August 16, 2019

NOTIFICATION

In exercise of powers conferred under section 181 of the Electricity Act, 2003 (No. 36 of 2003) and all other powers enabling in this behalf, and after previous publication, the Uttar Pradesh Electricity Regulatory Commission, hereby makes the following Regulations to amend the Uttar Pradesh Electricity Regulatory Commission (Promotion of Green Energy through Renewable Purchase Obligation) Regulations, 2010 vide notification no. UPERC/Secy/ Regulation/10-787 dated 17th August, 2010 (hereinafter referred to as "the principal Regulations"), namely: -

1. Short Title and Commencement

1.1 These Regulations may be called the Uttar Pradesh Electricity Regulatory Commission (Promotion of Green Energy through Renewable Purchase Obligation) (First Amendment) Regulations, 2019.

1.2 These Regulations shall come into force from the date of their publication in the Official Gazette of the Uttar Pradesh Government.

2. The provisions of the principal Regulations are amended as hereunder:

Amendment to Regulation 2- "Definitions"

(i) After clause (j), clause (ja) shall be inserted as hereunder:

(ja) "Hydropower Purchase Obligation (HPO)" means a separate entity within Non-Solar Renewable Purchase Obligation (RPO). The HPO shall cover all Large Hydro Power (LHPs) commissioned after issue of Ministry of Power Office Memorandum F.No. 15/2/2016-H-I (Pt.) dated March 8, 2019 as well as the untied capacity (i.e., without PPA) of the commissioned projects. This HPO will be within the existing Non-Solar RPO after increasing the percentage assigned for it so that existing Non-Solar RPO for other renewable sources remains unaffected by the introduction of HPO.

Amendment to Regulation 4- "Renewable Purchase Obligation"

(i) The Table in Regulation 4 shall be substituted by the following:

Table – A: Minimum Quantum of Purchase (FY 2010-11 to FY 2018-19) (%)

Year	Minimum quantum of purchase from renewable energy sources as % of total energy consumed (in kWh)		
	Non-Solar	Solar	Total
	(1)	(2)	(3) = (1+2)
2010-11	3.75	0.25-	4
2011-12	4.50	0.5	5

Year	Minimum quantum of purchase from renewable energy sources as % of total energy consumed (in kWh)		
	Non-Solar	Solar	Total
	(1)	(2)	(3) = (1+2)
2012-13	5.0	1	6
2013-14	5.0	1	6
2014-15	5.0	1	6
2015-16	5.0	1	6
2016-17	5.0	1	6
2017-18	5.0	1	6
2018-19	5.0	1	6

Table – B: Minimum Quantum of Purchase (FY 2019-20 to FY 2023-24) (%)

Year	Minimum quantum of purchase from renewable energy sources as % age of total energy consumed (in kWh)			
	Non-Solar		Solar	Total
	Other Non-Solar	HPO		
	(1)	(2)	(3)	(4) =(1+2+3)
2019-20	5	1	2	8
2020-21	6	2	3	11
2021-22	6	3	4	13
2022-23	6	3	5	14
2023-24	7	3	5	15

(ii) The first proviso to Regulations 4.1 shall be substituted as mentioned in the Table below:

EXISTING	AMENDED
Provided that if the obligated entity has established the fact that the minimum quantum of purchase from solar energy (shown in column (3) above) is not available in the market either in the form of solar power or solar certificate in a particular year and the Commission is satisfied with this fact, then additional non-solar energy over and above that shown in column (2) above shall be purchased for fulfilment of total renewable purchase obligation in accordance to column (3) above:	Provided that on achievement of Solar RPO compliance to the extent of 85% and above, remaining shortfall if any, can be met by excess Non-Solar energy purchased beyond specified Non-Solar RPO for that particular year. Provided further that on achievement of Non-Solar RPO Compliance to the extent of 85% and above, remaining shortfall if any, can be met by excess Solar energy purchased beyond specified Solar RPO trajectory.

EXISTING	AMENDED
	Provided the Other Non-Solar and HPO, under the head of Non-Solar RPO, will have 100% fungibility.

(iii) The following proviso shall be added after the last proviso of Regulation 4.1:
Provided that from FY 2016-17, the Renewable Purchase Obligations shall be on total consumption of electricity by an obligated entity, excluding consumption met from hydro sources of power (not covered under HPO).

(iv) The Regulations 4.3 shall be substituted as mentioned in the Table below:

EXISTING	AMENDED
The renewable purchase obligation specified for the year 2012-13 shall continue beyond 2012-13 until any revision is effected by the Commission in this regard.	The renewable purchase obligation specified for the year 2023-24 shall continue beyond 2023-24 until any revision is effected by the Commission in this regard.

(v) The following Regulations 4.5 shall be inserted after the Regulations 4.4:
"Each Obligated entity will file the Annual Return of RPO within 60 days of completion of the Financial Year and Quarterly Return within 30 days of the end of the quarter, in which all details regarding the purchase of other Non-Solar RPO and HPO RPO and Solar RPOs will be given along with reasons in case of non-achievement of the targets set and roadmap to bridge the gap."

(vi) The Following Regulation 4.6 shall be inserted after the amended Regulation 4.5:
"The RPO of Captive Power Plants (CPP) may be kept fixed at the RPO level applicable in the year in which CPP was commissioned. As and when the company adds to the capacity of the CPP, it will have to provide for additional RPO as obligated in the year in which new capacity is commissioned."
Provided if the CPP is commissioned prior to the issuance of Uttar Pradesh Electricity Regulatory Commission (Promotion of Green Energy through Renewable Purchase Obligation) Regulations, 2010, RPO for CPP will be kept equivalent to that notified for FY 2010-11.

(vii) The following proviso of Regulation 7 shall be substituted as mentioned below:

EXISTING	AMENDED
Provided that RPO Regulatory Charges shall be equivalent to the applicable preferential tariff for solar or non-solar renewable energy sources or any other	Provided that RPO Regulatory Charges shall be equivalent to the applicable floor prices of Solar and Non-Solar RECs or any other rate as

EXISTING	AMENDED
rate as may be stipulated by the Commission: Provided further that the RPO Regulatory Fund so created shall be utilised, as may be directed by the Commission, for purchase of the certificates or for development of transmission and distribution infrastructure in the State related to generating stations based on renewable energy sources or in any other manner as may be stipulated by the Commission: Provided further that the Commission may empower the State Agency to procure out of the amount available in the fund the required number of certificates from the Power Exchange:	may be stipulated by the Commission: Provided further that the RPO Regulatory Fund so created shall be utilised, as may be directed by the Commission, for purchase of the certificates or may be provided to UPNEDA and/or any other Govt agency notified by the Government of Uttar Pradesh, for development of transmission and distribution infrastructure in the State related to generating stations based on renewable energy sources or in any other manner as may be provided by the Commission:

(Kaushal Kishore Sharma)
Member

(Raj Pratap Singh)
Chairman

REGISTERED NO. PT.-40



The Bihar Gazette

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27 Agrahayana 1940(S)
(NO.PATNA 1195) PATNA, Tuesday, 18TH DECEMBER 2018

BIHAR ELECTRICITY REGULATORY COMMISSION, PATNA

(Renewable Purchase Obligation, its Compliance and REC Framework Implementation) (3rd Amendment) Regulations, 2018

Notification
The 17th December, 2018

No. BERC-SMP-31/2018-13—In exercise of powers conferred under section 181 of the Electricity Act, 2003 read with Sections 61, 66, 86(1)(e) and all other powers enabling the Commission in this behalf, the Bihar Electricity Regulatory Commission hereby amends the Bihar Electricity Regulatory Commission (Renewable Purchase Obligation, its compliance and REC Framework Implementation) Regulations, 2010 notified vide no. BERC-Regl-01/10-05 dated 16th November, 2010.

1. Short title, extent and commencement:—

1.1 these regulations may be called the Bihar Electricity Regulatory Commission (Renewable Purchase Obligation, its compliance and REC Framework Implementation) (3rd Amendment) Regulations, 2018.

1.2 These Regulations extend to the whole of the State of Bihar.

1.3 These Regulations shall come into force on the date of their publication in the official Gazette.

2. Amendment of Regulation 4:—

A New proviso shall be added before first proviso of Regulation 4.1 of the principal regulation as under:-

'Provided that on achievement of Solar RPO compliance to the extent of 85 % and above in any year, remaining shortfall, if any, may be met by purchase of excess non-solar energy beyond the percentage specified for

Non-Solar RPO for that particular year.

Provided further that on achievement of Non-Solar RPO compliance to the extent of 85 % and above in any year, remaining shortfall, if any, may be met by purchase of excess solar energy beyond the percentage specified for solar RPO for that particular year".

The following shall be added at the end of Clause 4.1 of the principal regulation:-

"Commission may review minimum percentage of compliance specified in the above Regulations depending upon prevailing situation in succeeding years"

3. The following shall be added at the end of first proviso of Regulation 5.1 of the principal regulation:

"Similarly, if non-solar certificates are not available in a particular year, then in such cases, additional solar certificate shall be purchased for fulfillment of the Renewable Purchase Obligation (RPO)"

4. Amendment of Regulation 7:—

4.1 Clause 7.1 of these regulations shall be substituted by following:

"Each distribution licensee shall indicate, along with sufficient proof thereof, the estimated quantum of purchase from renewable energy sources for the ensuring year in tariff / annual performance review petition in accordance with Regulation notified by the commission. The estimated quantum of purchase shall be in accordance with clause 4.1 of these Regulations. If the distribution licensee is unable to fulfill the obligation, the shortfall of the specified quantum of solar and / or non-solar of that year would be added to the specified quantum for the next year. Provided, the solar certificates and/ or non-solar certificates were not available in that particular year. However, credit for excess purchase from renewable energy sources would not be adjusted in the ensuing year."

4.2 Clause 7.2 of these regulations shall be substituted by following:—

"Despite availability of renewable energy sources, if distribution licensee fails to fulfill the minimum quantum of purchase from renewable energy sources, it, without prejudice to the penalty to which it may be liable under section 142 of the Act, shall be liable to pay compensation as per clause 9 of these Regulations"

5. Amendment of Regulation 9:—

5.1 The following shall be added at the end of first proviso of Regulation 9.1 of the principal regulation:

"or the fund may be deposited in the "Bihar Renewable Energy Development fund""

5.2 The third proviso of Regulation 9.1 of the principal regulation shall be deleted:

By Order of the Commission,
Rameshwar Prasad Das,
Secretary

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भारत का राजपत्र
The Gazette of India

असाधारण
EXTRAORDINARY
भाग I—खण्ड 1
PART I—Section 1
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सं. 39] नई दिल्ली, बृहस्पतिवार, जनवरी 28, 2016/माघ 8, 1937
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विद्युत मंत्रालय

संकल्प

नई दिल्ली, 28 जनवरी, 2016

टैरिफ नीति

सं. 23/2/2005-आर एंड आर (खंड-IX).–1.0 प्रस्तावना

1.1 विद्युत अधिनियम, 2003 की धारा 3 का अनुपालन करते हुए, केंद्र सरकार ने दिनांक 6 जनवरी, 2006 को टैरिफ नीति अधिसूचित की। टैरिफ नीति में और संशोधन 31 मार्च, 2008, 20 जनवरी, 2011 और 08 जुलाई, 2011 को अधिसूचित किए गए थे। विद्युत अधिनियम, 2003 की धारा 3(3) के अंतर्गत प्रदत्त शक्तियों का प्रयोग करते हुए केंद्र सरकार एतदद्वारा भारत के राजपत्र में इस संकल्प के प्रकाशन की तारीख से प्रभावी किए जाने हेतु संशोधित टैरिफ नीति अधिसूचित करती है।

06 जनवरी, 2006 को अधिसूचित टैरिफ नीति के प्रावधानों के अंतर्गत तथा इसमें किए गए संशोधनों के अंतर्गत किसी भी किए गए कार्य अथवा की गई कार्रवाई अथवा तथाकथित किए गए अथवा किए जाने वाले कार्य के होते हुए भी, जहां तक कि इस नीति से असंगत नहीं हैं, उन्हें इस संशोधित नीति के प्रावधानों के अंतर्गत किया गया अथवा किया जाने वाला माना जाएगा।

1.2 राष्ट्रीय विद्युत नीति ने नयी उत्पादन क्षमता की अभिवृद्धि एवं प्रतिवर्ष विद्युत की प्रतिव्यक्ति उपलब्धता बढ़ाने का लक्ष्य निर्धारित किया है एवं न केवल ऊर्जा और व्यस्ततमकालीन कमी को दूर करने के लिए, बल्कि केंद्रीय विद्युत प्राधिकरण द्वारा निर्दिष्ट स्पिनिंग रिजर्व रखा जाना भी है। विद्युत क्षेत्र को आगामी पांच वर्षों में सभी घरों को सस्ती बिजली की उपलब्धता को सुगम बनाने हेतु चुनौती को भी पूरा करना है।

1.3 केन्द्र और राज्य सरकार, बजटीय संसाधनों से अपेक्षित धनराशि मुहैया कराने में असमर्थ हैं अतः विद्युत क्षेत्र में निवेश को आकर्षित करने के लिए निवेश पर उपयुक्त रिटर्न मुहैया कराना अनिवार्य है। देश के आर्थिक विकास में तेजी लाने और लोगों के जीवन स्तर में सुधार लाने का लक्ष्य प्राप्त करने हेतु

उपभोक्ताओं की विभिन्न श्रेणियों को उचित दर पर बिजली की उपलब्धता को सुनिश्चित कराना भी समान रूप से आवश्यक है।

1.4 क्षेत्र में पर्याप्त निवेशों को आकर्षित करने की जरूरत तथा उपभोक्ताओं हेतु औचित्यपूर्ण उपयोगकर्त्ता शुल्क (यूजर चार्ज) के बीच संतुलन को सुनिश्चित करना विनियामक प्रक्रिया के लिए गंभीर चुनौती है। विद्युत क्षेत्र का त्वरित विकास और आवश्यक निवेशों को आकर्षित करने की इसकी क्षमता के साथ-साथ पूरे देश में नियामक दृष्टिकोण का विस्तार करना अपेक्षित है। राज्यों की अधिक संख्या और विविधताओं पर विचार करते हुए दृष्टिकोण में निरंतरता अत्यंत आवश्यक है।

2.0 विधायी स्थिति

2.1 विद्युत अधिनियम, 2003 की धारा 3(1) के जरिए केन्द्र सरकार को टैरिफ नीति निरूपण का अधिकार दिया गया है। अधिनियम की धारा 3 (3) के जरिए केन्द्र सरकार को समय-समय पर टैरिफ नीति की समीक्षा अथवा संशोधित करने का अधिकार दिया गया है।

2.2 केंद्रीय विद्युत विनियामक आयोग (सीईआरसी) और राज्य विद्युत विनियामक आयोग (एसईआरसी) विनियम निरूपण के साथ-साथ अपने कार्य निष्पादन में टैरिफ नीति से निर्देशित होंगे।

2.3 विनियामक आयोग, उत्पादन कंपनियों और पारेषण लाइसेंस धारकों के लिए टैरिफ के निर्धारण हेतु केन्द्रीय आयोग द्वारा विनिर्दिष्ट सिद्धांतों और कार्य प्रणालियों से निर्देशित होंगे।

2.4 केन्द्र सरकार द्वारा अधिनियम के प्रावधान के अंतर्गत विनियामक मंच का गठन किया गया है, जो अन्य बातों के साथ-साथ विशेषकर वितरण के क्षेत्र में नीतिगत निरंतरता बनाए रखने में सहयोग करेगा।

3.0 नीति का विकास

टैरिफ नीति को राज्य सरकारों, केन्द्रीय विद्युत प्राधिकरण (सीईए), केन्द्रीय विद्युत विनियामक आयोग और विभिन्न पणधारियों (स्टेक होल्डरों) के साथ परामर्श करके तैयार किया गया है।

4.0 नीति के उद्देश्य

टैरिफ नीति के उद्देश्य निम्नानुसार हैं :

(क) उपभोक्ताओं को उचित एवं प्रतिस्पर्द्धी दरों पर विद्युत की उपलब्धता सुनिश्चित करना;

(ख) क्षेत्र की वित्तीय व्यवहार्यता सुनिश्चित करना और निवेश को आकर्षित करना;

(ग) विनियामक क्षेत्राधिकार में पारदर्शिता, निरंतरता और पूर्वानुमेयता को बढ़ावा देना और विनियामक जोखिमों को कम करना;

(घ) प्रचालन में प्रतिस्पर्धा, दक्षता का संवर्द्धन करना और आपूर्ति की गुणवत्ता में सुधार करना;

(ङ) नवीकरणीय स्रोतों से विद्युत उत्पादन को प्रोत्साहित करना;

(च) पर्याप्त व्यस्ततमकालीन रिजर्व, विश्वसनीय ग्रिड प्रचालन तथा विभिन्न नवीकरणीय ऊर्जा स्रोतों को एकीकरण प्रदान करने के लिए पम्प्ड स्टोरेज परियोजनाओं (पीएसपी) सहित जल विद्युत उत्पादन को बढ़ाना;

(छ) बेहतर उपभोक्ता सेवाओं के लिए एक गतिशील और सुदृढ़ विद्युत अवसंरचना विकसित करना;

(ज) उपभोक्ताओं की सभी श्रेणियों को पर्याप्त और निर्बाध विद्युत की आपूर्ति सुविधाजनक बनाना;

(झ) उपभोक्ताओं को विद्युत आपूर्ति की विश्वसनीयता के लिए अग्रिम रूप से उत्पादन, पारेषण और वितरण में संचय सहित पर्याप्त क्षमता निर्माण सुनिश्चित करना।

5.0 टैरिफ के प्रति सामान्य दृष्टिकोण

5.1 विद्युत उद्योग के विभिन्न खंडों में प्रतिस्पर्धा का समावेश करना, विद्युत अधिनियम, 2003 की मुख्य विशेषताओं में से एक है। प्रतिस्पर्धा से पूंजी लागत में कमी तथा प्रचालन में दक्षता के जरिए उपभोक्ताओं को पर्याप्त लाभ होगा। इससे प्रतिस्पर्धात्मक रूप से मूल्य निर्धारण की सुविधा उपलब्ध होंगी। केन्द्र सरकार ने वितरण लाइसेंसधारकों द्वारा विद्युत उपलब्ध कराने हेतु बोली प्रक्रिया पर आधारित टैरिफ के विस्तृत निर्देश पहले ही जारी कर दिए हैं।

5.2 वितरण लाइसेंस धारकों द्वारा विद्युत की सभी भावी आवश्यकताओं को प्रतिस्पर्धात्मक रूप से प्राप्त किया जाता रहेगा सिवाय मौजूदा परियोजनाओं का विस्तार करने के मामले में, अथवा जहां पर चिन्हित किए गए विकासकर्त्ता के रूप में राज्य सरकार द्वारा नियंत्रणाधीन अथवा स्वामित्व वाली कंपनी हो और जहां पर विनियामकों को मानकों पर आधारित टैरिफ निर्धारण का सहारा लेना पड़ता हो बशर्ते कि इस प्रयोजनार्थ निजी विकासकर्ताओं द्वारा विद्युत उत्पादन क्षमता का विस्तार किया जाना एकबारगी अभिवृद्धि तक सीमित होगी जो कि विद्यमान क्षमता के 100% से अधिक नहीं होगी।

बशर्ते कि उपयुक्त आयोग, जैसा कि विद्युत अधिनियम, 2003 में परिभाषित है कि ऐसी विस्तार परियोजनाओं के मामले में, मौजूदा परियोजना की अवसंरचना और नई प्रौद्योगिकी की दक्षता साझा करने का लाभ टैरिफ के माध्यम से उपभोक्ताओं तक पहुँचाने को सुनिश्चित करेगा।

बशर्ते कि इसके अतिरिक्त राज्य सरकार राज्य में निवेश को बढ़ावा देने के लिए नीति अधिसूचित कर सकती है जिसके अंतर्गत उत्पादन संयंत्रों की स्थापना की अनुमति देते हुए जिसमें नवीकरणीय ऊर्जा स्रोत शामिल हैं, से उस राज्य के वितरण लाइसेंसियों द्वारा अधिकतम 35% संस्थापित क्षमता का प्रापण किया जा सकता है और जिसके लिए विद्युत अधिनियम, 2003 की धारा 62 के अंतर्गत टैरिफ निर्धारित किया जा सकता है।

बशर्ते कि नीति के पैरा 5.11 (ञ) में शामिल किसी भी प्रावधान के होते हुए भी, ऐसी 35% संस्थापित क्षमता के टैरिफ को एसईआरसी द्वारा निर्धारित किया जाएगा।

तथापि, राष्ट्रीय विद्युत नीति के पैरा 5.7.1 के अंतर्गत अनुमत दीर्घकालिक पीपीए से अलग 15% विद्युत, राज्य के वितरण लाइसेंसी द्वारा प्रापण की जाने वाली 35% विद्युत में शामिल नहीं की जाएगी।

5.3 केंद्र सरकार द्वारा नियंत्रणाधीन अथवा इसके स्वामित्व वाली सभी नई विद्युत उत्पादन एवं पारेषण परियोजनाओं के टैरिफ का निर्धारण 6 जनवरी, 2006 को अधिसूचित टैरिफ नीति के अनुसार प्रतिस्पर्धात्मक बोली के आधार पर किया जाता रहेगा, जब तक कि अन्यथा केंद्र सरकार द्वारा मामला-दर-मामला आधार पर विनिर्दिष्ट न किए जाए।

इसके अतिरिक्त, अंतरा-राज्य पारेषण परियोजनाएं एक थ्रेशहोल्ड सीमा, जिसका निर्धारण एसईआरसी द्वारा किया जाएगा, से ज्यादा लागत वाली परियोजनाएं राज्य सरकार द्वारा प्रतिस्पर्धात्मक बोली प्रक्रिया के माध्यम से विकसित की जाएंगी।

5.4 केंद्रीय विद्युत विनियामक आयोग, केंद्रीय विद्युत प्राधिकरण तथा अन्य पणधारकों से परामर्श करके, छः माह के अंदर, कोल वाशरी रिजेक्ट्स का प्रयोग कर रही परियोजनाओं से विद्युत उत्पादन के टैरिफ के निर्धारण हेतु विनियमों को तैयार करेगा। इन विनियमों का राज्य विद्युत विनियामक आयोगों द्वारा भी पालन किया जाएगा।

बशर्ते, केंद्रीय/राज्य पीएसयू, सरकारी कंपनी और सरकारी कंपनी से भिन्न कंपनी, जिसमें सरकारी कंपनी से भिन्न कंपनी की प्रत्यक्ष रूप से अथवा इसकी किसी भी सहायक कंपनी या संबद्ध कंपनी के माध्यम से शेयरधारिता प्रदत्त शेयर पूंजी के 26% से ज्यादा नहीं होगी, वाले संयुक्त उपक्रम द्वारा कोल वाशरी

रिजेक्ट्स आधारित परियोजनाओं से विद्युत का प्रापण अधिनियम की धारा 62 के अंतर्गत किया जा सकता है।

5.5 पम्प्ड स्टोरेज प्लांट (पीएसपी) सहित जल विद्युत परियोजना के विकासकर्ता को दीर्घकालीन विद्युत क्रय करारों (पीपीए) के माध्यम से बेची जाने वाली विद्युत के लिए सेवा विनियमों की कार्यनिष्पादन आधारित लागत के आधार पर उपयुक्त आयोग द्वारा टैरिफ निर्धारित कराने का विकल्प होगा, यदि निम्नलिखित शर्तों को पूरा कर लिया जाता है:

(क) उपयुक्त आयोग संतुष्ट है कि एक पारदर्शी द्विस्तरीय प्रक्रिया अपनाने के पश्चात संबंधित राज्य सरकार द्वारा परियोजना स्थल का आबंटन किया गया है। प्रथम चरण वित्तीय क्षमता, समान आकार की अवसरचनात्मक परियोजनाओं को विकसित करने का विगत अनुभव, परियोजनाओं को समय पर तथा अनुमानित लागत, में तैयार करने का विगत ट्रेक रिकार्ड, टर्न-ओवर तथा कार्यनिष्पादन गारंटी को पूरा करने की योग्यता इत्यादि के मानकों के आधार पर पूर्व-अर्हता के लिए होना चाहिए। दूसरे चरण में, केवल एक सकल मात्रानिर्धारक पैरामीटर जैसा कि केंद्र सरकार द्वारा यथा अधिसूचित निःशुल्क विद्युत की प्रतिशतता से अधिक निःशुल्क विद्युत, राज्य सरकार को प्रदान की गई इक्विटी भागीदारी अथवा केंद्र सरकार द्वारा समय-समय पर अधिसूचित किए जाने वाले अन्य पैरामीटर के आधार पर बोलियां आमंत्रित की जाए।

(ख) के.वि.प्रा. की स्वीकृति (यदि अधिनियम की धारा 8 के तहत अपेक्षित हो) वित्तीय समापन, कार्य सौंपने और वितरण लाइसेंसधारियों के साथ नीचे (ग) में निर्धारित क्षमता को दीर्घकालीन पीपीए (35 वर्षों अथवा इससे अधिक अवधि के) करने के कार्य 15.08.2022 तक पूरे कर लिए जाएं।

(ग) कुल विक्रय योग्य डिजाइन ऊर्जा का 60% या इससे ज्यादा, दीर्घावधि पीपीए के लिए निश्चित है और शेष मर्चेंट विक्रय हेतु अनुमत है।

बशर्ते कि, वितरण लाइसेंसी उपयुक्त आयोग के अनुमोदन से अध्यधीन मौजूदा निबंधन एवं शर्तों पर दीर्घकालीन पीपीए की अवधि 35 वर्षों से अगले 15 वर्षों के लिए बढ़ा सकता है।

बशर्ते कि इस खंड में निहित प्रावधान पम्प्ड स्टोरेज प्लांट (पीएसपी) के लिए लागू नहीं होंगे।

(घ) परियोजना की सभी यूनिटों को शुरू करने के लिए समयावधि उपयुक्त आयोग द्वारा आरंभिक सूची के अनुमोदन की तारीख से 4 वर्ष निर्धारित होगी। तथापि उपयुक्त आयोग कारणों का लिखित में अभिलेखन करने के पश्चात् 100 मेगावाट क्षमता से अधिक की (जलाशय तथा रन-ऑफ-रिवर परियोजनाओं) जल विद्युत परियोजनाओं के लिए लंबी समयावधि निर्धारित कर सकेगा। चालू करने के निर्धारित समय की प्राप्ति हेतु दंड सहित सहमत समय सीमाओं का निर्धारण केंद्रीय विद्युत प्राधिकरण के परामर्श से उपयुक्त आयोग द्वारा निश्चित किया जाएगा। उपयुक्त आयोग, निर्माण के दौरान ब्याज (आईडीसी) तथा वित्त पोषण लागत (एफसी) को सीईए के अनुमोदन से, विलंब की अवधि, जो कि विकासकर्ता के कारण नहीं हुआ, तक ही पास-थ्रू कर सकेगा।

(ङ) उपकरण की आपूर्ति एवं परियोजना के निर्माण के लिए ठेका सौंपने का कार्य या तो टर्नकी के माध्यम से अथवा सुपरिभाषित पैकेजों के माध्यम से अंतर्राष्ट्रीय प्रतिस्पर्द्धी बोली के आधार पर किया जाता है।

5.6 ऊपर पैरा 5.5 में किसी भी बात के होते हुए भी 100 मेगावाट से ज्यादा की डिजाइन क्षमता वाली जल विद्युत परियोजनाओं, जिनके लिए स्थल को या तो पारदर्शी प्रक्रिया का पालन करते हुए तथा मानदंड के पूर्व-निर्धारित समुच्चय के आधार पर पहले अवार्ड किया जा चुका है, के विकासकर्ता के पास, अधिनियम की धारा 62 के अंतर्गत, लागत आधिक्य के आधार पर दीर्घकालीन पीपीए के माध्यम से बेची जाने वाली विद्युत के लिए उपयुक्त आयोग द्वारा टैरिफ निर्धारित करवाए जाने का विकल्प होगा।

5.7 पैरा 5.5 एवं 5.6 के अंदर शामिल परियोजनाओं के मामलों में उपयुक्त आयोग निम्नलिखित को सुनिश्चित करते हुए टैरिफ निर्धारित करेगा-

(i) परियोजना स्थल आबंटित करने (अधिसूचित निःशुल्क विद्युत के अलावा) के लिए परियोजना विकासकर्ता द्वारा वहन किए गए अथवा वहन किए जाने के लिए प्रतिबद्ध कोई व्यय न तो परियोजना लागत में शामिल किया जाएगा और न ही इस प्रकार का कोई व्यय टैरिफ में शामिल किया जाएगा।

(ii) परियोजना लागत में परियोजना की अनुमोदित आर एंड आर योजना की लागत शामिल होगी जो निम्नलिखित के अनुसार होगी:

(क) वर्तमान में मान्य राष्ट्रीय पुनर्वास एवं पुनर्स्थापन नीति;

(ख) आर एंड आर पैकेज जैसा कि परिशिष्ट के रूप में संलग्न है।

(iii) वार्षिक निर्धारित प्रभार कुल विक्रय योग्य, डिजाइन ऊर्जा के संबंध में दीर्घावधि पीपीए के आधार पर टाई-अप की गई विक्रय योग्य डिजाइन ऊर्जा के लिए आनुपातिक रूप से ली जाएगी जिसे कुल विक्रय योग्य डिजाइन ऊर्जा के निम्नलिखित को घटाकर प्राप्त किया जाएगा।

(क) मेजबान राज्य तथा राइपेरियन राज्य के लिए समय-समय पर केंद्र सरकार द्वारा अधिसूचित अनुसार निःशुल्क विद्युत तथा राज्य सरकार द्वारा गठित स्थानीय क्षेत्र विकास निधि के लिए अंशदान हेतु प्रतिशतता। इस निःशुल्क विद्युत को राज्य सरकार के निर्णय के अनुसार वितरित किया जाए।

(ख) आरंभन की तारीख से 10 वर्ष की अवधि के लिए नामोदिष्ट पुनर्स्थापन क्षेत्र/परियोजना क्षेत्रों में वितरण लाइसेंसी के माध्यम से राज्य सरकार द्वारा अधिसूचित प्रत्येक परियोजना प्रभावित परिवार को प्रत्येक माह 100 यूनिट बिजली के बराबर ऊर्जा निःशुल्क प्रदान की जाएगी।

5.8 उपयुक्त आयोग, प्रारंभिक वर्षों में, टैरिफ भार को कम करने के क्रम में दीर्घकालीन वित्तीय लिखतों का प्रयोग करने के लिए जल विद्युत परियोजनाओं (एचईपी) के विकासकर्ताओं को प्रोत्साहित करने हेतु उपयुक्त विनियामक संरचना की व्यवस्था करेगा।

5.9 प्रतिस्पर्धा का वास्तविक लाभ उपयुक्त बाजार परिस्थितियां उत्पन्न होने पर ही उपलब्ध होगा। विद्युत आपूर्ति की कमी को नियंत्रित करने की जरूरत होगी। विभिन्न निष्पादनकर्त्ता प्रतिस्पर्धा के जरिए सेवा की गुणवत्ता में वृद्धि करेंगे। विद्युत उद्योग को उस स्थिति में लाने हेतु सभी प्रयास किए जाने की जरूरत होगी जिसमें उपभोक्ताओं के समग्र हितों की रक्षा हो। पारेषण और वितरण अर्थात् वायर के व्यवसाय को प्राकृतिक एकाधिकार की विशेषताओं के कारण अंतर्राष्ट्रीय रूप से मान्यता प्राप्त है, जिसमें लागत की संवीक्षा के आधार पर रेगुलेटेड रिटर्न में जटिलताएं अंतर्निहित हैं।

5.10 उपभोक्ता का हित विद्युत उत्पादन, पारेषण एवं वितरण जैसी संपूर्ण मूल्य श्रंखला की व्यवहार्यता तथा सततता को सुनिश्चित करने और ठीक इसी समय उपभोक्ताओं को उचित मूल्य पर विद्युत आपूर्ति किए जाने को सुगम बनाने से सर्वोत्तम रूप से पूरा होता है। इन उद्देश्यों को हासिल करने के लिए उपयुक्त सरकार द्वारा समय-समय पर वित्तीय टर्न-अराउंड/पुनःसंरचना योजनाएं अनुमोदित की जाती हैं। उपयुक्त सरकार तथा उपयुक्त आयोग ऐसी योजनाएं कार्यान्वित करते समय सभी विवेकपूर्ण लागतों की वसूली के संदर्भ में, उत्पादन, पारेषण एवं वितरण की व्यवहार्यता सुनिश्चित करेंगे।

5.11 उत्पादन, पारेषण तथा वितरण के सामान्य पहलुओं के संदर्भ में सेवा नियमन की निष्पादन आधारित लागत हेतु टैरिफ नीति निम्नांकित फ्रेमवर्क प्रस्तुत करती है। पैरा 6.1 और पैरा 7.1(6) में संदर्भित प्रतिस्पर्धात्मक बोली वाली परियोजनाओं के लिए ये फ्रेमवर्क लागू नहीं होंगे। क्षेत्रगत पहलुओं पर उत्तरवर्ती खंडों में विचार किया गया है।

(क) निवेश पर रिटर्न

रिटर्न की दर को तय करते समय उपभोक्ताओं के हितों और निवेश की जरूरत के मध्य संतुलन की जरूरत है। रिटर्न द्वारा निवेश को आकर्षित करने के लिए यदि विद्युत क्षेत्र को वरीयता प्राप्त न हो तो भी उसे अन्य क्षेत्रों के बराबर रखा जाए ताकि विद्युत क्षेत्र पर्याप्त क्षमता का सृजन करने में समर्थ हो सके। रिटर्न दर ऐसी होनी चाहिए जिसमें सेक्टर का विकास करने में उचित सरप्लस उत्पादन की गुंजाइश हो।

केन्द्रीय आयोग समग्र जोखिम और पूंजी की प्रचालित लागत को ध्यान में रखते हुए उत्पादन तथा पारेषण परियोजनाओं के लिए इक्विटी पर रिटर्न दर को समय-समय पर अधिसूचित करेगा, जिसका एसईआरसी द्वारा भी अनुसरण किया जाएगा। पारेषण के लिए सीईआरसी द्वारा अधिसूचित रिटर्न दर को एसईआरसी द्वारा वितरण के लिए उपयुक्त संशोधन के साथ अपनाया जा सकता है, ऐसा करते समय जोखिमों को भी ध्यान में रखा जाएगा। इस मामले में समान दृष्टिकोण हेतु विनियामक मंच के माध्यम से आम सहमति बनाना वांछनीय होगा ।

परियोजना की सम्पूर्ण पूँजीगत लागत की अनुमति प्रदान करते समय यथोचित आयोग यह सुनिश्चित करेगा कि ये युक्तिसंगत हैं और इस लक्ष्य को प्राप्त करने के लिए विनियामक आयोगों द्वारा पूँजीगत लागत संबंधी अपेक्षित बेंचमार्कों को तैयार किया जाना चाहिए। केंद्रीय आयोग इक्विटी पर रिटर्न अथवा पूंजी पर रिटर्न, जो भी उपभोक्ताओं के हित में उचित समझा जाए, दृष्टिकोण अपना सकता है।

राज्य आयोग उपयुक्त समय पर वितरण व्यवसाय में रिटर्न के लिए "वितरण और आपूर्ति मार्जिन" पर विचार कर सकता है। राज्य आयोग विस्तृत अध्ययन के आधार पर मूल्य कैप विनियम पर भी विचार कर सकता है। विनियामक मंच को इस संबंध में एक व्यापक दृष्टिकोण विकसित करना चाहिए। ऐसा प्रस्ताव तैयार करते समय विचार-विमर्श में अन्य बातों के साथ साथ कुल तकनीकी एवं वाणिज्यिक हानियों में कमी करना, कार्य निष्पादन मानकों में सुधार करना और आपूर्ति लागत में कमी करना जैसे मुद्दों को शामिल किया जायेगा।

(ख) इक्विटी मानदंड

परियोजनाओं की पूंजीगत लागत की वित्त-व्यवस्था के लिए 70:30 का ऋण:इक्विटी अनुपात अपनाया जाना चाहिए। प्रवर्तक, इक्विटी निवेशों की उच्चतर मात्रा प्राप्त करने के लिए स्वतंत्र होंगे। इक्विटी इस मानदंड से अधिक होने पर, इसे ब्याज की औसत भारित दर पर और ब्याज दरों की उपयुक्तता सुनिश्चित करने के पश्चात परियोजना के दीर्घावधिक ऋण घटक की औसत भारित टैनर के लिए और की गई ऋण पुनर्संरचना, यदि कोई हो, के प्रभाव को ध्यान में रखते हुए अग्रिम ऋण माना जाए। यदि इक्विटी, नियामक स्तर से कम हो तो टैरिफ परिकलन में इक्विटी पर रिटर्न के निर्धारण के लिए वास्तविक इक्विटी को प्रयोग में लाया जाएगा।

(ग) मूल्यह्रास

केन्द्रीय आयोग, उत्पादन और पारेषण परिसम्पतियों के ह्रास दरों को अधिसूचित कर सकता है। अधिसूचित की गई ऐसी ह्रास दरें विनियामक मंच द्वारा किए गए उचित संशोधन के साथ वितरण परिसंपत्तियों के लिए भी लागू की जाएगी।

बशर्ते कि, उपयुक्त आयोग परियोजना के उपयोगी कार्यकाल के दौरान लागू किए जाने वाले मूल्यह्रास की दर की ऊपरी सीमा टैरिफ निर्धारण के उद्देश्य से निर्दिष्ट करेगा और विकासकर्ता के पास, टैरिफ का अनुमोदन मांगते समय, उक्त सीमा के अधीन मूल्यह्रास की निम्न दर दर्शाने का विकल्प होगा।

मूल्यह्रास की अधिसूचित दरें टैरिफों और लेखांकन के प्रयोजन हेतु भी लागू होंगी।

मूल्यह्रास के विरुद्ध किसी अग्रिम की जरूरत नहीं होनी चाहिए।

परिसंपत्तियों के पूर्ण मूल्यह्रास के पश्चात् कम किए गए टैरिफ का लाभ उपभोक्ताओं को मिलते रहना चाहिए।

उपर्युक्त के होते हुए भी, जिस उत्पादन कंपनी के उन संयंत्रों जिनका पीपीए समाप्त हो चुका हो, या उन संयंत्रों जिनका उपयोगी जीवनकाल पूरा हो चुका है, की विद्युत को उन नवीकरणीय उत्पादन संयंत्रों की विद्युत के साथ मिलाया जा सकता है जो बोली की प्रक्रिया के माध्यम से स्थापित किए जाने हैं अथवा जिन संयंत्रों की स्थापना के लिए उपस्कर का प्रापण प्रतिस्पर्धात्मक बोली के माध्यम से किया जाता है। ऐसे मामलों में, ऐसे संयंत्रों की विद्युत की उपयुक्त सरकार द्वारा निर्धारित किए जाने वाले सिद्धांतों पर नवीकरणीय ऊर्जा उत्पादक संयंत्रों से विद्युत खरीद रहे लाभग्राहियों को पुनःआबंटित किया जा सकता है। आबद्धकर निकाय जो अंततः ऐसी विद्युत खरीदते हैं, वे नवीकरणीय ऊर्जा उत्पादक संयंत्रों से खरीदी गई विद्युत की मात्रा को, अपने नवीकरणीय क्रय दायित्व मानेंगे।

ऐसे पारंपरिक तथा नवीकरणीय उत्पादक संयंत्रों का अनुसूचीकरण एवं प्रेषण पृथक रूप से किया जाएगा।

(घ) ऋण की लागत

टैरिफ घटाने के मद्देनज़र ऋण की अवधि समेत उसकी संरचना को प्रोत्साहित किया जाना चाहिए। ऋण की अनुवर्ती पुनर्संरचना के कारण लागतों में बचत को विनियामक आयोगों द्वारा उपभोक्ताओं के हितों का ध्यान रखते हुए प्रोत्साहित किया जाना चाहिए।

(ङ.) विदेशी विनिमय जोखिम प्रबंधन की लागतः

विदेशी विनिमय की भिन्नता संबंधी जोखिम पास थ्रू नहीं होंगे। तथापि, विदेशी मुद्राओं में प्राप्त ऋणों के संबंध में विदेशी विनिमय भिन्नताओं को रोकने के लिए यथाचित लागतों की अनुमति होनी चाहिए। यह प्रावधान केवल उन परियोजनाओं के लिए होना चाहिए जहाँ कि टैरिफ का निर्धारण प्रतिस्पर्धात्मक बोली के आधार पर नहीं किया गया है।

(च) प्रचालन मानदंड

उपभोक्ताओं के साथ दक्षतापूर्वक प्रचालनों का लाभ शेयर करने हेतु प्रोत्साहन और अप्रोत्साहन को ध्यान में रखते हुए उपयुक्त निष्पादन मानदंड विकसित किए जाने की जरूरत होगी। पैरा 5.11(ज)(2) में उल्लिखित मामलों को छोड़कर टैरिफ में प्रचालन पैरामीटर को केवल "नियामक स्तर" पर होना चाहिए और "नियामक और वास्तविकता के स्तर से कम" का नहीं होना चाहिए। प्रचालन संबंधी बेहतर निष्पादन के लिए इसे प्रोत्साहित किया जाना जरूरी है। मानदंड विगत निष्पादन से जुड़े हुए उत्तरोत्तर दक्षताओं को प्रतिबिंबित करते हुए, ईंधन, बेहतर उपकरणों का संग्रहण, प्रचालनों की प्रकृति, उपभोक्ताओं आदि को दी जाने वाली सेवा के स्तर पर भी प्रौद्योगिकी नवीनता लिए हुए होने चाहिए। सतत् एवं प्रमाणित अक्षमता को नियंत्रित एवं दंडित किया जाना चाहिए।

केन्द्रीय आयोग, केन्द्रीय विद्युत प्राधिकरण के परामर्श से उत्पादन और पारेषण हेतु समय-समय पर प्रचालनगत मानदंडों को अधिसूचित करेगा। राज्य विद्युत विनियामक आयोग (एसईआरसी) इन मानदंडों को अपनाएगा। उन मामलों में, जहां पर पिछले कई वर्षों से मानदंड अत्यंत कम होने की स्थिति में राज्य विद्युत विनियामक आयोग, उचित रूप से आसान मानदंड निर्धारित कर सकते हैं और केन्द्रीय आयोग द्वारा अधिसूचित किए गए मानदंडों को प्राप्त करने के लिए समय रहते ही तरीका बदल सकते हैं, अथवा इस संबंध में प्राधिकरण द्वारा विनिर्दिष्ट मानकों के अनुरूप उन्हें चरणबद्ध ढंग से हटा सकते हैं।

वितरण नेटवर्कों हेतु प्रचालन मानदंडों को संबंधित राज्य विद्युत विनियमामक आयोग द्वारा अधिसूचित किया जाएगा। एकरूपता के लिए, विनियामक मंच राज्य विनिर्दिष्ट विशिष्टताओं को ध्यान में रखते हुए मॉडल दिशा-निर्देश तैयार करें।

(छ) नवीकरण और आधुनिकीकरण

उच्चतर दक्षता स्तरों के लिए उत्पादन संयंत्रों (पवन ऊर्जा उत्पादन संयंत्रों के पुनःशक्तिकरण सहित) के लिए नवीकरण और आधुनिकीकरण को प्रोत्साहित किए जाने की जरूरत है, चाहे इन्होंने अपना उपयोगी कार्यकाल पूरा न

भी किया हो। इसमें आवधिक मरम्मत शामिल नहीं है। बहुवर्षीय टैरिफ (एमवाईटी) फ्रेमवर्क का निर्धारण किया जाए, जिसमें नवीकरण और आधुनिकीकरण के लिए आवश्यक पूंजीगत निवेश शामिल हों, साथ ही जिसमें यथोचित आयोग द्वारा निर्धारित किए जाने वाले विशेष व संशोधित निष्पादन मानकों के संबंध में यूटिलिटियों एवं लाभार्थियों के बीच दक्षता सुधार के लाभों का आदान-प्रदान करने संबंधी प्रोत्साहन ढांचा भी शामिल हो। पूर्व निर्धारित दक्षता लाभों के लिए अपेक्षित पूंजी लागत और उच्चस्तरीय निष्पादन को बनाए रखने के लिए जरूरी है कि उपयुक्त आयोग इसका मूल्यांकन करे।

(ज) बहुवर्षीय टैरिफ

1) अधिनियम की धारा 61 के अनुसार टैरिफ निर्धारण के लिए निबंधन एवं शर्तों के लिए उपयुक्त आयोग अन्य बातों के साथ-साथ बहुवर्षीय टैरिफ (एमवाईटी) सिद्धान्तों से निर्देशित होगा। फ्रेमवर्क में 5 वर्ष की नियंत्रण अवधि होनी चाहिए। आंकड़ो संबंधी अनिश्चितता व अन्य व्यावहारिक कारणों से विनियामक आयोग द्वारा जरूरी माने जाने पर पारेषण व वितरण के लिए आरंभिक तौर पर तीन वर्ष की नियंत्रण अवधि भी हो सकती है। विश्वसनीय आंकड़ों के अभाव वाले मामलों में उपयुक्त आयोग प्रथम नियंत्रण अवधि के लिए एमवाईटी में अनुमान प्रस्तुत कर सकता है तथा और अधिक विश्वसनीय आंकड़े प्राप्त होने पर नियंत्रण अवधि नये सिरे से शुरू हो सकती है।

2) ऐसे मामले जहां पर प्रचालन पिछले कई वर्षों से मानदंड से काफी कम है वहां पर राजस्व जरूरत निर्धारित करने संबंधी व्यवस्था अपेक्षित स्तर की बजाय " लचीले " स्तर की होनी चाहिए। अपेक्षित निष्पादन मानक प्राप्त करने के लिए उपयुक्त बेंचमार्किंग अध्ययन आयोजित किए जायें। न्यूनतम सेवा संबंधी मानकों को पूरा करने के लिए आवश्यक पूंजीगत व्यय के निमित्त प्रत्येक यूटिलिटी के लिए पृथक से अध्ययनों की जरूरत होगी।

3) एक बार नियंत्रण अवधि की शुरूआत में राजस्व जरूरत तय हो जाने के पश्चात् विनियामक आयोग को निवेश लागत घटकों के बजाय उत्पादन विनियमन पर ध्यान देना चाहिए। नियंत्रण अवधि की समाप्ति पर निष्पादन की व्यापक समीक्षा की जाए ।

4) विगत लागतों के बोझ से भावी उपभोक्ताओं को बचाने के लिए नियंत्रित न की जा सकने वाली लागतों को तेजी से वसूल किया जाना चाहिए। नियंत्रित न की जा सकने वाली लागतों (सीमित नहीं) में ये शामिल है- ईंधन लागत, मुद्रास्फीति के कारण लागत, कर एवं उपकर, विपरीत प्राकृतिक घटनाओं के मामले समेत विद्युत क्रय यूनिट लागतों में भिन्नता।

5) विनियामक आयोग सूचना देने के बारे में स्पष्ट दिशा-निर्देश व नियम बनाएं। अधिनियम की धारा 62(2) उपयुक्त आयोग को यह अधिकार प्रदान करती है कि वह टैरिफ निर्धारण के लिए उत्पादन, पारेषण व वितरण के बारे में विनिर्दिष्ट पृथक ब्योरों को दर्शाने के लिए लाइसेंसधारकों से कहे।

(झ) क्लीन डेवलेपमेंट मैकेनिज्म (सीडीएम) के अंतर्गत लाभ

ऐसी सभी विद्युत परियोजनाओं (उत्पादन पारेषण व वितरण) जो संबंधित बेस लाईन की तुलना में ग्रीनहाऊस गैस (जीएचजी) का अपेक्षाकृत कम उत्सर्जन करती है, के लिए टैरिफ निर्धारित करते समय क्लीन डेवलेपमेंट मैकेनिज्म (सीडीएम) से प्राप्त लाभों को भी इस प्रकार ध्यान में रखा जाना चाहिए ताकि परियोजना विकासकों को पर्याप्त प्रोत्साहन प्रदान किया जा सके।

(ञ) कंपोजिट स्कीम

अधिनियम की धारा 79 (1) की उपधारा (ख) में व्यवस्था की गई है कि केंद्रीय आयोग उत्पादन कंपनी के टैरिफ को नियंत्रित करेगा, यदि वह उत्पादन कंपनी एक से अधिक राज्यों में विद्युत के उत्पादन एवं विक्रय हेतु एक कंपोजिट स्कीम में शामिल होती है अथवा अन्यथा उसके पास एक कंपोजिट स्कीम हो।

स्पष्टीकरणः अधिनियम की धारा 79(1) के अंतर्गत विनिर्दिष्ट कंपोजिट स्कीम का अर्थ होगा - जिस राज्य में ऐसी परियोजना स्थित है, उससे बाहर वितरण लाइसेंसी को परियोजना की न्यूनतम 10% क्षमता के विक्रय के लिए

परियोजना के वाणिज्यिक प्रचालन की तिथि (परियोजना की अंतिम इकाई की सीओडी परियोजना के वाणिज्यिक प्रचालन की तिथि मानी जाएगी) से पहले दीर्घकालीन अथवा मध्यमकालीन पीपीए पर हस्ताक्षर करने वाली उत्पादन कंपनी द्वारा विद्युत का उत्पादन एवं विक्रय एक से ज्यादा राज्य में करने वाली स्कीम।

5.12 जैसा कि विदित है कि राज्य सरकारों के पास विद्युत क्रय और उपभोग पर शुल्क, कर और उपकर लगाने के अधिकार होते हैं, ये संसाधनों का इष्टतम उपयोग एवं प्रतिस्पर्द्धा को प्रभावपूर्ण ढंग से विकृत कर सकता है, विशेष रूप से जब इन करों का उपयोग चयनित आधार पर और असमान रूप से किया जाए।

कुछ मामलों में विद्युत खपत संबंधी शुल्कों आदि को उत्पादन (यथा कैप्टिव उत्पादन) आदि से जोड़ा जाता है और लगाए गए शुल्कों का स्तर ग्रिड से विद्युत लेने वाले उसी श्रेणी के उपभोक्ताओं पर लगाए जा रहे शुल्क की तुलना में काफी अधिक होता है। इस प्रकार का भेदभाव पक्षपातपूर्ण और अनुपयुक्त है। कैप्टिव उत्पादन को पूर्ण स्वतंत्रता देने का प्रयोजन यह है कि उद्योग विश्वसनीय, गुणवत्तापरक और किफायती विद्युत प्राप्त कर सकें। विशेषतया उपभोक्ता समूह द्वारा स्थापित किए जा सकने वाले कैप्टिव विद्युत संयंत्रों संबंधी प्रावधानों को इस लक्ष्य को ध्यान में रखकर मान्यता दी गई है कि देश भर में लघु एवं मध्यम उद्योगों के विस्तार से तीव्र आर्थिक विकास को गति मिलेगी और बड़े पैमाने पर रोज़गार के अवसर पैदा होंगे।

उपभोक्ताओं को उचित और प्रतिस्पर्धात्मक कीमतों पर विद्युत उपलब्ध कराने संबंधी लक्ष्य की प्राप्ति हेतु जरूरी है कि ऐसे शुल्कों को उचित स्तर पर रखा जाए।

5.13 अधिनियम में, एक मेगावाट या इससे अधिक के उपभोक्ताओं के लिए समयबद्ध ढंग से खुली पहुँच प्रारंभ करने की व्यवस्था है। विनियामक आयोग अधिनियम के प्रावधानों के अनुसार, उपभोक्ताओं की विभिन्न श्रेणियों के लिए खुली पहुँच प्रारंभ करेंगे।

6.0 उत्पादन

मांग में अनुमानित वृद्धि को पूरा करने के लिए उत्पादन क्षमता क्षेत्र का त्वरित विकास आवश्यक है। विद्युत बाज़ारों की दक्ष कार्यप्रणाली के लिए पर्याप्त उत्पादन भी जरूरी है। साथ ही, उपभोक्ता हितों की रक्षा के लिए नई क्षमता अभिवृद्धि पर अत्यन्त किफायती दरों पर विद्युत का वितरण सुनिश्चित किया जाए। इन उद्देश्यों की पूर्ति हेतु यह नीति निम्नांकित उपाय निर्धारित करती है।

6.1 विद्युत की प्राप्ति

जैसा कि पैरा 5.1 में निर्धारित है, भावी जरूरतों की दृष्टि से विद्युत अर्जन, केंद्र सरकार द्वारा समय-समय पर जारी दिशा-निर्देशों के आलोक में पारदर्शी प्रतिस्पर्धात्मक बोली प्रक्रिया के जरिए होना चाहिए। इन दिशानिर्देशों में आधारभूत भार जरूरत और व्यस्ततमकालीन भार जरूरतों के लिए पृथक से विद्युत अर्जन व्यवस्था है। इससे इस प्रकार की ऐसी जरूरतों को पूरा करने के लिए उत्पादन क्षमता बढ़ोत्तरी में मदद मिलेगी।

तथापि, दिनांक 19 जनवरी, 2005 के दिशानिर्देशों के अनुसार कुछ प्रतिस्पर्द्धात्मक बोली परियोजनाओं में कोल इंडिया लिमिटेड (सीआईएल) से कोयले की अपेक्षित मात्रा प्राप्त करने में कठिनाइयां आई हैं। आश्वासन पत्र/एफएसए में दर्शाई गई मात्रा की तुलना में सीआईएल द्वारा आपूर्ति किए गए घरेलू कोयले की कम मात्रा की स्थिति में, कमी को पूरा करने के लिए अधिप्राप्त आयातित/बाजार आधारित ई-नीलामी वाले कोयले की लागत पर दिनांक 31.7.2013 के कार्यालय ज्ञापन संख्या एफयू-12/2011-आईपीसी (वाल्यूम-III) में विद्युत मंत्रालय द्वारा जारी की गई परामर्शिका के अनुसार मामला दर मामला आधार पर उपयुक्त आयोग द्वारा पास-थ्रू बनाए जाने पर विचार किया जाएगा।

6.2 टैरिफ ढांचा और संबद्ध मामले

(1) मैरिट आर्डर डिस्पैच को सरल बनाने के लिए सभी दीर्घावधिक और मध्यावधिक अनुबंधों के लिए द्वि-भागीय टैरिफ ढांचा अपनाया जाना चाहिए। राष्ट्रीय विद्युत नीति के अनुसार उपलब्धता आधारित टैरिफ (एबीटी) को राज्य स्तर पर भी आरंभ किया जाना है। इस ढांचे का उत्पादन स्टेशनों (एसईआरसी द्वारा यथा निर्धारित क्षमताओं

वाले ग्रिड से जुड़े कैप्टिव संयंत्रों समेत) तक विस्तार किया जाएगा। उपयुक्त आयोग बेहतर भार प्रबंधन के लिए व्यवस्ततम व गैर-व्यस्ततमकालीन घंटों के लिए निर्धारित प्रभार की पृथक दरें दो वर्षों की अवधि के भीतर करेगा।

विद्युत स्टेशनों से हर समय उपलब्ध रहने और प्रेषण हेतु तैयार रहने की अपेक्षा की जाती है। विद्युत क्रय करार (पीपीए) में वर्णित किसी प्रावधान के होते हुए भी, विद्युत अधिनियम, 2003 की धारा 62 के अंतर्गत विनियमित टैरिफ के आधार पर उत्पादन स्टेशनों की गैर मांग वाली उत्पादन क्षमता के बेहतर उपयोग को सुनिश्चित करने के लिए प्राप्तकर्ता द्वारा विद्युत की मांग न किए जाने की स्थिति में, दिन के 00:00 घंटों से कम से कम 24 घंटे पहले और उसकी मात्रा के बारे में सूचना देगा ताकि उत्पादन केंद्र, इस संबंध में केंद्र सरकार द्वारा निर्धारित नीति के अनुरूप इसे बाजार में बेच सकें। विकासकर्ता और पीपीए पर हस्ताक्षर करने वाले प्राप्तकर्ता, यदि पीपीए में पहले से ही व्यवस्था नहीं की गई है तो आपस में की गई सहमति के आधार पर बाजार में, इस प्रकार की मांग न की गई विद्युत के विक्रय, यदि कोई है, से प्राप्त होने वाले लाभों में 50:50 के अनुपात की हिस्सेदारी करेंगे। इस प्रकार के लाभ की गणना ऐसी विद्युत और ईंधन प्रभार के बिक्री मूल्य के बीच अंतर के रूप में की जाएगी। तथापि, यह सुनिश्चित किया जाए कि ऐसी मर्चेंट बिक्री के परिणामस्वरूप मूल लाभार्थी (लाभार्थियों को) उच्चतम औसत ऊर्जा के रूप में जिसमें मर्चेंट बिक्री को छोड़कर भुगतान योग्य ऊर्जा प्रभार शामिल है, पर प्रतिकूल प्रभाव न पड़े। अधिनियम की धारा 63 के अंतर्गत परियोजनाओं के लिए ऐसी बिक्री की प्रणाली को उपयुक्त आयोग द्वारा प्रापक तथा उत्पादक के बीच परस्पर रूप से सहमत शर्तों पर निर्धारित किया जाएगा, अथवा जब तक कि यदि पहले से ही पीपीए में विनिर्दिष्ट न हो।

(2) विद्युत खरीद समझौते में उत्पादन कंपनियों के लिए पर्याप्त एवं बैंक ग्राह्य भुगतान सुरक्षा प्रबंध सुनिश्चित किया जाना चाहिए। लैटर ऑफ क्रेडिट, एस्क्रो ऑफ कैश फ्लों आदि जैसी उपलब्ध भुगतान सुरक्षा तंत्र के बावजूद भी पीपीए के अनुसार सहमत टैरिफ के भुगतान की लगातार डिफॉल्ट के मामले में उत्पादन कंपनियां दूसरे क्रेताओं को ऐसी विद्युत बिक्री कर सकती है।

(3) कोयला आधारित उत्पादन केंद्रों के मामले में कोल वाशरीज़, कोयला हितकारी प्रणाली, शुष्क राख लदान एवं निपटान प्रणाली स्थापना की उपयुक्त लागत भी परियोजना लागत में शामिल होगी।

(4) बोलियां अवार्ड किए जाने के बाद यदि केंद्र सरकार, राज्य सरकारों/संघ राज्य क्षेत्रों अथवा अन्य किसी सरकारी तंत्र द्वारा लगाए गए घरेलू शुल्कों, लेवीज, उपकरों और करों जिनसे लागत में तदनुसार परिवर्तन होते हैं, तो इसे "विधि में परिवर्तन" के रूप में माना जाएगा जब तक कि पीपीए में अन्यथा प्रावधान न हो, इसे उपयुक्त आयोग के अनुमोदन के अध्यधीन पास-थ्रू के रूप में अनुमति दी जाए।

(5) नगर पालिका/स्थानीय निकायों/समान संगठन के 50 किलोमीटर के दायरे के भीतर आने वाले विद्यमान संयंत्रों सहित ताप विद्युत संयंत्र (संयंत्रों), इन निकायों के सीवेज ट्रीटमेंट प्लांट के निकटता के क्रम में उत्पादित शोधित सीवेज जल का अनिवार्यतः प्रयोग करेंगे और इस कारण संबद्ध लागत की टैरिफ में पास-थ्रू की अनुमति होगी। सीवेज ट्रीटमेंट प्लांट द्वारा आपूर्ति की कमी की स्थिति में ऐसे थर्मल संयंत्र अपनी आवश्यकताओं को पूरा करने के लिए पानी के बैकअप स्रोत को भी सुनिश्चित करेंगे। इस कारण संबद्ध लागत, स्थिर लागत में शामिल होगी ताकि ऐसे ताप विद्युत संयंत्र का मैरिट ऑर्डर बाधित न हो। सीवेज ट्रीटमेंट प्लांट को विद्युत संयंत्र के विकासकर्ता के परामर्श से ही बंद किया जाएगा।

6.3 कैप्टिव उत्पादन को उपयोग में लाना

कैप्टिव उत्पादन प्रतिस्पर्द्धी विद्युत उपलब्ध कराने के लिए एक महत्वपूर्ण साधन है। उपयुक्त आयोग को ऐसा वातावरण तैयार करना चाहिए जो कैप्टिव विद्युत संयंत्रों को ग्रिड के साथ जोड़ने में प्रोत्साहन प्रदान करे।

ऐसे कैप्टिव संयंत्र, अधिशेष विद्युत की आपूर्ति उत्पादन कंपनियों पर लागू होने वाले उसी विनियम के अध्यधीन ग्रिड के जरिए कर सकते हैं। इस नीति के पैरा 5.2 के दूसरे परंतुक को ध्यान में रखते हुए अधिनियम की धारा 63 के अंतर्गत केंद्र सरकार द्वारा जारी किए गए दिशानिर्देशों का अनुपालन करते हुए वितरण लाइसेंसियों द्वारा कैप्टिव संयंत्रों से सुनिश्चित आपूर्ति खरीदी जा सकती है।

व्यस्ततम और गैर-व्यस्ततमकीन आपूर्ति के लिए पृथक-पृथक कीमत तय की जानी चाहिए और टैरिफ में वास्तविक स्तर पर उत्पादन की परिवर्तनीय लागत और क्षमता प्रभारों हेतु उचित मुआवजा शामिल किया जाना चाहिए।

संबंधित राज्य आयोग प्रभारों को उचित एवं सही ठहराते हुए कार्यान्वयन के लिए व्हीलिंग प्रभार और अन्य सेवा शर्तें जोड़ना निर्धारित करे।

ग्रिड से संबद्ध कैप्टिव संयंत्र सहमत टैरिफ के आधार पर उपलब्ध पारेषण सुविधाओं के माध्यम से ग्रिड से संबद्ध नॉन-कैप्टिव प्रयोगकर्त्ताओं को भी विद्युत आपूर्ति कर सकते हैं। विद्युत का ऐसा क्रय खुली पहुंच के लिए संगत नियमों के अधीन होगा जिसमें विद्युत नियमावली, 2005 के नियम 3 के संबद्ध प्रावधानों का अनुपालन शामिल है।

6.4 नवीकरणीय ऊर्जा स्रोतों से सह-उत्पादन सहित ऊर्जा उत्पादन के नवीकरणीय स्रोतः

(1) अधिनियम की धारा 86(1)(ङ) के प्रावधानों के अनुसरण में, उपयुक्त आयोग नवीकरणीय ऊर्जा स्रोतों से ऊर्जा की खरीद के लिए किसी वितरण लाइसेंसी के क्षेत्र में विद्युत की कुल खपत की न्यूनतम प्रतिशतता इस प्रकार के संसाधनों की उपलब्धता और रिटेल टैरिफ पर इसके प्रभाव को ध्यान में रखते हुए निर्धारित करेगा। नवीकरणीय ऊर्जा की खरीद की लागत एसईआरसी द्वारा प्रशुल्क निर्धारण के समय ध्यान में रखी जाएगी। नवीकरणीय क्रय बाध्यता (आरपीओ) की दीर्घावधि ग्रोथ ट्रेजेक्टरी विद्युत मंत्रालय द्वारा एमएनआरई के परामर्श से निर्धारित की जाएगी।

बशर्ते कि नवीकरणीय स्रोतों के इतर स्रोतों से सह-उत्पादन को आरपीओ की प्रयोज्यता से बाहर नहीं रखा जाएगा।

(i) इस प्रकार लागू किए गए प्रतिशत के भीतर राज्य विद्युत विनियामक आयोग इस नीति में अधिसूचना की तारीख से सौर ऊर्जा के क्रय के लिए भी न्यूनतम प्रतिशत रखेगा जो मार्च, 2022 तक अथवा जैसा केंद्र सरकार द्वारा समय-समय पर अधिसूचित अनुसार, जल विद्युत को छोड़कर, कुल ऊर्जा खपत के 8% तक पहुँचेगा।

(ii) वितरण लाइसेंसी, अधिनियम की धारा 62 के अंतर्गत उपयुक्त आयोग द्वारा निर्धारित टैरिफ पर अपने स्रोतों सहित सभी स्रोतों से विद्युत के प्रापण के अनुपात में राज्य में सभी "बेस्ट टू एनर्जी प्लांट्स" से उत्पादित 100 प्रतिशत विद्युत का प्रापण अनिवार्य रूप से करेंगे।

(iii) वांछनीय है कि ऊर्जा के नवीकरणीय संसाधनों से ऊर्जा का क्रय विभिन्न राज्यों में कमोवेश इसी अनुपात में हो। देश के केवल कुछ भागों में इन स्रोतों की व्यापक उपलब्धता के वर्तमान परिदृश्य में इस लक्ष्य की प्राप्ति हेतु नवीकरणीय ऊर्जा प्रमाण-पत्रों (आरईसी) जैसी उपयुक्त प्रणाली को प्रोन्नत किए जाने की आवश्यकता होगी। इस प्रकार की प्रणाली के जरिए नवीकरणीय ऊर्जा आधारित उत्पादन कम्पनियां परम्परागत विद्युत हेतु निर्धारित दरों पर स्थानीय वितरण लाइसेंसी को विद्युत का विक्रय कर सकती हैं और अन्य वितरण कम्पनियों तथा आबद्धकर निकायों को प्रमाण-पत्रों का विक्रय करके शेष लागत की वसूली कर सकती है ताकि परवर्ती कंपनियां नवीकरणीय विद्युत क्रय दायित्वों को पूरा कर सकें। आरईसी प्रणाली में सौर विनिर्दिष्ट आरईसी भी होना चाहिए।

(iv) उपयुक्त आयोग, पृथक प्रौद्योगिकी आधारित आरईसी और 'आरईसी मल्टीप्लायर' (अर्थात् ऐसी उभरती हुई प्रौद्योगिकियों में इस स्तर के उत्पादन को उच्चतर अथवा निम्नतर आरईसी प्रदान करके) निर्धारित करके ऐसी अन्य उभरती हुई नवीकरणीय ऊर्जा प्रौद्योगिकियों को बढ़ावा देने के लिए उपयुक्त विनियामक ढांचा प्रदान कर सकता है। इसी प्रकार, समय के साथ नवीकरणीय ऊर्जा प्रौद्योगिकियों के मूल्यों में परिवर्तन को ध्यान में रखते हुए, आरईसी मल्टीप्लायर आधारित विंटेज (अर्थात संयंत्र के चालू करने के वर्ष के आधार पर उत्पादन के उस स्तर के लिए आरईसी की उच्चतर अथवा निम्नतर संख्या प्रदान करके) निर्धारित कर सकता है।

(2) टैरिफ कम रखने के लिए राज्य प्रतिस्पर्द्धी बोली के माध्यम से बेस्ट टू एनर्जी संयंत्रों को छोड़कर, नवीकरणीय ऊर्जा स्रोतों से विद्युत का प्रापण करने का प्रयास करेंगे। वितरण लाइसेंसियों द्वारा, अधिसूचित क्षमता से ज्यादा क्षमता वाली परियोजनाओं से नवीकरणीय ऊर्जा स्रोतों से विद्युत का प्रापण केंद्र सरकार द्वारा अधिसूचित की जाने वाली तिथि से, प्रतिस्पर्द्धात्मक बोली प्रक्रिया के माध्यम से किया जाएगा।

तथापि, ऐसी अधिसूचना तक, नवीकरणीय ऊर्जा स्रोत परियोजनाओं से विद्युत का ऐसा कोई प्रापण विद्युत अधिनियम, 2003 की धारा 62 के अंतर्गत किया जाएगा। ऐसे स्रोतों से टैरिफ निर्धारित करते समय उपयुक्त आयोग यह सुनिश्चित करने के लिए सौर विकिरण और पवन की तीव्रता, जो एक क्षेत्र से दूसरे क्षेत्र में भिन्न हो सकती है, को ध्यान में रखेगा ताकि लाभ उपभोक्ताओं तक पहुँच सके।

(3) केंद्रीय आयोग को अनिरंतर विद्युत, विशेषकर नवीकरणीय ऊर्जा स्रोतों के मूल्य निर्धारण हेतु दिशानिर्देश निर्धारित करना चाहिए जहां पर विद्युत का प्रापण प्रतिस्पर्द्धी बोली के माध्यम से नहीं है। सीईआरसी द्वारा अनुबंधित टैरिफ उस श्रेणी के लिए ऊपरी सीमा के रूप में कार्य करेगा।

(4) वितरण कंपनियों को नवीकरणीय ऊर्जा स्रोतों से विद्युत के प्रापण के लिए प्रोत्साहित करने हेतु केन्द्र सरकार, समय-समय पर जनहित में बैंक-लोडेड तरीके अथवा किसी अन्य तरीके से उत्तरोत्तर रूप से टैरिफ बढ़ाए जाने की अनुमति देकर, नवीकरणीय ऊर्जा के लिए पीपीए की अवधि के दौरान ऐसे उत्पादन संयंत्रों की आयु चक्र में उपयुक्त बोली आधारित टैरिफ ढांचा अधिसूचित कर सकती है। तदनुरूप, ऐसी बोली आधारित नवीकरणीय ऊर्जा का प्रापक, इस प्रकार से निर्धारित टैरिफ के भुगतान के लिए दायित्वों का अनुपालन करेगा।

(5) नवीकरणीय ऊर्जा स्रोतों को बढ़ावा देने के लिए, किसी भी उत्पादन कंपनी को, जो एक विनिर्दिष्ट तिथि के बाद कोयला/लिग्नाइट आधारित ताप विद्युत आधारित उत्पादन केन्द्र स्थापित करने का प्रस्ताव करती है, ऐसी नवीकरणीय ऊर्जा उत्पादन क्षमता स्थापित करना अथवा ऐसी क्षमता के बराबर नवीकरणीय ऊर्जा का प्रापण अथवा आपूर्ति करना आवश्यक होगा जो केंद्र सरकार पणधारकों के साथ अपेक्षित परामर्श के पश्चात समय-समय पर निर्धारित करेगी। प्रत्येक उत्पादक द्वारा उत्पादित नवीकरणीय ऊर्जा को बिक्री के उद्देश्य से इसके ताप विद्युत उत्पादन के साथ मिलाया जा सकता है। यदि कोई आबद्धकर इकाई इस नवीकरणीय विद्युत का प्रापण करती है, तब एसईआरसी यह मान लेगी कि आबद्धकर निकाय द्वारा ऐसे नवीकरणीय ऊर्जा उत्पादन स्टेशनों से खरीदी गई विद्युत की मात्रा तक नवीकरणीय क्रय दायित्व (आरपीओ) को पूरा कर लिया गया है।

बशर्ते कि यदि कोई मौजूदा कोयला और लिग्नाइट आधारित ताप विद्युत उत्पादन केन्द्र मौजूदा विद्युत क्रय करारों के अंतर्गत विद्युत प्रापकों की सहमति से अतिरिक्त नवीकरणीय ऊर्जा उत्पादन क्षमता स्थापित करना चाहता है तो इस प्रकार के संयंत्र से उत्पादित विद्युत को मिलाने की अनुमति दी जाएगी और इस प्रकार की नवीकरणीय ऊर्जा के टैरिफ के पास-थ्रू की अनुमति उपयुक्त आयोग द्वारा दी जाएगी। आबद्धकर निकाय, जो अंततः ऐसी विद्युत खरीदते हैं, अपने नवीकरणीय क्रय दायित्व में मानेंगे।

बशर्ते, ऐसे पारंपरिक तथा नवीकरणीय उत्पादक संयंत्रों का अनुसूचीकरण एवं प्रेषण पृथक रूप से किया जाएगा।

(6) ऊर्जा के नवीकरणीय स्रोतों को आगे प्रोत्साहन देने के लिए, अन्तर-राज्यीय पारेषण प्रणाली के माध्यम से बिक्री हेतु ऊर्जा के सौर और पवन स्रोतों से उत्पादित विद्युत के पारेषण पर कोई भी अन्तर-राज्यीय पारेषण प्रभार और हानियां उस अवधि तक, जो केन्द्र सरकार द्वारा अधिसूचित की जाए, नहीं लगाई जाएंगी।

(7) उपयुक्त आयोग स्थानीय प्राधिकरण, पंचायत संस्थान, प्रयोक्ता संस्थान, सहकारी सोसायटी, गैर-सरकारी संगठन, फ्रैंचाइजी अथवा नवीकरणीय ऊर्जा सेवा कंपनी सहित किसी निकाय द्वारा नवीकरणीय ऊर्जा स्रोतों, विशेष रूप से छत पर सौर प्रणाली से विद्युत के उत्पादन और बिक्री को सुगम बनाने के लिए विनियामक फ्रेमवर्क की व्यवस्था कर सकता है। उपयुक्त सरकार इस प्रयोजन के लिए पूरक नीतिगत सहायता भी उपलब्ध करा सकती है।

व्याख्याः नवीकरणीय ऊर्जा सेवा कंपनी का अभिप्राय ऐसी ऊर्जा सेवा कंपनी से है जो उपभोक्ताओं को विद्युत के रूप में नवीकरणीय ऊर्जा उपलब्ध कराती है।

7.0 पारेषण

देश की पारेषण प्रणाली में क्षेत्रीय नेटवर्क, अंतःक्षेत्रीय कनेक्शन, जो पांच क्षेत्रों और राज्य नेटवर्कों को विद्युत पहुँचाते हैं, शामिल हैं। राज्य नेटवर्कों का विकास एक समान नहीं रहा है और इन नेटवर्कों की क्षमता में विस्तार की जरूरत

है। ये नेटवर्क अंतःराज्यीय विद्युत प्रवाह और क्षेत्रीय व राष्ट्रीय प्रवाह में भी महत्वपूर्ण भूमिका निभायेंगे। जहां तक पारेषण का संबंध है, टैरिफ नीति निम्नलिखित उद्देश्यों की पूर्ति करेगी-

1. विश्वसनीयता के लिए पर्याप्त मार्जिन के साथ उत्पादन से पूर्व पारेषण नेटवर्क का इष्टतम विकास सुनिश्चित करना और देश में उत्पादन एवं पारेषण परिसंपत्तियों का दक्षतापूर्वक उपयोग संवर्द्धित करना।

2. पारेषण क्षेत्र में अपेक्षित निवेश आकर्षित करना और पर्याप्त रिटर्न उपलब्ध कराना।

7.1 पारेषण कीमत निर्धारण

(1) राज्य के भीतर हस्तांतरण और मध्यवर्ती राज्य में विद्युत पारेषण, जो ऐसे अंतःराज्य पारेषण के आनुषांगिक हो, को मिलाकर अंतःराज्य पारेषण के लिए उपयुक्त पारेषण टैरिफ ढांचा कार्यान्वित किया गया है ताकि समूचे देश में सभी परिसंपत्तियों के प्रभावी उपयोग को प्रोत्साहित किया जा सके और अपेक्षित नई पारेषण क्षमताओं का तीव्र विकास किया जा सके।

(2) राष्ट्रीय विद्युत नीति के अनुसार कार्यान्वयनाधीन राष्ट्रीय टैरिफ ढांचा दूरी, दिशा और विद्युत प्रवाह परिमाण के प्रति संवेदनशील होना चाहिए। इसे सीईए के परामर्श को ध्यान में रखते हुए सीईआरसी द्वारा विकसित किया गया है। पारेषण प्रभारों को समय-समय पर संशोधित किए गए ऐसे टैरिफ तंत्र के अनुसार साझा किया जाएगा।

(3) इस ढांचे के अंतर्गत पारेषण प्रभार मेगावाट प्रति सर्किल किलोमीटर आधार, जोनल पोस्टल स्टैम्प आधार अथवा व्यावहारिकता आधार पर निर्धारित किया जा सकता है। इसका प्रयोजन यही है कि पारेषण प्रणाली प्रयोक्ताओं के बीच पारेषण लागत का बंटवारा पारेषण प्रणाली उपयोग के आधार पर हो सके। सभी द्वारा उपयोग किए जाने के बाद 'उपयोगिता' घटक द्वारा विश्वसनीयता का यथासमय लाभ लिया जाना चाहिए। न्यूतनम और अधिकता पारेषण दरों के बीच अंतर इस प्रकार होना चाहिए कि वह नियोजित विकास/पारेषण प्रणाली के विस्तार को प्रभावित न करे बल्कि गैर-इष्टतम पारेषण निवेश को हतोत्साहित करे।

(4) एनईपी द्वारा निर्धारित दृष्टिकोण को ध्यान में रखते हुए नेटवर्क विस्तार के लिए लाभार्थियों के साथ पूर्व करार पूर्ण शर्त नहीं होनी चाहिए। सीटीयू/एसटीयू को नेटवर्क का विस्तार स्टेकहोल्डरों के साथ परामर्श करके और राष्ट्रीय विद्युत योजना के अनुसार आवश्यकता का पता लगाने के पश्चात और उचित नियामक अनुमोदनों के पश्चात् कार्य आरंभ करने के बाद करना चाहिए। ग्रिड के सुचारु प्रचालन के लिए, पारेषण प्रणाली को उत्पादन से पहले विकसित करने के लिए प्रयास किए जाने चाहिए।

(5) केन्द्रीय आयोग ने पूंजी एवं प्रचालन संबंधी लागत के लिए मानदंड विनिर्दिष्ट किए हैं तथा अंतर-राज्यीय पारेषण लाइसेंसियों के लिए कार्य निष्पादन मानक निर्धारित किए हैं। टैरिफ निर्धारण और कार्य निष्पादन के मानकों का अनुपालन समय-समय पर यथासंशोधित इन मानदंडों के अनुसार किया जाएगा।

(6) सीटीयू/एसटीयू सहित पारेषण विकासकर्ता द्वारा निवेश केंद्र सरकार द्वारा समय-समय पर जारी किए गए दिशा-निर्देशों के अनुसार प्रतिस्पर्द्धी बोली के जरिए आमंत्रित किया जाएगा।

(7) सभी भावी अंतर-राज्यीय पारेषण परियोजनाएं, सामान्यतः प्रतिस्पर्द्धी बोली प्रक्रिया के माध्यम से विकसित की जाएगी, तथापि, केंद्र सरकार (क) नीतिगत महत्व, तकनीकी उन्नयन इत्यादि विशेष श्रेणी की परियोजनाओं अथवा (ख) मामला दर मामला आधार पर अत्यावश्यक स्थिति का प्रबंध करने के लिए किए जाने वाले आवश्यक कार्य के लिए, प्रतिस्पर्द्धी बोली से छूट प्रदान कर सकती है।

(8) सीईआरसी ने अंतराराज्य पारेषण के लिए फ्रेमवर्क संबंधी विनियम विनिर्दिष्ट किया है। अंतःराज्य पारेषण के लिए एसईआरसी द्वारा वोल्टेज, दूरी, दिशा व प्रवाह परिमाण आदि जैसे कारकों पर भली भांति विचार करते हुए इसी प्रकार का दृष्टिकोण कार्यान्वित किया जाए।

(9) प्रस्तावित पारेषण टैरिफ ढांचे की जरूरतों के मुताबिक मीटरिंग को प्राथमिकता आधार पर पूरा किया जाए। मीटरिंग एबीटी जरूरतों के अनुकूल होनी चाहिए, इससे टाइम ऑफ डे (टीओडी) टैरिफ का कार्यान्वयन भी आसान होगा।

7.2 पारेषण हानि आबंटन

(1) पारेषण प्रणाली संबंधी संगत वोल्टेज स्तर पर दूरी एवं दिशागत संवेदनशीलता पर उपयुक्त रूप से विचार करने के पश्चात् औसत हानियों के आधार पर यथायोग्य लेन-देन प्रभारित किए जा रहे हैं। अंतरराज्यीय पारेषण के लिए सीईआरसी द्वारा इस बारे में निर्धारित कार्यप्रणाली के आधार पर एसईआरसी अंतःराज्य पारेषण के लिए इसी प्रकार का फ्रेमवर्क तैयार कर सकता है।

लॉस फ्रेमवर्क में यह सुनिश्चित किया जाना चाहिए कि हानि संबंधी मुआवजा युक्तिसंगत हो और प्रयोज्य तकनीकी हानि बेंचमार्कों से संबद्ध हो। यह बेंचमार्क उपयुक्त आयोग द्वारा सीईए की सलाह पर विचार करते हुए तय किया जा सकता है।

(2) यह वांछनीय होगा कि वृद्धिशील हानियों के आधार पर हानि क्षतिपूर्ति प्रणाली की ओर अग्रसर हुआ जाए क्योंकि पारेषण क्षमताओं में वर्तमान कमियां नेटवर्क विस्तार से पूरी की जाती हैं। उपयुक्त आयोग को नेटवर्क विन्यास के लिए पारेषण हानि की अनुमत स्तर को स्थापित करने के लिए आवश्यक अध्ययनों को करना अपेक्षित है तथा पारेषण प्रणाली का संवर्द्धन करना एवं प्रणाली हानियों में कमी लाने के लिए पूंजीगत व्यय की आवश्यकता होती है। चूंकि लाइन लोडिंग के एक स्तर से अतिरिक्त प्रवाह हानियां अत्यधिक रूप से बढ़ जाती हैं, इसलिए ओवरलोडिंग की स्थिति से बचने के लिए सीटीयू/एसटीयू को पारेषण प्रणालियों के उन्नयन को सुनिश्चित करना चाहिए। उपयुक्त आयोग को पारेषण प्रणाली के उन्नयन के लिए नई परिसंपत्तियों में पर्याप्त पूंजी निवेशों को अनुमति प्रदान करनी चाहिए।

7.3 पारेषण में अन्य मामले

(1) सीटीयू तथा एसटीयू के लिए इन संगठनों हेतु "की परफॉर्मेंस इंडीकेटर्स" (केपीआई) के अनुसार वित्तीय प्रोत्साहन व अप्रोत्साहन लागू किए जाने चाहिए। ऐसे केपीआई में कुशल नेटवर्क निर्माण, प्रणालीगत उपलब्धता व हानि में कमी शामिल होगी।

(2) सीटीयू/एसटीयू तथा भार प्रेषण केंद्रों द्वारा भावी प्रयोक्ताओं के साथ सभी उपलब्ध सूचना, विशेषतया उपलब्ध पारेषण क्षमता व भार प्रवाह अध्ययन संबंधी सूचना को साझा किया जाना चाहिए।

(3) असाधारण परिस्थितियों, जिनमें ऊर्जा सुरक्षा, सार्वजनिक व्यवस्था अथवा प्राकृतिक आपदा सहित राज्य की सुरक्षा के लिए खतरा शामिल है, यदि केंद्र सरकार केंद्रीय उत्पादन स्टेशनों के अनावंटित हिस्से से विद्युत का आवंटन करती है अथवा अन्यथा विद्युत के ऐसे आवंटन को लघु अवधि, मध्यावधि और दीर्घकालिक पहुंच के क्रम में प्राथमिकता दी जाएगी।

7.4 सहायक सेवाएं

(1) केंद्रीय आयोग, प्रभारों के बंटवारे की पद्धति, विद्युत की गुणवत्ता, विश्वसनीयता और ग्रिड की सुरक्षा का रख-रखाव करने के लिए विद्युत प्रणाली अथवा ग्रिड प्रचालन के सहायक के रूप में आवश्यक सहायक सेवा हेतु मानक और ढांचे को शुरु करें।

(2) केंद्रीय आयोग सहायक सेवाओं के लिए मानक विनिर्दिष्ट करते समय केंद्रीय विद्युत प्राधिकरण, एसईआरसी/जेईआरसी, सीटीयू/एसटीयू और एनएलडीसी/आरएलडीसी/एसएलडीसी से भी परामर्श करेगा।

(3) राज्य आयोग, केंद्रीय आयोग द्वारा विनिर्दिष्ट सहायक सेवाओं के लिए मानक और ढांचा भी अपनाएगा।

8.0 वितरण

कुशल तरीके से तथा युक्तिसंगत दरों पर विनिर्दिष्ट मानकों के मुताबिक विश्वसनीय एवं गुणवत्ता वाली बिजली की आपूर्ति राष्ट्रीय विद्युत नीति के मुख्य उद्देश्यों में से एक उद्देश्य है। राज्य आयोग को सभी उपभोक्ताओं के लिए सेवा की गुणवत्ता, निरंतरता एवं विश्वसनीयता के संबंध में लाइसेंसियों के निष्पादन-मानक निर्धारित एवं अधिसूचित करने चाहिए। यह आवश्यक है कि विनियामक मंच सेवा मानकों संबंधी मूल ढाँचा निर्धारित करे। यथाशीघ्र सेवा के अपेक्षित स्तर तक पहुंचने के लिए लाइसेंसियों को एक उपयुक्त ट्रांजिशन फ्रेमवर्क उपलब्ध कराया जा सकता है। उक्त मानकों का पालन नहीं करने पर अधिनियम की धारा 57 के अनुसार लाइसेंसियों पर दंड लगाए जा सकते हैं

उद्योग के वितरण क्षेत्र को कुशल एवं समृद्ध बनाने हेतु विद्युत क्षेत्र में सुधार तथा विनिर्दिष्ट मानकों के अनुसार सेवा का प्रावधान सफलता की कुंजी है। यह जरूरी है कि विनियामक आयोग वितरण लाइसेंसियों की वाणिज्यिक व्यवहार्यता की आवश्यकताओं तथा उपभोक्ता हितों के बीच संतुलन सुनिश्चित करे। हानि वाली यूटिलिटियों को लाभ वाली यूटिलिटियों, जो अपनी पूर्ण विकास क्षमता को हासिल करने के लिए भारत को सक्षम बनाने हेतु अंतरराष्ट्रीय मानकों की सेवाएं उपलब्ध कराने के लिए पूंजीगत बाजारों से आवश्यक संसाधन जुटा सकती हैं, में बदलने की आवश्यकता है। प्रचालनगत क्षमता को प्रोत्साहित किया जाए। नियामक प्राचलों के संदर्भ में दक्ष प्रचालनों के लाभ उपभोक्ताओं और लाइसेंसियों के बीच उपयुक्त ढंग से साझा किए जाएं।

उपयुक्त आयोग द्वारा वितरण लाइसेंसी के लिए प्रत्येक वर्ष भार का पूर्वानुमान लगाने और भार को पूरा करने के लिए अपनी संक्षिप्त, मध्यावधि एवं दीर्घावधि विद्युत प्रापण योजनाएं आयोग के समक्ष प्रस्तुत करना अनिवार्य किया जाना चाहिए।

राज्य विनियामक आयोग एक विशिष्ट ट्रेजेक्टरी तैयार करेगा ताकि राज्य में विद्यमान परिस्थिति पर निर्भर करते हुए वर्ष 2021-22 तक अथवा उससे पूर्व सभी वर्ग के उपभोक्ताओं को 24 घंटे पर्याप्त और निर्बाधित विद्युत की आपूर्ति सुनिश्चित की जा सके।

ऐसे क्षेत्रों में, जहां ग्रिड नहीं पहुंची है या ग्रिड में पर्याप्त विद्युत उपलब्ध नहीं है, नवीकरणीय ऊर्जा की आपूर्ति करने वाले माइक्रो-ग्रिड्स स्थापित किए जा रहे हैं। ऐसे माइक्रो-ग्रिड्स स्थापित करने में लगने वाला निवेश बहुत अधिक होता है। परियोजना के जीवन काल के पूरा होने से पहले ग्रिड का क्षेत्र में पहुंच जाना निवेश के जोखिमों में से एक है और जिससे माइक्रोग्रिड्स से विद्युत बनाना महंगा और अव्यवहार्य है। माइक्रो-ग्रिड में ऐसे जोखिम को कम करने के लिए और माइक्रो-ग्रिड्स में निवेश को प्रोत्साहित करने के लिए उपयुक्त आयोग द्वारा यथानुमोदित निवेशों की अवमूल्ययित लागतों तथा उद्योग बैंचमार्क और एक सीमा, यदि आवश्यक हो, पर विचार करते हुए अधिनियम की धारा 62 के अंतर्गत निर्धारित किए जाने वाले टैरिफ पर ऐसे माइक्रो-ग्रिड से ग्रिड में विद्युत की अनिवार्य खरीद को अधिदेशित करने के लिए उपयुक्त विनियामक संरचना बनाए जाने की आवश्यकता है। इस संबंध में उपयुक्त आयोग छः माह के भीतर आवश्यक विनियम अधिसूचित करेगा।

8.1 बहुवर्षीय टैरिफ (एमवाईटी) ढांचे का कार्यान्वयन

(1) एमवाईटी ढांचा यूटिलिटियों और उपभोक्ताओं का जोखिम कम करेगा, क्षमता में सुधार होगा तथा प्रणालीगत हानियों में कमी आएगी और निवेश आकर्षित करेगा। इससे विद्युत खरीद कीमतों और मुद्रास्फीति सूचकांकों के ज्ञात सूचकों में टैरिफ समायोजन को सीमित करके समग्र रूप से उपभोक्ता टैरिफ के संबंध में व्यापक अनुमान तैयार हो सकेंगे। यह ढांचा सरकारी तथा निजी दोनों यूटिलिटियों पर लागू होगा ।

(2) राज्य आयोग समग्र एमवाईटी ढांचे के भाग के रूप में उपभोक्ताओं के साथ अधिक लाभ और हानियों को साझा करने का तंत्र शुरू करे। पहली नियंत्रण अवधि में यूटिलिटियों के लिए प्रोत्साहन, यूटिलिटी द्वारा वहन की जाने वाली हानियों की प्रतिशतता की अपेक्षा निर्धारित उच्च स्तर पर यूटिलिटी द्वारा रखे जा रहे अधिक लाभ की प्रतिशतता के साथ असंयमित की जाए। निष्पादन में त्वरित सुधार करने और हानियों में कमी के लिए यह जरूरी है और दीर्घकाल में टैरिफ में कमी के जरिए इससे उपभोक्ताओं के हितों की रक्षा हो सकेगी।

(3) जैसा कि पैरा 5.11 (ज) में इंगित है। आरंभिक नियंत्रण अवधि में कार्यान्वित किया गया एमवाईटी ढांचा पूरी की जा रही मीटरिंग के परिणामस्वरूप बेसलाइनों में होने वाले परिवर्तनों का समायोजन करने के लिए पर्याप्त रूप से लचीला होना चाहिए।

(4) यदि प्रतिस्पर्धात्मक दशाओं में आवश्यक हो तो लाइसेंसियों के पास राज्य आयोग द्वारा अनुमोदित टैरिफ से कम टैरिफ वसूलने की नम्यता हो सकती है, बशर्ते वे अधिनियम की धारा 62 के अनुसार इसके कारण अतिरिक्त राजस्व की आवश्यकता के लिए दावा न करें।

(5) नियंत्रण अवधि के आरंभ में, जब "वास्तविक" लागत भावी अनुमानों के लिए आधार तैयार करती हो, अपेक्षित टैरिफ और इस समय लागू टैरिफों के बीच लार्ज अन्कवर्ड गैप हो सकता है। इस अंतराल को टैरिफ शुल्कों और वैकल्पिक साधनों के माध्यम से पूरा किया जाना चाहिए जिसमें अन्य बातों के साथ-साथ वित्तीय पुनर्गठन और ट्रांजिशन फाइनेंसिंग शामिल है।

(6) वर्तमान लाइसेंसधारियों के पास उस क्षेत्र के लिए पृथक राजस्व आवश्यकताओं और टैरिफ फाइल करने का विकल्प होना चाहिए जहाँ राज्य आयोग ने राष्ट्रीय विद्युत नीति के पैरा 5.4.7 के साथ पठित अधिनियम की धारा 14 के प्रावधानों के अनुसरण में बहुवितरण लाइसेंस जारी किए हैं।

(7) उपयुक्त आयोगों को लाइसेंसधारियों द्वारा समय पर फाइल न किए जाने की स्थिति में स्वतः आधार पर टैरिफ निर्धारण और विनियामक जांच शुरू करनी चाहिए। यह वांछनीय है कि अपेक्षित टैरिफ परिवर्तन प्रत्येक वित्तीय वर्ष के आरंभ की तारीख से प्रभावी हों और फाइलिंग में विलम्ब के कारण होने वाला कोई अंतर लाइसेंसधारियों के कारण होना चाहिए।

8.2 राजस्व आवश्यकताओं और लागतों हेतु ढांचा

8.2.1 टैरिफ निर्धारण में निम्नलिखित तथ्यों पर ध्यान दिया जाना आवश्यक है-

(1) सभी विद्युत क्रय लागतों का वैध समझा जाना आवश्यक है जब तक कि यह प्रमाणित न हो जाए कि मेरिट आदेश सिद्धांत का उल्लंघन किया गया है अथवा अनुचित दरों पर विद्युत का क्रय किया गया है। सकल तकनीकी एवं वाणिज्यिक (एटीएंडसी) हानियों को प्रकट किए जाने की आवश्यकता है, किन्तु 24 घंटे की आपूर्ति के लिए विद्युत क्रय और आवश्यक एवं उचित ओ एंड एम तथा प्रणाली उन्नयन हेतु निवेश के लिए अपेक्षित राजस्व को अस्वीकार किए बिना। विशेष रूप से उन उपभोक्ताओं को, जो ऐसी टैरिफ का भुगतान करने के लिए तैयार है जो दक्ष लागतें दर्शाते हैं, को गुणवत्तापरक विद्युत की चौबीसों घण्टे निर्बाध आपूर्ति पाने का अधिकार है। एम वाई टी ट्रेजेक्टरी में इंगित टी एंड डी हानियों के नियामक स्तर के अनुसार कुल फुटकर बिक्री का वास्तविक आकलन करना चाहिए ताकि उचित विद्युत खरीद अनुपात अंतर (उदाहरणार्थ, कम बारिश होने की स्थिति में ताप विद्युत उत्पादन से और अधिक ऊर्जा खरीदी जा सकती है) की शर्त पर एसईआरसी के विनियमों के अनुसार विद्युत खरीद की लागत तथा ईंधन अधिभार समायोजन को अनुमति दी जा सके।

(2) प्राप्त किए जाने योग्य ट्रेजेक्टरी को किसी एमवाईटी ढांचे में रिटर्न से जोड़कर एटीएंडसी हानि कमी को प्रोत्साहित किया जाना चाहिए। व्यापक पारदर्शिता और उपभोक्ता समूहों का पोषण प्रभावकारी होगा। सरकारी स्वामित्व वाली यूटिलिटियों के संबंध में एटीएंडसी हानि में कमी लाने के लिए शासन प्रणाली में सुधार करना राज्य विद्युत नियामक आयोगों के लिए एक बहुत ही कठिन कार्य एवं गंभीर चुनौती होगी। पूरी लागतों को सम्मिलित करने का लक्ष्य रखने वाले विभिन्न एटीएंडसी हानि स्तरों से सम्बद्ध आगामी वर्षों में उपभोक्ता टैरिफों के विभिन्न स्तरों के साथ एमवाईटी व्यवस्था चोरी को कम करने के लिए प्रभावी कार्यवाही हेतु अपेक्षित राजनीतिक इच्छा का सृजन कर सकता है क्योंकि इसका विकल्प टैरिफ में अधिक वृद्धि होगा। विभिन्न क्षेत्रों/इलाकों के ऊर्जा लेखा परीक्षाओं की तृतीय पक्ष जांच का इस्तेमाल एटीएंडसी हानि के उच्च

स्तरों हेतु क्षेत्र/इलाकों में विशिष्ट अधिभार लगाने के लिए किया जा सकता है और इससे बेहतर शासन प्रणाली के लिए प्रभावी कार्यवाही हेतु स्थानीय सहमति का सृजन हो सकता है। राज्य विद्युत विनियामक आयोग हानियों में कमी से सम्बद्ध यूटिलिटियों के स्टाफ के लिए उपयुक्त स्थानीय क्षेत्र आधारित प्रोत्साहन एवं अप्रोत्साहन योजना को भी प्रोत्साहित कर सकते हैं।

एसईआरसी, लाइसेंसी के प्रत्येक वितरण सर्किल के संबंध में विभिन्न पैरामीटरों हेतु बेस लाईन आंकड़ों का स्वतंत्र मूल्यांकन करेगा।

एसईआरसी, लाइसेंसियों द्वारा प्रस्तुत वित्तीय और तकनीकी आंकड़ों की स्वतंत्र जांच की एक प्रणाली भी स्थापित करेगा।

चूंकि मीटरिंग वितरण नेटवर्क में उपयुक्त स्तर तक पूरी हो चुकी है इसलिए तकनीकी हानियों को पृथक करना संभव होना चाहिए। तदनुसार, एमवाईटी ढांचे के अंतर्गत तकनीकी हानि कमी को वाणिज्यिक हानि कमी से अलग समझा जाना चाहिए जिसके लिए अलग दृष्टिकोण अपेक्षित होता है।

(3) अधिनियम की धारा 65 प्रावधान करती है कि राज्य आयोग द्वारा निर्धारित किए गए टैरिफ में उपभोक्ताओं को सब्सिडी प्रदान करने के संबंध में राज्य सरकार का कोई निर्देश प्रभावी नहीं होगा यदि राज्य आयोग द्वारा निर्धारित सब्सिडी का भुगतान यूटिलिटियों को नहीं किया जाता है और राज्य आयोग द्वारा निर्धारित टैरिफ इस संबंध में आयोग द्वारा जारी किए गए आदेशों की तारीख से लागू होगा। राज्य आयोगों को यूटिलिटियों की वित्तीय व्यवहार्यता सुनिश्चित करने के लिए कानून के इस प्रावधान के अनुपालन को सुनिश्चित करना चाहिए। कानून के इस प्रावधान के कार्यान्वयन को सुनिश्चित करने के लिए, राज्य आयोग को राज्य सरकार द्वारा सब्सिडी प्रतिबद्धता पर विचार किए बिना आरंभ में टैरिफ निर्धारिण करना चाहिए और उपभोक्ताओं की संबंधित श्रेणियों के लिए राज्य सरकार द्वारा सब्सिडी पर विचार करने के पश्चात् सब्सिडी प्राप्त टैरिफ का निर्धारण किया जाएगा।

(4) यूटिलिटियों द्वारा सामना किए जा रहे ट्रांजिशन मामलों जैसे कि बिलों की वसूली में प्रगामी सुधार आदि की पर्याप्त रूप से पहचान करते हुए कार्यशील पूंजी की अनुमति दी जानी चाहिए। डूबत ऋणों को विकसित नीतियों के अनुसार तथा राज्य आयोग के अनुमोदन के अध्यधीन माना जाना चाहिए।

(5) पिछली हानियों अथवा लाभों के पास-थ्रू की अनुमति गैर-नियंत्रणीय कारकों की सीमा तक दी जानी चाहिए। संक्रमणकालीन अवधि के दौरान नियंत्रणीय कारक एमवाईटी ढांचे के अंतर्गत निर्धारित अनुपातों में यूटिलिटियों और उपभोक्ताओं के लिए माना जाना चाहिए।

(6) आकस्मिक संचय राज्य आयोग द्वारा विनियमों के माध्यम से विनिर्दिष्ट आकस्मिक दशाओं की स्थिति में ही केवल राज्य आयोग के पूर्व अनुमोदन के साथ बनाए जाने चाहिएं। विकासात्मक संचय और टैरिफ एवं लाभांश नियंत्रण संचय बनाने की वर्तमान पद्धतियों को समाप्त किया जाना चाहिए।

(7) अधिनियम की धारा 61 में यह अनिवार्य है कि उपयुक्त आयोग, टैरिफ निर्धारित करते समय, न केवल उपभोक्ताओं के हितों की रक्षा सुनिश्चित करेगा बल्कि यथोचित ढंग से विद्युत की लागत की वसूली भी सुनिश्चित करेगा। अधिनियम की धारा 62 में ईंधन मूल्य में अंतर, जो विनिर्दिष्ट किया जाए, को पूरा करने के लिए वर्ष के दौरान आवधिक टैरिफ समायोजन की व्यवस्था भी है।

इसलिए, उपयुक्त आयोग को उत्पादन कंपनी और लाइसेंसी की सभी तर्कसंगत लागतों की वसूली के लिए मासिक/त्रैमासिक आधार पर ईंधन के मूल्य, विद्युत क्रय आदि में भिन्नता के कारण उत्पन्न होने वाली लागतों की वसूली के लिए उपयुक्त मूल्य समायोजन फॉर्मूला विनिर्दिष्ट करना चाहिए।

8.2.2 विशेष वर्ष में टैरिफ प्रभाव को सीमित करने के लिए गत समय में विनियामक परिसम्पत्ति की सुविधा को कुछ विनियामक आयोगों द्वारा अपनाया गया है। यह केवल प्राकृतिक आपदा अथवा अप्रत्याशित घटनाओं के मामले में बहुत ही अपवाद के रूप में ही किया जाना चाहिए और निम्नलिखित के अध्यधीन होना चाहिए:

क. सामान्य परिस्थितियों में व्यापार के अंतर्गत, किसी विनियामक परिसंपत्ति के सृजन की अनुमति नहीं दी जाएगी।

ख. विनियामक परिसंपत्तियों की वहन लागत सहित बकाया विनियामक परिसम्पत्तियों की वसूली समयबद्ध होनी चाहिए और अधिकतम सात वर्षों की अवधि के भीतर होनी चाहिए। राज्य आयोग इसके लिए ट्रेजेक्टरी विनिर्दिष्ट कर सकता है।

8.3 टैरिफ डिजाइन: टैरिफ को सेवा लागत से जोड़ा जाना

यह व्यापक रूप से विदित है कि विद्युत का यौक्तिक एवं आर्थिक मूल्य निर्धारण ऊर्जा संरक्षण और भू-जल संसाधनों के स्थिर प्रयोग हेतु प्रमुख उपायों में से एक हो सकता है।

अधिनियम की धारा 61 (छ) की शर्तों के अनुसार उपयुक्त आयोग इस उद्देश्य से दिशानिर्देशित होगा कि टैरिफ विद्युत की आपूर्ति की दक्ष एवं विवेकशील लागत को प्रगामी रूप से प्रदर्शित करे।

राज्य सरकारें अधिनियम की धारा 65 के प्रावधानों के अनुसार उपयुक्त मानी गई सीमा तक सब्सिडी दे सकती हैं। प्रत्यक्ष सब्सिडी, सभी को टैरिफ में क्रास सब्सिडी के तंत्र की अपेक्षा उपभोक्ताओं की गरीब श्रेणियों को सहायता देने के लिए बेहतर तरीका है। सब्सिडियों को प्रभावी रूप से और पारदर्शक रूप में लक्षित किया जाना चाहिए। क्रास-सब्सिडियों के विकल्प के रूप में, राज्य सरकार के पास विद्युत शुल्क प्रणाली के माध्यम से संसाधन जुटाने और केवल जरुरतमंद उपभोक्ताओं को प्रत्यक्ष सब्सिडियों का लाभ प्रदान करने का एक विकल्प विद्यमान है, सब्सिडी का प्रभावी रूप से लक्ष्य बनाने का यह बेहतर तरीका है।

तदनुसार निम्नलिखित सिद्धांत अपनाएं जाएंगे:

1. राष्ट्रीय विद्युत नीति में निर्धारित अनुसार, गरीबी रेखा से नीचे के उपभोक्ता, विनिर्दिष्ट स्तर से नीचे उपभोग करते हैं, को क्रॉस सब्सिडी के माध्यम से विशेष सहायता प्राप्त हो सकती है। उपभोक्ताओं के ऐसे नामित समूह के लिए टैरिफ, आपूर्ति की औसत लागत का कम से कम 50 प्रतिशत होगी।

2. विद्युत आपूर्ति की लागत को टैरिफ द्वारा प्रगामी रूप से प्रदर्शित करने के लक्ष्य को प्राप्त करने के लिए, उपयुक्त आयोग रोडमैप इस प्रकार अधिसूचित करेगा कि टैरिफ, आपूर्ति की औसत लागत के ± 20% के भीतर हो। क्रॉस सब्सिडी में क्रमिक कमी के दृष्टिकोण के आधार पर रोड मैप में मध्यवर्ती लक्ष्य भी होंगे।

3. कृषि उपयोग हेतु टैरिफ निर्धारित करते समय, स्थायी तरीके से भू-जल संसाधनों के प्रयोग की आवश्यकता के अनिवार्यता को भी आपूर्ति की औसत लागत के अतिरिक्त ध्यान में रखना होगा। कृषि उपयोग हेतु टैरिफ भू-जल की अत्यधिक हानि को रोकने के लिए भू-जल तालिका की स्थिति के आधार पर राज्य के विभिन्न भागों के लिए विभिन्न स्तरों पर निर्धारित की जा सकती है। अधिनियम की धारा 62 (3) प्रबंध करती है कि किसी क्षेत्र की भौगोलिक स्थिति टैरिफ अंतर के लिए एक मानदंड हो सकती है। उस क्षेत्र के गरीब किसानों को सहायता देने के लिए सब्सिडी के अधिकतम स्तर का विचार किया जा सकता है जहाँ भू-जल स्तरों की देखरेख और सतत् भू-जल प्रयोग को सुनिश्चित करने के लिए उचित प्रतिबंधों के अधीन सिंचाई उद्देश्यों हेतु विद्युत की बड़ी मात्रा की आवश्यकता होती है।

4. उपभोक्ताओं की विभिन्न श्रेणियों के लिए सब्सिडी की सीमा विभिन्न संबंधित पहलुओं को ध्यान में रखते हुए राज्य सरकार द्वारा निर्धारित की जा सकती है। किन्तु निशुल्क विद्युत का प्रावधान वांछनीय नहीं है क्योंकि यह विद्युत के व्यर्थ उपभोग को प्रोत्साहित करता है। इसके अलावा बहुत से मामलों में जल तालिका

में कमी होती है जिससे आने वाली पीढ़ियों के लिए सिंचाई और पीने के पानी की कमी की परिहार्य समस्या पैदा होती है। इससे विद्युत की मांग में तीव्र वृद्धि होने की भी संभावना है जिससे वितरण नेटवर्क पर काफी दबाव पड़ता है और इस प्रकार विद्युत की आपूर्ति की गुणवत्ता पर प्रतिकूल प्रभाव पड़ता है। अतः यह आवश्यक है कि उचित स्तर के प्रयोक्ता प्रभार लगाएँ जाएं। विद्युत की सब्सिडी प्राप्त दरों को उपभोग की पूर्व-निर्धारित सीमा तक ही अनुमति दी जानी चाहिए जिसके बाद उपभोक्ताओं से सेवा की दक्ष लागत को दर्शाने वाला टैरिफ वसूल किया जाना चाहिए। यदि राज्य सरकार उपभोक्ताओं की गरीब श्रेणी को विद्युत की लागत का कुछ भाग ही प्रतिपूर्ति के रूप में देना चाहती है तो इस राशि को नकद अथवा किसी अन्य उपयुक्त तरीके से दिया जा सकता है। उपभोक्ताओं को सब्सिडी का यह अंतरण पूर्व-भुगतान मीटर के प्रयोग से भी सुगम हो सकता है।

5. कृषि/ग्रामीण उपभोक्ताओं के संबंध में आपूर्ति की मीटरिंग पंचायत संस्थानों, प्रयोगकर्ता संगठनों, सहकारी समितियों आदि की भागेदारी से फ्रैंचाइजियों के साथ वाणिज्यिक व्यवस्था के माध्यम से ग्रामीण क्षेत्रों में स्थानीय वितरण के प्रबन्धन द्वारा प्रभावी तरीके से तथा उपभोक्ता की सुविधानुसार प्राप्त की जा सकती है। सीमित प्रयोग उपभोक्ताओं, जो सब्सिडी प्राप्त विद्युत के लिए पात्र हैं, के मामलों में मीटरिंग हेतु किफायती विकल्प के रूप में स्मार्ट मीटरों को प्रोत्साहित किया जा सकता है।

8.4 टैरिफ घटकों की परिभाषा और उनको लागू करना

1) अलग-अलग स्थायी और परिवर्तनीय शुल्कों तथा समय अंतराल वाले टैरिफ की विशेषता वाले द्विभागीय टैरिफों को बड़े उपभोक्ताओं (अर्थात् 1 मेगावाट से अधिक की मांग वाले उपभोक्ता) के लिए प्राथमिक रूप से एक वर्ष के भीतर शुरू किया जाएगा और बाद में सभी उपभोक्ताओं के लिए पाँच वर्षों की अवधि के भीतर अथवा इस प्रकार की अवधि जो विनिर्दिष्ट की जा सकती है, शुरू किया जाएगा। इससे व्यस्ततम मांग को पूरा करने और विभिन्न ऊर्जा संरक्षण उपायों को कार्यान्वित करने में भी मदद मिलेगी।

2) राष्ट्रीय विद्युत नीति में उल्लेख है कि उत्पादन कंपनियों के साथ हुए विद्यमान पीपीए को उत्तराधिकारी वितरण कंपनियों को उपयुक्त रूप से सौंपे जाने की आवश्यकता होगी। राज्य सरकारें वितरण कंपनियों की विभिन्न लोड प्रोफाइलों को ध्यान में रखते हुए ऐसी व्यवस्था कर सकती है ताकि उपभोक्ताओं की विभिन्न श्रेणियों के लिए राज्य में रिटेल टैरिफ एकसमान रहें। इसके पश्चात् रिटेल टैरिफ, प्रतिस्पर्द्धी लागतों पर विद्युत का प्रापण करने, चोरी को नियंत्रित करने और अन्य वितरण हानियों को कम करने में वितरण कंपनियों की सापेक्ष दक्षता को प्रदर्शित करेगा।

3) उपयुक्त आयोग विशेषरूप से उपभोक्ताओं की उन श्रेणियों, जो बड़े पैमाने पर बिना मीटर के हैं, के लिए मीटर टैरिफ आधारित मीटरिंग और बिलिंग को बढ़ावा देने के लिए प्रोत्साहन दे सकता है। मीटरिंग टैरिफ और प्रोत्साहनों का व्यापक प्रचार किया जाना चाहिए। स्मार्ट मीटरों से दूरस्थ मीटरिंग और बिलिंग, व्यस्ततम और गैर-व्यस्ततम टैरिफ का कार्यान्वयन तथा मांग प्रतिक्रिया के माध्यम से मांग पक्ष प्रबंधन में लाभ होता है। यह भविष्य में, पवन और सौर विद्युत जैसे उत्पादन की मध्यवर्ती किस्मों की वृद्धि के कारण भार-उत्पादन संतुलन के लिए आवश्यक होगा।

इसलिए, उपयुक्त आयोग निम्नलिखित के लिए स्मार्ट मीटर अधिदेशित करता है:

(क) यथाशीघ्र किंतु 31.12.2017 से पहले 500 यूनिट अथवा इससे अधिक की मासिक खपत वाले उपभोक्ता;

(ख) 31.12.2019 तक 200 यूनिट से अधिक की मासिक खपत वाले उपभोक्ता।

इसके अतिरिक्त, सभी प्रोस्यूमर्स को टू-वे स्मार्ट मीटर उपलब्ध कराए जाएंगे जो ग्रिड को वापस बिजली बेच सकते हैं जब उन्हें इसकी आवश्यकता है।

वितरण क्षेत्र में ऊर्जा लेखा परीक्षा को सक्षम बनाने के लिए, वितरण प्रणाली में, सभी वितरण कंपनियां 132 केवी स्तर के ट्रांसफार्मरों से 11 केवी स्तर तक के वितरण ट्रांसफार्मरों के लिए तथा इसके अतिरिक्त प्रत्येक उपभोक्ता तक संपूर्ण चेन में अपनी विद्युत प्रणाली में स्मार्ट मीटर सुनिश्चित करेगी। इसके अतिरिक्त, बिजली की चोरी रोकने के लिए, वितरण कंपनियों के पास वितरण प्रबंधन की प्रणाली और ऊर्जा लेखा परीक्षा कार्यों वाली वितरण स्काडा जैसी सक्षम विशेषताएं होनी चाहिएं। एसईआरसी इसे दो वर्षों के भीतर लागू करना अनिवार्य करेगा।

4) राज्य विद्युत विनियामक आयोग वितरण लाइसेंसी द्वारा वसूल किए जाने वाले कनेक्शन प्रभारों को पर्याप्त रूप से विनियमित भी कर सकती है ताकि यह सुनिश्चित किया जा सके कि दूसरा वितरण लाइसेंसी अनुचित कनैक्शन प्रभारों की मांग द्वारा चैरी पिकिंग का सहारा न ले। दूसरे लाइसैंसी का कनेक्शन शुल्क वर्तमान लाइसैंसी द्वारा देय शुल्क से अधिक नहीं होना चाहिए।

8.5 खुली पहुंच के लिए क्रास सब्सिडी अधिभार एवं अतिरिक्त अधिभार

8.5.1 राष्ट्रीय विद्युत नीति में निर्धारित है कि क्रास सब्सिडी अधिभार और खुली पहुंच की अनुमति वाले उपभोक्ताओं से वसूल किया जाने वाला अतिरिक्त अधिभार इतना अधिक नहीं होना चाहिए कि वह प्रतिस्पर्धा को समाप्त कर दे जो कि उत्पादन और खुली पहुंच के माध्यम से उपभोक्ताओं को विद्युत की प्रत्यक्ष आपूर्ति के लिए विकसित की जानी है।

उपभोक्ता, जिसे खुली पहुंच की अनुमति प्राप्त है, उत्पादनकर्ता को, पारेषण लाइसेंसधारक, जिसकी पारेषण प्रणालियां प्रयोग की जाती हैं, वितरण यूटिलिटी को क्रॉस सब्सिडी अधिभार के अतिरिक्त व्हीलिंग प्रभारों का भुगतान करना होगा। अतः क्रास सब्सिडी अधिभार का परिकलन इस प्रकार से करने की जरुरत है कि वितरण लाइसेंसी की क्षतिपूर्ति करते समय खुली पहुंच के जरिए प्रतिस्पर्द्धा लाने में बाधा नहीं आए। उपभोक्ता खुली पहुंच की सुविधा तभी लेगा जब सभी प्रभारों का भुगतान करने पर भी उसे लाभ प्राप्त हो। वितरण लाईसेंसी के हित संरक्षण की स्थिति में यह जरुरी होगा कि अधिनियम के प्रावधानों, जिसमें चरणबद्ध ढंग से खुली पहुंच को शुरू करने की अपेक्षा की गई है, को उपभोक्ताओं के व्यापक हित में प्रतिस्पर्धा हेतु उपयोग में लाया जाए।

एसईआरसी, विद्युत आपूर्ति की लागत की गणना उपभोक्ताओं की उस श्रेणी के लिए, वितरण लाइसेंसी द्वारा (क) नवीकरणीय क्रय दायित्व को पूरा करने सहित विद्युत क्रय की प्रति यूनिट भारित औसत लागत (ख) एसईआरसी द्वारा अनुमति प्राप्त संबंधित वोल्टेज स्तर और वाणिज्यिक हानियों के लिए लागू पारेषण और वितरण हानियां (ग) संबंधित वोल्टेज स्तर तक पारेषण, वितरण और व्हीलिंग प्रभार, और (घ) वहन विनियामक परिसंपत्तियों की प्रति यूनिट लागत, यदि लागू हो, के योग के रूप में कर सकता है।

सरचार्ज फार्मूला

$$S=T-[C/(1-L/100)+D+R]$$

जहां

S सरचार्ज है

T संबंधित उपभोक्ता श्रेणी द्वारा भुगतानयोग्य टैरिफ है जिसमें नवीकरणीय क्रय दायित्व दर्शाना शामिल है।

C लाइसेंसी द्वारा विद्युत क्रय की प्रति यूनिट भारित औसत लागत है जिसमें नवीकरणीय क्रय दायित्व पूरा करना शामिल है।

D संबंधित वोल्टेज स्तर के लिए लागू पारेषण, वितरण और व्हीलिंग चार्ज का योग है।

L संबंधित वोल्टेज स्तर के लिए लागू प्रतिशत के रूप में व्यक्त पारेषण, वितरण और वाणिज्यिक हानियों का योग है।

R वहन विनियामक परिसंपत्तियों की प्रति यूनिट लागत है।

उपरोक्त फार्मूला सभी वितरण लाइसेंसियों के लिए, विशेष रूप से, जहां विद्युत की कमी है, कार्य नहीं कर सकता, राज्य विनियामक आयोग विद्युत अधिनियम के समग्र उद्देश्यों को ध्यान में रखते हुए वितरण लाइसेंसी के क्षेत्र में विद्यमान विभिन्न परिस्थितियों को ध्यान में रखते हुए इसकी समीक्षा और इसमें परिवर्तन कर सकता है।

बशर्ते कि यह सरचार्ज खुली पहुँच प्राप्त करने वाले उपभोक्ताओं की श्रेणी के लिए लागू टैरिफ के 20% से अधिक नहीं होना चाहिए।

बशर्ते कि उपयुक्त आयोग, उपयुक्त सरकार के परामर्श से रेलवे, जैसा कि भारतीय रेलवे अधिनियम, 1989 में परिभाषित है, के डीम्ड लाइसेंसी होने के कारण, इसकी अपनी खपत के लिए क्रय की गई विद्युत पर किसी क्रास सब्सिडी चार्ज की वसूली से छूट प्रदान करेगा।

8.5.2 विद्युत अधिनियम, 1948 (अब निरस्त) की धारा 43(ए)(1)(सी) के अंतर्गत सक्षम सरकार की सहमति के साथ विद्युत उत्पादन कंपनियों द्वारा बेची जा रही विद्युत पर और भारतीय विद्युत अधिनियम, 1910 (अब निरस्त) की धारा 27 के अंतर्गत राज्य सरकार की अनुमति के आधार पर जब तक कि यह अनुमति वैध है, वितरण लाइसेंसी द्वारा आपूर्ति की जा रही विद्युत पर किसी प्रभार का भुगतान करना अपेक्षित नहीं होगा।

8.5.3 अधिभार, वितरण लाइसेंसी, पारेषण लाइसेंसी, एसटीयू अथवा सीटीयू, जिसकी सुविधाएं विद्युत आपूर्ति के लिए उपयोग में लाई जा रही हैं, किसी के भी द्वारा एकत्रित किया जा सकता है। सभी मामलों में किसी विशेष उपभोक्ता से एकत्रित राशियां उस वितरण लाइसेंसी को दी जानी चाहिए जिसके क्षेत्र में उपभोक्ता स्थित है। एक ही क्षेत्र में आपूर्ति कर रहे दो लाइसेंसधारियों के मामले में उस लाइसेंसधारी को एकत्रित की गई राशियाँ दी जाएंगी जिससे उपभोक्ता आपूर्ति का लाभ उठा रहा है।

8.5.4 अधिनियम की धारा 42(4) के अनुसार आपूर्ति के दायित्व हेतु अतिरिक्त अधिभार केवल तभी लागू होना चाहिए जब अंतिम रूप से यह दर्शा दिया जाए कि विद्युत क्रय प्रतिबद्धताओं की दृष्टि से लाइसेंसी का दायित्व समाप्त हो गया है या हो रहा है या ऐसी संविदा के परिणामस्वरूप निर्धारित की गई लागतों को वहन करने की अपरिहार्य देयताएं और स्थिति मौजूद हैं। नेटवर्क परिसम्पत्तियों से संबंधित स्थायी लागतों को व्हीलिंग प्रभारों के माध्यम से वसूल किया जाएगा।

8.5.5 व्हीलिंग प्रभार अंतःराज्यीय पारेषण प्रभारों के लिए निर्धारित किए गए उन्हीं सिद्धांतों के आधार पर निर्धारित किए जाने चाहिए और इसके अलावा इसमें संबंधित वोल्टेज स्तर का औसतन हानि क्षतिपूर्ति शामिल होगा।

8.5.6 खुली पहुंच वाले उपभोक्ता को आपूर्तिकर्ता उत्पादक द्वारा कटौती किए जाने के मामले में लाइसेंसी द्वारा उस उपभोक्ता श्रेणी को, अस्थायी कनेक्शन के लिए उपयुक्त आयोग द्वारा यथानिर्धारित टैरिफ के भुगतान पर वैकल्पिक व्यवस्था की जाए। बशर्ते कि ऐसे प्रभार उस श्रेणी के सामान्य प्रभार के 125 प्रतिशत से ज्यादा नहीं होंगे।

9.0 व्यापार मार्जिन

अधिनियम में यह व्यवस्था है कि उपयुक्त आयोग जरुरत होने पर व्यापार मार्जिन तय करे। बाजार को प्रतिस्पर्धात्मक बनाने के लिए बिजली क्षेत्र में व्यापार को प्रोत्साहित करने की जरुरत है, यद्यपि उपयुक्त आयोग व्यापार लेन-देन की लगातार निगरानी करे और यह सुनिश्चित करे कि बिजली के व्यापारी बिजली कमी की स्थिति में अनुचित लाभ न उठाएं। इस उद्देश्य की पूर्ति हेतु व्यापार मार्जिन का निर्धारण जरुरी है।

ज्योति अरोरा, संयुक्त सचिव

परिशिष्ट

जल विद्युत परियोजनाओं के लिए अनुमोदित आर एंड आर प्रावधानों की मुख्य विशेषताएँ

1 समावेशन सीमा

किसी जल विद्युत परियोजना के विकास से, यदि एक भी परिवार प्रभावित हो तो निम्नलिखित प्रावधान लागू होंगे:

2 परियोजना प्रभावित परिवार (पीएएफ) की परिभाषा

परियोजना प्रभावित परिवार (पीएएफ) से वह परिवार अभिप्रेत है जिसका निवास-स्थान या अन्य संपत्ति या आजीविका का स्रोत जल विद्युत परियोजना के कार्य से प्रभावित हुआ हो और जो एलएआरआर अधिनियम की धारा-11 के अंतर्गत अधिसूचना की घोषणा की तारीख से दो वर्ष पूर्व से प्रभावित क्षेत्र में रह रहा हो। प्रभावित परिवार में अनाधिकृत निवासी (स्क्वॉटर) भी शामिल होंगे।

3 कृषि श्रमिक की परिभाषा

ऐसा व्यक्ति जो सामान्यतः प्रभावित क्षेत्र के घोषित होने की तारीख से दो वर्ष पूर्व से प्रभावित क्षेत्र में रह रहा हो और कृषि भूमि पर मुख्यतः शारीरिक श्रम के जरिए आजीविका चलाता हो।

4 गैर-कृषि श्रमिकों की परिभाषा

ऐसा व्यक्ति जो सामान्यतः प्रभावित क्षेत्र के घोषित होने की तारीख से दो वर्ष पूर्व से प्रभावित क्षेत्र में रह रहा हो और उसकी प्रभावित क्षेत्र में कोई भूमि न हो और वह अपनी आजीविका मुख्यतः शारीरिक श्रम से या ग्रामीण शिल्पकार या समुदाय सेवा प्रदाताओं के रूप में चलाता हो।

5 स्क्वॉटर (अनधिकृत निवासी) की परिभाषा

प्रभावित क्षेत्र में कानूनी अधिकार रहित सरकारी भूमि का कब्जादार परिवार और वह एलएआरआर अधिनियम की धारा 11 के अंतर्गत अधिसूचना की घोषणा की तारीख से 5 वर्ष पूर्व से वहाँ रह रहा हो।

6 पुनर्वास/पुनःस्थापन कॉलोनियाँ

इस नीति का उद्देश्य उन परियोजना प्रभावित परिवारों, जो हाइड्रो परियोजनाओं के विकास के कारण विस्थापित हो गए हों, को जहां तक संभव हो सके, बना बनाया मकान उपलब्ध कराना है। हालांकि जहां पर विकल्प दिया जाए, इसके बदले में उदार आवास निर्माण भत्ता दिया जाएगा।

7 प्रशिक्षण एवं क्षमता निर्माण

यह नीति परियोजना प्रभावित परिवारों तथा स्थानीय लोगों को सतत आजीविका के लिए प्रशिक्षण देने की आवश्यकता पर बल देती है। निर्माण शुरू होने से कम से कम छह महीने पूर्व परियोजना विकासकर्ताओं द्वारा स्थानीय लोगों को आवश्यक कौशल प्रदान करने के लिए आई टी आई द्वारा विशेष प्रशिक्षण कार्यक्रम शुरू किया जाएगा। इससे पीएएफ एवं परियोजना के आस-पास रह रहे अन्य लोगों की रोजगारोपयोगिता में वृद्धि होने की आशा है।

8 अतिरिक्त प्रावधान

इस नीति में परियोजना प्रभावित परिवारों के लिए निम्नलिखित अतिरिक्त प्रावधान परिकल्पित हैं:

- मेधावी छात्रों के लिए छात्रवृत्ति
- चिकित्सा सुविधाओं का विस्तार

- विवाह अनुदान
- जीवन-निर्वाह अनुदान
- सहकारियों एवं स्वयंसेवी समूहों के लिए आय सृजन योजनाओं को बढ़ावा देना
- बीज, कीटनाशक एवं उर्वरक सब्सिडी तथा सिंचाई सहायता

उपर्युक्त अतिरिक्त प्रावधानों के अलावा वर्तमान में लागू पुनर्वास एवं पुनःस्थापन राष्ट्रीय नीति के प्रावधान सामान्यतः प्रभावी बने रहेंगे।

MINISTRY OF POWER

RESOLUTION

New Delhi, the 28th January, 2016

TARIFF POLICY

No. 23/2/2005-R&R (Vol-IX).—1.0 INTRODUCTION

1.1 In compliance with section 3 of the Electricity Act 2003, the Central Government notified the Tariff Policy on 6th January, 2006. Further amendments to the Tariff Policy were notified on 31st March, 2008, 20th January, 2011 and 8th July, 2011. In exercise of powers conferred under section 3(3) of Electricity Act, 2003, the Central Government hereby notifies the revised Tariff Policy to be effective from the date of publication of this resolution in the Gazette of India.

Notwithstanding anything done or any action taken or purported to have been done or taken under the provisions of the Tariff Policy notified on 6th January, 2006 and amendments made thereunder, shall, in so far as it is not inconsistent with this Policy, be deemed to have been done or taken under provisions of this revised policy.

1.2 The National Electricity Policy has set the goal of adding new generation capacity and enhancing per capita availability of electricity per year and to not only eliminate energy and peaking shortages but to also have a spinning reserve as specified by the Central Electricity Authority. Development of the power sector has also to meet the challenge of providing access for affordable electricity to all households in next five years.

1.3 It is therefore essential to attract adequate investments in the power sector by providing appropriate return on investment as budgetary resources of the Central and State Governments are incapable of providing the requisite funds. It is equally necessary to ensure availability of electricity to different categories of consumers at reasonable rates for achieving the objectives of rapid economic development of the country and improvement in the living standards of the people.

1.4 Balancing the requirement of attracting adequate investments to the sector and that of ensuring reasonability of user charges for the consumers is the critical challenge for the regulatory process. Accelerated development of the power sector and its ability to attract necessary investments calls for, inter alia, consistent regulatory approach across the country. Consistency in approach becomes all the more necessary considering the large number of States and the diversities involved.

2.0 LEGAL POSITION

2.1 Section 3 (1) of the Electricity Act, 2003 empowers the Central Government to formulate the tariff policy. Section 3(3) of the Act enables the Central Government to review or revise the tariff policy from time to time.

2.2 Central Electricity Regulatory Commission (CERC) and State Electricity Regulatory Commissions (SERCs) shall be guided by the tariff policy in discharging their functions including framing the regulations.

2.3 Regulatory Commissions shall be guided by the principles and methodologies specified by the Central Commission for determination of tariff applicable to generating companies and transmission licensees.

2.4 The Forum of Regulators has been constituted by the Central Government under the provisions of the Act which would, inter alia, facilitate consistency in approach specially in the area of distribution.

3.0 EVOLUTION OF THE POLICY

The tariff policy has been evolved in consultation with the State Governments, the Central Electricity Authority (CEA), the Central Electricity Regulatory Commission and various stakeholders.

4.0 OBJECTIVES OF THE POLICY

The objectives of this tariff policy are to:

(a) Ensure availability of electricity to consumers at reasonable and competitive rates;

(b) Ensure financial viability of the sector and attract investments;

(c) Promote transparency, consistency and predictability in regulatory approaches across jurisdictions and minimise perceptions of regulatory risks;

(d) Promote competition, efficiency in operations and improvement in quality of supply;

(e) Promote generation of electricity from Renewable sources;

(f) Promote Hydroelectric Power generation including Pumped Storage Projects (PSP) to provide adequate peaking reserves, reliable grid operation and integration of variable renewable energy sources;

(g) Evolve a dynamic and robust electricity infrastructure for better consumer services;

(h) Facilitate supply of adequate and uninterrupted power to all categories of consumers;

(i) Ensure creation of adequate capacity including reserves in generation, transmission and distribution in advance, for reliability of supply of electricity to consumers.

5.0 GENERAL APPROACH TO TARIFF

5.1 Introducing competition in different segments of the electricity industry is one of the key features of the Electricity Act, 2003. Competition will lead to significant benefits to consumers through reduction in capital costs and also efficiency of operations. It will also facilitate the price to be determined competitively. The Central Government has already issued detailed guidelines for tariff based bidding process for procurement of electricity by distribution licensees.

5.2 All future requirement of power should continue to be procured competitively by distribution licensees except in cases of expansion of existing projects or where there is a company owned or controlled by the State Government as an identified developer and where regulators will need to resort to tariff determination based on norms provided that expansion of generating capacity by private developers for this purpose would be restricted to one time addition of not more than 100% of the existing capacity.

Provided further that the Appropriate Commission, as defined in the Electricity Act, 2003, shall ensure that in case of expansion of such projects, the benefit of sharing of infrastructure of existing project and efficiency of new technology is passed on to consumers through tariff.

Provided also that the State Government can notify a policy to encourage investment in the State by allowing setting up of generating plants, including from renewable energy sources out of which a maximum of 35% of the installed capacity can be procured by the Distribution Licensees of that State for which the tariff may be determined under Section 62 of the Electricity Act, 2003.

Provided that notwithstanding the provision contained in para 5.11(j) of the policy, the tariff for such 35% of the installed capacity shall be determined by SERC.

However, the 15% of power outside long term PPAs allowed under para 5.7.1 of National Electricity Policy shall not be included in 35% allowed to be procured by Distribution Licensees of the State.

5.3 The tariff of all new generation and transmission projects of company owned or controlled by the Central Government shall continue to be determined on the basis of competitive bidding as per the Tariff Policy notified on 6th January, 2006 unless otherwise specified by the Central Government on case to case basis.

Further, intra-state transmission projects shall be developed by State Government through competitive bidding process for projects costing above a threshold limit which shall be decided by the SERCs.

5.4 The Central Electricity Regulatory Commission in consultation with Central Electricity Authority and other stakeholders shall frame within six months, regulations for determination of tariff for generation of electricity from projects using coal washery rejects. These regulations shall also be followed by State Electricity Regulatory Commissions.

Provided that procurement of power from coal washery rejects based projects developed by Central/State PSUs, Joint Venture between Government Company and Company other than Government Company in which shareholding of company other than Government Company either directly or through any of its subsidiary company or associate company shall not be more than 26% of the paid up share capital, can be done under Section 62 of the Act.

5.5 The developer of a hydroelectric project, including Pumped Storage Plant (PSP), would have the option of getting the tariff determined by the Appropriate Commission for the power to be sold through long term Power Purchase

Agreements (PPAs) on the basis of performance based cost of service regulations if the following conditions are fulfilled:

(a) The Appropriate Commission is satisfied that the project site has been allotted to the developer by the concerned State Government after following a transparent two stage process. The first stage should be for prequalification on the basis of criteria of financial strength, past experience of developing infrastructure projects of similar size, past track record of developing projects on time and within estimated costs, turnover and ability to meet performance guarantee etc. In the second stage, bids are to be called on the basis of only one single quantifiable parameter, such as, additional free power in excess of percentage of free power, as notified by the Central Government, equity participation offered to the State Government, or any other parameter to be notified by the Central Government from time to time.

(b) Concurrence of CEA (if required under Section 8 of the Act), financial closure, award of work and long term Power Purchase Agreement (PPA) (of the duration of 35 years or more) of the capacity specified in (c) below with distribution licensees are completed by 15.08.2022.

(c) Long term PPA is firmed up for 60% or more of the total saleable design energy, balance being allowed for merchant sale.

Provided that distribution licensees can extend the duration of long term PPA beyond 35 years for a further period of 15 years at the existing terms and conditions subject to the approval of Appropriate Commission.

Provided further that nothing contained in this clause shall apply to Pumped Storage Plants (PSP).

(d) The time period for commissioning of all the units of the project shall be fixed at four years from the date of approval of the commissioning schedule by the Appropriate Commission. However, the Appropriate Commission may, after recording reasons in writing, fix longer time period for hydro electric projects (reservoir as well as run-of- river projects) of more than 100 MW capacity. Agreed timelines to achieve the fixed commissioning schedule alongwith penalty for delay shall be decided by the Appropriate Commission in consultation with the Central Electricity Authority. The Appropriate Commission shall allow pass through the Interest During Construction (IDC) and Financing Cost (FC) only upto the period of delay not attributable to the developer, as approved by the CEA.

(e) Award of contracts for supply of equipment and construction of the project, either through a turnkey or through well defined packages, are done on the basis of international competitive bidding.

5.6 Notwithstanding anything contained in Para 5.5 above, the developers of hydro electric projects of more than 100 MW design capacity for which sites have been awarded earlier by following a transparent process and on the basis of pre-determined set of criteria would have the option of getting the tariff determined by the Appropriate Commission for the power to be sold through long term PPA on the basis of cost plus under Section 62 of the Act.

5.7 In case of projects covered under Para 5.5 and 5.6, the Appropriate Commission shall determine tariff ensuring the following:

(i) Any expenditure incurred or committed to be incurred by the project developer for getting project site allotted (except free power as notified) would neither be included in the project cost, nor any such expenditure shall be passed through in tariff.

(ii) The project cost shall include the cost of the approved R&R plan of the Project which shall be in conformity with the following:

(a) the National Rehabilitation & Resettlement Policy currently in force;

(b) the R&R package as enclosed at appendix.

(iii) Annual fixed charges shall be taken pro-rata to the saleable design energy tied up on the basis of long term PPAs with respect to total saleable design energy. The total saleable design energy shall be arrived at by deducting the following from the design energy at the bus bar:

a) Free power as notified by the Central Government from time to time for the host State and the riparian State and percentage for contribution towards Local Area Development Fund as constituted by the State Government. This free power may be suitably staggered as decided by the State Government.

b) Energy corresponding to 100 units of electricity to be provided free of cost every month to every Project Affected Family notified by the State Government to be offered through the concerned distribution licensee in the designated resettlement area/projects area for a period of ten years from the date of commissioning.

5.8 The Appropriate Commission shall provide for suitable regulatory framework for incentivizing the developers of Hydro Electric Projects (HEPs) for using long-term financial instruments in order to reduce the tariff burden in the initial years.

5.9 The real benefits of competition would be available only with the emergence of appropriate market conditions. Shortages of power supply will need to be overcome. Multiple players will enhance the quality of service through competition. All efforts will need to be made to bring power industry to this situation as early as possible in the overall interests of consumers. Transmission and distribution, i.e. the wires business is internationally recognized as having the characteristics of a natural monopoly where there are inherent difficulties in going beyond regulated returns on the basis of scrutiny of costs.

5.10 Consumer interest is best served in ensuring viability and sustainability of the entire value chain viz., generation, transmission and distribution of electricity, while at the same time facilitating power supply at reasonable rate to consumers. The financial turnaround/restructuring plans are approved by the Appropriate Government from time to time to achieve this objective. The Appropriate Government as well as the Appropriate Commission while implementing such plans shall ensure viability of the generation, transmission and distribution in terms of recovery of all prudent costs.

5.11Tariff policy lays down the following framework for performance based cost of service regulation in respect of aspects common to generation, transmission as well as distribution. These shall not apply to competitively bid projects as referred to in para 6.1 and para 7.1 (6). Sector specific aspects are dealt with in subsequent sections.

a) Return on Investment

Balance needs to be maintained between the interests of consumers and the need for investments while laying down rate of return. Return should attract investments at par with, if not in preference to, other sectors so that the electricity sector is able to create adequate capacity. The rate of return should be such that it allows generation of reasonable surplus for growth of the sector.

The Central Commission would notify, from time to time, the rate of return on equity for generation and transmission projects keeping in view the assessment of overall risk and the prevalent cost of capital which shall be followed by the SERCs also. The rate of return notified by CERC for transmission may be adopted by the SERCs for distribution with appropriate modification taking into view the risks involved. For uniform approach in this matter, it would be desirable to arrive at a consensus through the Forum of Regulators.

While allowing the total capital cost of the project, the Appropriate Commission would ensure that these are reasonable and to achieve this objective, requisite benchmarks on capital costs should be evolved by the Regulatory Commissions. The Central Commission may adopt either Return on Equity or Return on Capital approach whichever is considered better in the interest of the consumers.

The State Commission may consider 'distribution and supply margin' as basis for allowing returns in distribution business at an appropriate time. The State Commission may also consider price cap regulation based on comprehensive study. The Forum of Regulators should evolve a comprehensive approach in this regard. The considerations while preparing such an approach would, inter-alia, include issues such as reduction in Aggregate Technical and Commercial losses, improving the standards of performance and reduction in cost of supply.

b) Equity Norms

For financing of future capital cost of projects, a Debt: Equity ratio of 70:30 should be adopted. Promoters would be free to have higher quantum of equity investments. The equity in excess of this norm should be treated as loans advanced at the weighted average rate of interest and for a weighted average tenor of the long term debt component of the project after ascertaining the reasonableness of the interest rates and taking into account the effect of debt restructuring done, if any. In case of equity below the normative level, the actual equity would be used for determination of Return on Equity in tariff computations.

c) Depreciation

The Central Commission may notify the rates of depreciation in respect of generation and transmission assets. The depreciation rates so notified would also be applicable for distribution assets with appropriate modification as may be evolved by the Forum of Regulators.

Provided that the Appropriate Commission shall specify, for the purpose of tariff determination, a upper ceiling of the rate of depreciation to be applicable during the useful life of the project and the developer shall have the option of indicating, while seeking approval for tariff, lower rate of depreciation subject to the aforesaid ceiling.

The rates of depreciation so notified would be applicable for the purpose of tariffs as well as accounting.

There should be no need for any advance against depreciation.

Benefit of reduced tariff after the assets have been fully depreciated should remain available to the consumers.

Notwithstanding the above, power from those plants of a generating company, where either whose PPAs have expired or plants have completed their useful life, may be bundled with power from renewable generating plants to be set up through the process of bidding or for which the equipment for setting up such plant is procured through competitive bidding. In such cases, power from such plants can be reallocated to beneficiaries purchasing power from renewable energy generating plants on the principles to be decided by Appropriate Government. The Obligated Entities which finally buy such power shall account towards their renewable purchase obligation to the extent of power bought from renewable energy generating plants.

The scheduling and despatch of such conventional and renewable generating plants shall be done separately.

d) Cost of Debt

Structuring of debt, including its tenure, with a view to reducing the tariff should be encouraged. Savings in costs on account of subsequent restructuring of debt should be suitably incentivised by the Regulatory Commissions keeping in view the interests of the consumers.

e) Cost of Management of Foreign Exchange Risk

Foreign exchange variation risk shall not be a pass through. However, appropriate costs of hedging and swapping to take care of foreign exchange variations should be allowed for debt obtained in foreign currencies. This provision would be relevant only for the projects where tariff has not been determined on the basis of competitive bids.

f) Operating Norms

Suitable performance norms of operations together with incentives and disincentives would need to be evolved along with appropriate arrangement for sharing the gains of efficient operations with the consumers. Except for the cases referred to in para 5.1 l(h)(2), the operating parameters in tariffs should be at "normative levels" only and not at "lower of normative and actuals". This is essential to encourage better operating performance. The norms should be efficient, relatable to past performance, capable of achievement and progressively reflecting increased efficiencies and may also take into consideration the latest technological advancements, fuel, vintage of equipments, nature of operations, level of service to be provided to consumers etc. Continued and proven inefficiency must be controlled and penalized.

The Central Commission would, in consultation with the Central Electricity Authority, notify operating norms from time to time for generation and transmission. The SERC would adopt these norms. In cases where operations have been much below the norms for many previous years, the SERCs may fix relaxed norms suitably and draw a transition path over the time for achieving the norms notified by the Central Commission, or phase them out in accordance with the norms specified by the Authority in this regard.

Operating norms for distribution networks would be notified by the concerned SERCs. For uniformity, the Forum of Regulators should evolve model guidelines taking into consideration the state specific distinctive features.

g) Renovation and Modernization

Renovation and modernization of generation plants (including repowering of wind generating plants) need to be encouraged for higher efficiency levels even though they may have not completed their useful life. This shall not include periodic overhauls. A Multi-Year Tariff (MYT) framework may be prescribed which should also cover capital investments necessary for renovation and modernization and an incentive framework to share the benefits of efficiency improvement between the utilities and the beneficiaries with reference to revised and specific performance norms to be fixed by the Appropriate Commission. Appropriate capital costs required for predetermined efficiency gains and/or for sustenance of high level performance would need to be assessed by the Appropriate Commission.

h) Multi Year Tariff

1) Section 61 of the Act states that the Appropriate Commission for determining the terms and conditions for the determination of tariff shall be guided, inter-alia, by Multi-Year Tariff (MYT) principles. The framework should feature a five-year control period. The initial control period may, however, be of 3 year duration for transmission and distribution if deemed necessary by the Regulatory Commission on account of data uncertainties and other practical considerations. In cases of lack of reliable data, the Appropriate Commission may state assumptions in MYT for first control period and a fresh control period may be started as and when more reliable data becomes available.

2) In cases where operations have been much below the norms for many previous years, the initial starting point in determining the revenue requirement and the improvement trajectories should be recognized at

"relaxed" levels and not the "desired" levels. Suitable benchmarking studies may be conducted to establish the "desired" performance standards. Separate studies may be required for each utility to assess the capital expenditure necessary to meet the minimum service standards.

3) Once the revenue requirements are established at the beginning of the control period, the Regulatory Commission should focus on regulation of outputs and not the input cost elements. At the end of the control period, a comprehensive review of performance may be undertaken.

4) Uncontrollable costs should be recovered speedily to ensure that future consumers are not burdened with past costs. Uncontrollable costs would include (but not limited to) fuel costs, costs on account of inflation, taxes and cess, variations in power purchase unit costs including on account of adverse natural events.

5) Clear guidelines and regulations on information disclosure may be developed by the Regulatory Commissions. Section 62 (2) of the Act empowers the Appropriate Commission to require licensees to furnish separate details, as may be specified in respect of generation, transmission and distribution for determination of tariff.

(i) Benefits under Clean Development Mechanism (CDM)

Tariff fixation for all electricity projects (generation, transmission and distribution) that result in lower Green House Gas (GHG) emissions than the relevant base line should take into account the benefits obtained from the Clean Development Mechanism (CDM) into consideration, in a manner so as to provide adequate incentive to the project developers.

(j) Composite Scheme

Sub-section (b) of Section 79(1) of the Act provides that Central Commission shall regulate the tariff of generating company, if such generating company enters into or otherwise have a composite scheme for generation and sale of electricity in more than one State.

Explanation: The composite scheme as specified under section 79(1) of the Act shall mean a scheme by a generating company for generation and sale of electricity in more than one State, having signed long-term or medium-term PPA prior to the date of commercial operation of the project (the COD of the last unit of the project will be deemed to be the date of commercial operation of the project) for sale of atleast 10% of the capacity of the project to a distribution licensee outside the State in which such project is located.

5.12 While it is recognized that the State Governments have the right to impose duties, taxes, cess on sale or consumption of electricity, these could potentially distort competition and optimal use of resources especially if such levies are used selectively and on a non-uniform basis.

In some cases, the duties etc. on consumption of electricity is linked to sources of generation (like captive generation) and the level of duties levied is much higher as compared to that being levied on the same category of consumers who draw power from grid. Such a distinction is invidious and inappropriate. The sole purpose of freely allowing captive generation is to enable industries to access reliable, quality and cost effective power. Particularly, the provisions relating to captive power plants which can be set up by group of consumers has been brought in recognition of the fact that efficient expansion of small and medium industries across the country will lead to faster economic growth and creation of larger employment opportunities.

For realizing the goal of making available electricity to consumers at reasonable and competitive prices, it is necessary that such duties are kept at reasonable level.

5.13 The Act provides for introduction of open access for consumers of one megawatt and above in a time bound manner. The Regulatory Commissions shall introduce open access for different categories of consumers as per the provisions of the Act.

6.0 GENERATION

Accelerated growth of the generation capacity sector is essential to meet the estimated growth in demand. Adequacy of generation is also essential for efficient functioning of power markets. At the same time, it is to be ensured that new capacity addition should deliver electricity at most efficient rates to protect the interests of consumers. This policy stipulates the following for meeting these objectives.

6.1 Procurement of power

As stipulated in para 5.1, power procurement for future requirements should be through a transparent competitive bidding mechanism using the guidelines issued by the Central Government from time to time. These guidelines provide for procurement of electricity separately for base load requirements and for peak load requirements. This would facilitate setting up of generation capacities specifically for meeting such requirements.

However, some of the competitively bid projects as per the guidelines dated 19th January, 2005 have experienced difficulties in getting the required quantity of coal from Coal India Limited (CIL). In case of reduced quantity of

domestic coal supplied by CIL, vis-à-vis the assured quantity or quantity indicated in Letter of Assurance/FSA the cost of imported/market based e-auction coal procured for making up the shortfall, shall be considered for being made a pass through by Appropriate Commission on a case to case basis, as per advisory issued by Ministry of Power vide OM No. FU-12/2011-IPC (Vol-III) dated 31.7.2013.

6.2 Tariff structuring and associated issues

(1) A two-part tariff structure should be adopted for all long-term and medium-term contracts to facilitate Merit Order dispatch. According to National Electricity Policy, the Availability Based Tariff (ABT) is also to be introduced at State level. This framework would be extended to generating stations (including grid connected captive plants of capacities as determined by the SERC). The Appropriate Commission shall introduce differential rates of fixed charges for peak and off peak hours for better management of load within a period of two years.

Power stations are required to be available and ready to dispatch at all times. Notwithstanding any provision contained in the Power Purchase Agreement (PPA), in order to ensure better utilization of un-requisitioned generating capacity of generating stations, based on regulated tariff under Section 62 of the Electricity Act 2003, the procurer shall communicate, at least twenty four hours before 00.00 hours of the day when the power and quantum thereof is not requisitioned by it enabling the generating stations to sell the same in the market in consonance with laid down policy of Central Government in this regard. The developer and the procurers signing the PPA would share the gains realized from sale, if any, of such un-requisitioned power in market in the ratio of 50:50, if not already provided in the PPA. Such gain will be calculated as the difference between selling price of such power and fuel charge. It should, however, be ensured that such merchant sale does not result in adverse impact on the original beneficiary(ies) including in the form of higher average energy charge vis-à-vis the energy charge payable without the merchant sale. For the projects under section 63 of the Act, the methodology for such sale may be decided by the Appropriate Commission on mutually agreed terms between procurer and generator or unless already specified in the PPA.

(2) Power Purchase Agreement should ensure adequate and bankable payment security arrangements to the Generating companies. In case of persisting default on payment of agreed tariff as per PPA in spite of the available payment security mechanisms like letter of credit, escrow of cash flows etc. the generating companies may sell such power to other buyers.

(3) In case of coal based generating stations, the cost of project will also include reasonable cost of setting up coal washeries, coal beneficiation system and dry ash handling & disposal system.

(4) After the award of bids, if there is any change in domestic duties, levies, cess and taxes imposed by Central Government, State Governments/Union Territories or by any Government instrumentality leading to corresponding changes in the cost, the same may be treated as "Change in Law" and may unless provided otherwise in the PPA, be allowed as pass through subject to approval of Appropriate Commission.

(5) The thermal power plant(s) including the existing plants located within 50 km radius of sewage treatment plant of Municipality/local bodies/similar organization shall in the order of their closeness to the sewage treatment plant, mandatorily use treated sewage water produced by these bodies and the associated cost on this account be allowed as a pass through in the tariff. Such thermal plants may also ensure back-up source of water to meet their requirement in the event of shortage of supply by the sewage treatment plant. The associated cost on this account shall be factored into the fixed cost so as not to disturb the merit order of such thermal plant. The shutdown of the sewage treatment plant will be taken in consultation with the developer of the power plant.

6.3 Harnessing captive generation

Captive generation is an important means to making competitive power available. Appropriate Commission should create an enabling environment that encourages captive power plants to be connected to the grid.

Such captive plants could supply surplus power through grid subject to the same regulation as applicable to generating companies. Firm supplies may be bought from captive plants by distribution licensees using the guidelines issued by the Central Government under section 63 of the Act taking into account second proviso of para 5.2 of this Policy.

The prices should be differentiated for peak and off-peak supply and the tariff should include variable cost of generation at actual levels and reasonable compensation for capacity charges.

Wheeling charges and other terms and conditions for implementation should be determined in advance by the respective State Commission, duly ensuring that the charges are reasonable and fair.

Grid connected captive plants could also supply power to non-captive users connected to the grid through available transmission facilities based on negotiated tariffs. Such sale of electricity would be subject to relevant regulations for open access including compliance of relevant provisions of rule 3 of the Electricity Rules, 2005.

6.4 Renewable sources of energy generation including Co-generation from renewable energy sources:

(1) Pursuant to provisions of section 86(1)(e) of the Act, the Appropriate Commission shall fix a minimum percentage of the total consumption of electricity in the area of a distribution licensee for purchase of energy from renewable energy sources, taking into account availability of such resources and its impact on retail tariffs. Cost of purchase of renewable energy shall be taken into account while determining tariff by SERCs. Long term growth trajectory of Renewable Purchase Obligations (RPOs) will be prescribed by the Ministry of Power in consultation with MNRE.

Provided that cogeneration from sources other than renewable sources shall not be excluded from the applicability of RPOs.

(i) Within the percentage so made applicable, to start with, the SERCs shall also reserve a minimum percentage for purchase of solar energy from the date of notification of this policy which shall be such that it reaches 8% of total consumption of energy, excluding Hydro Power, by March 2022 or as notified by the Central Government from time to time.

(ii) Distribution Licensee(s) shall compulsorily procure 100% power produced from all the Waste-to-Energy plants in the State, in the ratio of their procurement of power from all sources including their own, at the tariff determined by the Appropriate Commission under Section 62 of the Act.

(iii) It is desirable that purchase of energy from renewable sources of energy takes place more or less in the same proportion in different States. To achieve this objective in the current scenario of large availability of such resources only in certain parts of the country, an appropriate mechanism such as Renewable Energy Certificate (REC) would need to be promoted. Through such a mechanism, the renewable energy based generation companies can sell the electricity to local distribution licensee at the rates for conventional power and can recover the balance cost by selling certificates to other distribution companies and obligated entities enabling the latter to meet their renewable power purchase obligations. The REC mechanism should also have a solar specific REC.

(iv) Appropriate Commission may also provide for a suitable regulatory framework for encouraging such other emerging renewable energy technologies by prescribing separate technology based REC multiplier (i.e. granting higher or lower number of RECs to such emerging technologies for the same level of generation). Similarly, considering the change in prices of renewable energy technologies with passage of time, the Appropriate Commission may prescribe vintage based REC multiplier (i.e. granting higher or lower number of RECs for the same level of generation based on year of commissioning of plant).

(2) States shall endeavor to procure power from renewable energy sources through competitive bidding to keep the tariff low, except from the waste to energy plants. Procurement of power by Distribution Licensee from renewable energy sources from projects above the notified capacity, shall be done through competitive bidding process, from the date to be notified by the Central Government.

However, till such notification, any such procurement of power from renewable energy sources projects, may be done under Section 62 of the Electricity Act, 2003. While determining the tariff from such sources, the Appropriate Commission shall take into account the solar radiation and wind intensity which may differ from area to area to ensure that the benefits are passed on to the consumers.

(3) The Central Commission should lay down guidelines for pricing intermittent power, especially from renewable energy sources, where such procurement is not through competitive bidding. The tariff stipulated by CERC shall act as a ceiling for that category.

(4) In order to incentivize the Distribution Companies to procure power from renewable sources of energy, the Central Government may notify, from time to time, an appropriate bid-based tariff framework for renewable energy, allowing the tariff to be increased progressively in a back-loaded or any other manner in the public interest during the period of PPA, over the life cycle of such a generating plant. Correspondingly, the procurer of such bid-based renewable energy shall comply with the obligations for payment of tariff so determined.

(5) In order to promote renewable energy sources, any generating company proposing to establish a coal/lignite based thermal generating station after a specified date shall be required to establish such renewable energy generating capacity or procure and supply renewable energy equivalent to such capacity, as may be prescribed by the Central Government from time to time after due consultation with stakeholders. The renewable energy produced by each generator may be bundled with its thermal generation for the purpose of sale. In case an obligated entity procures this renewable power, then the SERCs will consider the obligated entity to have met the Renewable Purchase Obligation (RPO) to the extent of power bought from such renewable energy generating stations.

Provided further that in case any existing coal and lignite based thermal power generating station, with the concurrence of power procurers under the existing Power Purchase Agreements, chooses to set up additional renewable energy generating capacity, the power from such plant shall be allowed to be bundled and tariff of such renewable energy shall be allowed to be pass through by the Appropriate Commission. The Obligated

Entities who finally buy such power shall account towards their renewable purchase obligations.

Provided also that scheduling and despatch of such conventional and renewable generating plants shall be done separately.

(6) In order to further encourage renewable sources of energy, no inter-State transmission charges and losses may be levied till such period as may be notified by the Central Government on transmission of the electricity generated from solar and wind sources of energy through the inter-state transmission system for sale.

(7) Appropriate Commission may provide regulatory framework to facilitate generation and sale of electricity from renewable energy sources particularly from roof-top solar system by any entity including local authority, Panchayat Institution, user institution, cooperative society, Non-Governmental Organization, franchisee or by Renewable Energy Service Company. The Appropriate Government may also provide complementary policy support for this purpose.

Explanation: "Renewable Energy Service Company" means an energy service company which provides renewable energy to the consumers in the form of electricity.

7.0 TRANSMISSION

The transmission system in the country consists of the regional networks, the inter-regional connections that carry electricity across the five regions and the State networks. Development of the State networks has not been uniform and capacity in such networks needs to be augmented. These networks will play an important role in intra-State power flows and also in the regional and national flows. The tariff policy, in so far as transmission is concerned, seeks to achieve the following objectives:

1. Ensuring optimal development of the transmission network ahead of generation with adequate margin for reliability and to promote efficient utilization of generation and transmission assets in the country;

2. Attracting the required investments in the transmission sector and providing adequate returns.

7.1 Transmission pricing

(1) A suitable transmission tariff framework for all inter-State transmission, including transmission of electricity across the territory of an intervening State as well as conveyance within the State which is incidental to such inter-state transmission, has been implemented with the objective of promoting effective utilization of all assets across the country and accelerated development of new transmission capacities that are required.

(2) The National Electricity Policy mandates that the national tariff framework implemented should be sensitive to distance, direction and related to quantum of power flow. This has been developed by CERC taking into consideration the advice of the CEA. Sharing of transmission charges shall be done in accordance with such tariff mechanism as amended from time to time.

(3) Transmission charges, under this framework, can be determined on MW per circuit kilometer basis, zonal postage stamp basis, or some other pragmatic variant, the ultimate objective being to get the transmission system users to share the total transmission cost in proportion to their respective utilization of the transmission system. The 'utilization' factor should duly capture the advantage of reliability reaped by all. The spread between minimum and maximum transmission rates should be such as not to inhibit planned development/augmentation of the transmission system but should discourage non-optimal transmission investment.

(4) In view of the approach laid down by the NEP, prior agreement with the beneficiaries would not be a pre-condition for network expansion. CTU/STU should undertake network expansion after identifying the requirements in consonance with the National Electricity Plan and in consultation with stakeholders and taking up the execution after due regulatory approvals. For smooth operation of the grid, efforts should be made to develop transmission system ahead of generation.

(5) The Central Commission has specified norms for capital and operating costs and laid down Standards of Performance for inter-State transmission licensees. Tariff determination and adherence to Standards of Performance shall be carried out in accordance with these norms, as amended from time to time.

(6) Investment by transmission developer including CTU/STUs would be invited through competitive bids in accordance with the guidelines issued by the Central Government from time to time.

(7) While all future inter-state transmission projects shall, ordinarily, be developed through competitive bidding process, the Central Government may give exemption from competitive bidding for (a) specific category of projects of strategic importance, technical upgradation etc. or (b) works required to be done to cater to an urgent situation on a case to case basis.

(8) CERC has specified Regulation on framework for the inter-State transmission. A similar approach should be implemented by SERCs for the intra-State transmission, duly considering factors like voltage, distance, direction and quantum of flow.

(9) Metering compatible with the requirements of the proposed transmission tariff framework should be established on priority basis. The metering should be compatible with ABT requirements, which would also facilitate implementation of Time of Day (ToD) tariffs.

7.2 Transmission loss allocation

(1) Transactions are being charged on the basis of average losses arrived at after appropriately considering the distance and directional sensitivity, as applicable to relevant voltage level, on the transmission system. Based on the methodology laid down by the CERC in this regard for inter-state transmission, the SERCs may evolve a similar framework for intra-state transmission.

The loss framework should ensure that the loss compensation is reasonable and linked to applicable technical loss benchmarks. The benchmarks may be determined by the Appropriate Commission after considering advice of CEA.

(2) It would be desirable to move to a system of loss compensation based on incremental losses as present deficiencies in transmission capacities are overcome through network expansion. The Appropriate Commission may require necessary studies to be conducted to establish the allowable level of system loss for the network configuration and the capital expenditure required to augment the transmission system and reduce system losses. Since additional flows above a level of line loading lead to significantly higher losses, CTU/STU should ensure upgrading of transmission systems to avoid the situations of overloading. The Appropriate Commission should permit adequate capital investments in new assets for upgrading the transmission system.

7.3 Other issues in transmission

(1) Financial incentives and disincentives should be implemented for the CTU and the STU around the Key Performance Indicators (KPI) for these organisations. Such KPIs would include efficient network construction, system availability and loss reduction.

(2) All available information should be shared with intending users by the CTU/STU and the load dispatch centers, particularly information on available transmission capacity and load flow studies.

(3) In extraordinary circumstances including threat to security to the State, public order or natural calamity, if the Central Government allocates power out of the unallocated share of the Central Generating Stations or otherwise, such allocation of power will have priority over short-term, medium-term and long-term access in this order.

7.4 Ancillary Services

(1) The Central Commission may introduce the norms and framework for ancillary services, including the method of sharing the charges, necessary to support the power system or grid operation for maintaining power quality, reliability and security of the grid.

(2) The Central Commission shall also consult the Central Electricity Authority, SERCs/JERCs, CTUs/STUs and NLDC/RLDC/SLDCs while specifying the norms for ancillary services.

(3) The State Commission shall also adopt the norms and framework for ancillary services as specified by the Central Commission.

8.0 DISTRIBUTION

Supply of reliable and quality power of specified standards in an efficient manner and at reasonable rates is one of the main objectives of the National Electricity Policy. The State Commission should determine and notify the standards of performance of licensees with respect to quality, continuity and reliability of service for all consumers. It is desirable that the Forum of Regulators determines the basic framework on service standards. A suitable transition framework could be provided for the licensees to reach the desired levels of service as quickly as possible. Penalties may be imposed on licensees in accordance with section 57 of the Act for failure to meet the standards.

Making the distribution segment of the industry efficient and solvent is the key to success of power sector reforms and provision of services of specified standards. Therefore, the Regulatory Commissions need to strike the right balance between the requirements of the commercial viability of distribution licensees and consumer interests. Loss making utilities need to be transformed into profitable ventures which can raise necessary resources from the capital markets to provide services of international standards to enable India to achieve its full growth potential. Efficiency in operations should be encouraged. Gains of efficient operations with reference to normative parameters should be appropriately shared between consumers and licensees.

Appropriate Commission should mandate Distribution Licensee to undertake load forecasting every year and to publish and submit to the Commission their short, medium and long-term power procurement plans to meet the load.

The State Regulatory Commission will devise a specific trajectory so that 24 hours supply of adequate and uninterrupted power can be ensured to all categories of consumers by 2021-22 or earlier depending upon the prevailing situation in the State.

Micro-grids supplying renewable energy are being set up in such areas where the grid has not reached or where adequate power is not available in the grid. Investment involved in setting up of such microgrids is substantial. One of the risks of investment is grid reaching the area before the completion of the project life and thereby making power from micro grids costly and unviable. In order to mitigate such risk and incentivize investment in microgrids, there is a need to put in place an appropriate regulatory framework to mandate compulsory purchase of power into the grid from such micro grids at a tariff to be determined under section 62 of the Act considering depreciated cost of investments and keeping in view industry benchmark and with a cap if necessary, as approved by the Appropriate Commission. The Appropriate Commission shall notify necessary regulations in this regard within six months.

8.1 Implementation of Multi-Year Tariff (MYT) framework

1) MYT framework would minimise risks for utilities and consumers, promote efficiency and appropriate reduction of system losses and attract investments. It would also bring greater predictability to consumer tariffs on the whole by restricting tariff adjustments to known indicators of power purchase prices and inflation indices. The framework should be applied for both public and private utilities.

2) The State Commissions should introduce mechanisms for sharing of excess profits and losses with the consumers as part of the overall MYT framework. In the first control period the incentives for the utilities may be asymmetric with the percentage of the excess profits being retained by the utility set at higher levels than the percentage of losses to be borne by the utility. This is necessary to accelerate performance improvement and reduction in losses and will be in the long term interest of consumers by way of lower tariffs.

3) As indicated in para 5.11(h), the MYT framework implemented in the initial control period should have adequate flexibility to accommodate changes in the baselines consequent to metering being completed.

4) Licensees may have the flexibility of charging lower tariffs than approved by the State Commission if competitive conditions require so without having a claim on additional revenue requirement on this account in accordance with Section 62 of the Act.

5) At the beginning of the control period when the "actual" costs form the basis for future projections, there may be a large uncovered gap between required tariffs and the tariffs that are presently applicable. This gap should be fully met through tariff charges and through alternative means that could inter-alia include financial restructuring and transition financing.

6) Incumbent licensees should have the option of filing for separate revenue requirements and tariffs for an area where the State Commission has issued multiple distribution licenses, pursuant to the provisions of Section 14 of the Act read with para 5.4.7 of the National Electricity Policy.

7) Appropriate Commissions should initiate tariff determination and regulatory scrutiny on a suo moto basis in case the licensee does not initiate filings in time. It is desirable that requisite tariff changes come into effect from the date of commencement of each financial year and any gap on account of delay in filing should be on account of licensee.

8.2 Framework for revenue requirements and costs

8.2.1 The following aspects would need to be considered in determining tariffs:

(1) All power purchase costs need to be considered legitimate unless it is established that the merit order principle has been violated or power has been purchased at unreasonable rates. The reduction of Aggregate Technical & Commercial (AT&C) losses needs to be brought about but not by denying revenues required for power purchase for 24 hours supply and necessary and reasonable O&M and investment for system upgradation. Consumers, particularly those who are ready to pay a tariff which reflects efficient costs have the right to get uninterrupted 24 hours supply of quality power. Actual level of retail sales should be grossed up by normative level of T&D losses as indicated in MYT trajectory for allowing power purchase cost subject to justifiable power purchase mix variation (for example, more energy may be purchased from thermal generation in the event of poor rainfall) and fuel surcharge adjustment as per regulations of the SERC.

(2) AT&C loss reduction should be incentivised by linking returns in a MYT framework to an achievable trajectory. Greater transparency and nurturing of consumer groups would be efficacious. For government owned utilities improving governance to achieve AT&C loss reduction is a more difficult and complex challenge for the SERCs. Prescription of a MYT dispensation with different levels of consumer tariffs in succeeding years linked to different AT&C loss levels aimed at covering full costs could generate the requisite political will for effective action to reduce theft as the alternative would be stiffer tariff increases. Third party verification of energy audit results for different areas/localities could be used to impose area/locality specific surcharge for greater AT&C loss levels and this in turn could generate local consensus for effective action for better governance. The SERCs may also encourage suitable local area based incentive and disincentive scheme for the staff of the utilities linked to reduction in losses.

The SERC shall undertake independent assessment of baseline data for various parameters for every distribution circle of the licensee.

The SERC shall also institute a system of independent scrutiny of financial and technical data submitted by the licensees.

As the metering is completed up to appropriate level in the distribution network, it should be possible to segregate technical losses. Accordingly technical loss reduction under MYT framework should then be treated as distinct from commercial loss reduction which requires a different approach.

(3) Section 65 of the Act provides that no direction of the State Government regarding grant of subsidy to consumers in the tariff determined by the State Commission shall be operative if the payment on account of subsidy as decided by the State Commission is not made to the utilities and the tariff fixed by the State Commission shall be applicable from the date of issue of orders by the Commission in this regard. The State Commissions should ensure compliance of this provision of law to ensure financial viability of the utilities. To ensure implementation of the provision of the law, the State Commission should determine the tariff initially, without considering the subsidy commitment by the State Government and subsidised tariff shall be arrived at thereafter considering the subsidy by the State Government for the respective categories of consumers.

(4) Working capital should be allowed duly recognising the transition issues faced by the utilities such as progressive improvement in recovery of bills. Bad debts should be recognised as per policies developed and subject to the approval of the State Commission.

(5) Pass through of past losses or profits should be allowed to the extent caused by uncontrollable factors. During the transition period controllable factors should be to the account of utilities and consumers in proportions determined under the MYT framework.

(6) The contingency reserves should be drawn upon with prior approval of the State Commission only in the event of contingency conditions specified through regulations by the State Commission. The existing practice of providing for development reserves and tariff and dividend control reserves should be discontinued.

(7) Section 61 of the Act mandates that the Appropriate Commission, while determining tariff, shall not only ensure safeguarding of consumer's interests but also the recovery of the cost of electricity in a reasonable manner. Section 62 of the Act further provides for periodic tariff adjustment during a year to take care of the variation in fuel price, as may be specified.

Therefore, the Appropriate Commission shall specify an appropriate price adjustment formula for recovery of the costs, arising on account of the variation in the price of fuel, power purchase etc. on monthly/quarterly basis for recovery of all prudent costs of the generating company and the licensee.

8.2.2 The facility of a regulatory asset has been adopted by some Regulatory Commissions in the past to limit tariff impact in a particular year. This should be done only as a very rare exception in case of natural calamity or force majeure conditions and subject to the following:

a. Under business as usual conditions, no creation of Regulatory Assets shall be allowed;

b. Recovery of outstanding Regulatory Assets along with carrying cost of Regulatory Assets should be time bound and within a period not exceeding seven years. The State Commission may specify the trajectory for the same.

8.3 Tariff design: Linkage of tariffs to cost of service

It has been widely recognised that rational and economic pricing of electricity can be one of the major tools for energy conservation and sustainable use of ground water resources.

In terms of the Section 61(g) of the Act, the Appropriate Commission shall be guided by the objective that the tariff progressively reflects the efficient and prudent cost of supply of electricity.

The State Governments can give subsidy to the extent they consider appropriate as per the provisions of section 65 of the Act. Direct subsidy is a better way to support the poorer categories of consumers than the mechanism of cross-subsidizing the tariff across the board. Subsidies should be targeted effectively and in transparent manner. As a substitute of cross subsidies, the State Government has the option of raising resources through mechanism of electricity duty and giving direct subsidies to only needy consumers. This is a better way of targeting subsidies effectively.

Accordingly, the following principles would be adopted:

1. Consumers below poverty line who consume below a specified level, as prescribed in the National Electricity Policy may receive a special support through cross subsidy. Tariffs for such designated group of consumers will be at least 50% of the average cost of supply.

2. For achieving the objective that the tariff progressively reflects the cost of supply of electricity, the Appropriate Commission would notify a roadmap such that tariffs are brought within ±20% of the average cost of supply. The road map would also have intermediate milestones, based on the approach of a gradual

reduction in cross subsidy.

3. While fixing tariff for agricultural use, the imperatives of the need of using ground water resources in a sustainable manner would also need to be kept in mind in addition to the average cost of supply. Tariff for agricultural use may be set at different levels for different parts of a state depending on the condition of the ground water table to prevent excessive depletion of ground water. Section 62 (3) of the Act provides that geographical position of any area could be one of the criteria for tariff differentiation. A higher level of subsidy could be considered to support poorer farmers of the region where adverse ground water table condition requires larger quantity of electricity for irrigation purposes subject to suitable restrictions to ensure maintenance of ground water levels and sustainable ground water usage.

4. Extent of subsidy for different categories of consumers can be decided by the State Government keeping in view various relevant aspects. But provision of free electricity is not desirable as it encourages wasteful consumption of electricity. Besides in most cases, lowering of water table in turn creating avoidable problem of water shortage for irrigation and drinking water for later generations. It is also likely to lead to rapid rise in demand of electricity putting severe strain on the distribution network thus adversely affecting the quality of supply of power. Therefore, it is necessary that reasonable level of user charges is levied. The subsidized rates of electricity should be permitted only up to a pre-identified level of consumption beyond which tariffs reflecting efficient cost of service should be charged from consumers. If the State Government wants to reimburse even part of this cost of electricity to poor category of consumers the amount can be paid in cash or any other suitable way. Use of prepaid meters can also facilitate this transfer of subsidy to such consumers.

5. Metering of supply to agricultural/rural consumers can be achieved in a consumer friendly way and in effective manner by management of local distribution in rural areas through commercial arrangement with franchisees with involvement of panchayat institutions, user associations, cooperative societies etc. Use of smart meters may be encouraged as a cost effective option for metering in cases of "limited use consumers" who are eligible for subsidized electricity.

8.4 Definition of tariff components and their applicability

1. Two-part tariffs featuring separate fixed and variable charges and time differentiated tariff shall be introduced on priority for large consumers (say, consumers with demand exceeding 1 MW) within one year and subsequently for all consumers within a period of five years or such period as may be specified. This would also help in flattening the peak and implementing various energy conservation measures.

2. The National Electricity Policy states that existing PPAs with the generating companies would need to be suitably assigned to the successor distribution companies. The State Governments may make such assignments taking care of different load profiles of the distribution companies so that retail tariffs are uniform in the State for different categories of consumers. Thereafter, the retail tariffs would reflect the relative efficiency of distribution companies in procuring power at competitive costs, controlling theft and reducing other distribution losses.

3. The Appropriate Commission may provide incentives to encourage metering and billing based on metered tariffs, particularly for consumer categories that are presently unmetered to a large extent. The metered tariffs and the incentives should be given wide publicity. Smart meters have the advantages of remote metering and billing, implementation of peak and off-peak tariff and demand side management through demand response. These would become essential in future for load-generation balancing due to increasing penetration of intermittent type of generation like wind and solar power.

Appropriate Commission shall, therefore, mandate smart meters for:

(a) Consumers with monthly consumption of 500 units and more at the earliest but not later than 31.12.2017;

(b) Consumers with monthly consumption above 200 units by 31.12.2019.

Further, two way smart meters shall be provided to all prosumers, who also sell back electricity to the grid as and when they require.

In order to enable energy audit in the distribution system, all distribution companies shall ensure smart meters in their electricity system throughout the chain from transformers at 132kV level right down to distribution transformer level at 11kV and further down to each consumer. Further, in order to reduce theft of power, the distribution companies should have enabling feature like distribution SCADA with distribution management system and energy audit functions. SERCs shall mandate these to be in place within two years.

4. The SERCs may also suitably regulate connection charges to be recovered by the distribution licensee to ensure that second distribution licensee does not resort to cherry picking by demanding unreasonable connection charges. The connection charges of the second licensee should not be more than those payable to the incumbent licensee.

8.5 Cross-subsidy surcharge and additional surcharge for open access

8.5.1 National Electricity Policy lays down that the amount of cross-subsidy surcharge and the additional surcharge to be levied from consumers who are permitted open access should not be so onerous that it eliminates competition which is intended to be fostered in generation and supply of power directly to the consumers through open access.

A consumer who is permitted open access will have to make payment to the generator, the transmission licensee whose transmission systems are used, distribution utility for the wheeling charges and, in addition, the cross subsidy surcharge. The computation of cross subsidy surcharge, therefore, needs to be done in a manner that while it compensates the distribution licensee, it does not constrain introduction of competition through open access. A consumer would avail of open access only if the payment of all the charges leads to a benefit to him. While the interest of distribution licensee needs to be protected it would be essential that this provision of the Act, which requires the open access to be introduced in a time-bound manner, is used to bring about competition in the larger interest of consumers.

SERCs may calculate the cost of supply of electricity by the distribution licensee to consumers of the applicable class as aggregate of (a) per unit weighted average cost of power purchase including meeting the Renewable Purchase Obligation; (b) transmission and distribution losses applicable to the relevant voltage level and commercial losses allowed by the SERC; (c) transmission, distribution and wheeling charges up to the relevant voltage level; and (d) per unit cost of carrying regulatory assets, if applicable.

Surcharge formula:

$S = T - [C/(1-L/100) + D + R]$

Where

S is the surcharge

T is the tariff payable by the relevant category of consumers, including reflecting the Renewable Purchase Obligation

C is the per unit weighted average cost of power purchase by the Licensee, including meeting the Renewable Purchase Obligation

D is the aggregate of transmission, distribution and wheeling charge applicable to the relevant voltage level

L is the aggregate of transmission, distribution and commercial losses, expressed as a percentage applicable to the relevant voltage level

R is the per unit cost of carrying regulatory assets.

Above formula may not work for all distribution licensees, particularly for those having power deficit, the State Regulatory Commissions, while keeping the overall objectives of the Electricity Act in view, may review and vary the same taking into consideration the different circumstances prevailing in the area of distribution licensee.

Provided that the surcharge shall not exceed 20% of the tariff applicable to the category of the consumers seeking open access.

Provided further that the Appropriate Commission, in consultation with the Appropriate Government, shall exempt levy of cross subsidy charge on the Railways, as defined in Indian Railways Act, 1989 being a deemed licensee, on electricity purchased for its own consumption.

8.5.2 No surcharge would be required to be paid in terms of sub-section (2) of Section 42 of the Act on the electricity being sold by the generating companies with consent of the competent government under Section 43(A)(1)(c) of the Electricity Act, 1948 (now repealed) and on the electricity being supplied by the distribution licensee on the authorisation by the State Government under Section 27 of the Indian Electricity Act, 1910 (now repealed), till the current validity of such consent or authorisation.

8.5.3 The surcharge may be collected either by the distribution licensee, the transmission licensee, the STU or the CTU, depending on whose facilities are used by the consumer for availing electricity supplies. In all cases the amounts collected from a particular consumer should be given to the distribution licensee in whose area the

consumer is located. In case of two licensees supplying in the same area, the licensee from whom the consumer was availing supply shall be paid the amounts collected.

8.5.4 The additional surcharge for obligation to supply as per section 42(4) of the Act should become applicable only if it is conclusively demonstrated that the obligation of a licensee, in terms of existing power purchase commitments, has been and continues to be stranded, or there is an unavoidable obligation and incidence to bear fixed costs consequent to such a contract. The fixed costs related to network assets would be recovered through wheeling charges.

8.5.5 Wheeling charges should be determined on the basis of same principles as laid down for intra-state transmission charges and in addition would include average loss compensation of the relevant voltage level.

8.5.6 In case of outages of generator supplying to a consumer on open access, standby arrangements should be provided by the licensee on the payment of tariff for temporary connection to that consumer category as specified by the Appropriate Commission. Provided that such charges shall not be more than 125 percent of the normal tariff of that category.

9.0 Trading Margin

The Act provides that the Appropriate Commission may fix the trading margin, if considered necessary. Though there is a need to promote trading in electricity for making the markets competitive, the Appropriate Commission should monitor the trading transactions continuously and ensure that the electricity traders do not indulge in profiteering in situation of power shortages. Fixing of trading margin should be resorted to for achieving this objective.

JYOTI ARORA, Jt. Secy

APPENDIX

SALIENT FEATURES OF THE APPROVED R&R PROVISIONS FOR HYDRO POWER PROJECTS

1. SCOPE OF COVERAGE

The following provisions shall be applicable even if one family is affected by the development of a Hydro Power Project.

2. DEFINITION OF PROJECT AFFECTED FAMILIES (PAFs)

A Project Affected Family (PAF) shall mean a family whose place of residence or other property or source of livelihood has been affected by the development of a hydro project and who have been residing in the affected zone for two years preceding the date of declaration of notification under Section-11 of the LARR Act. The affected family would also include squatters.

3. DEFINITION OF AGRICULTURAL LABOURER

A person normally residing in the affected zone for two years preceding the date of declaration of the affected zone and earns his/her livelihood principally by manual labour on agricultural land.

4. DEFINITION OF NON-AGRICULTURAL LABOURER

A person normally residing in the affected zone for two years preceding the date of declaration of the affected zone and who does not hold any land in the affected zone but earns his/her livelihood principally by manual labour or as rural artisan or a service provider to the community.

5. DEFINITION OF SQUATTERS

A family occupying Government land in the affected zone without a legal title, at least for 5 years prior to the date of declaration of notification under Section-11 of LARR Act.

6. REHABILITATION/RESETTLEMENT COLONIES

This policy aims to provide built up houses to Project Affected Families (PAFs) who get displaced due to the development of hydro projects to the extent possible. However, wherever opted for, liberal House Construction Allowance would be given in lieu.

7. TRAINING AND CAPACITY BUILDING

This policy also emphasizes the need to provide training to the Project Affected Families as well as to the local population for a sustained livelihood. Special training programmes from ITIs aimed at providing the required skills

to the local population would be undertaken by the Project developers at least six months prior to commencement of construction. This is expected to boost the employability of the PAFs and other people residing in the vicinity of the project.

8. ADDITIONAL PROVISIONS

This policy envisages additional provisions for Project Affected Families such as:

- scholarships for meritorious students,
- extension of medical facilities,
- marriage grants,
- subsistence grants,
- support for income generation schemes for cooperative and self-help groups,
- seed, pesticides and fertilizer subsidies, and irrigation support.

Besides the additional provisions mentioned above, the normally applicable provisions of the National Policy on Rehabilitation and resettlement, currently in force, would be applicable.

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Before the
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CASE No. 324 of 2019

In the matter of
Case of Brihanmumbai Electric Supply and Transport Undertaking for Truing up of Aggregate Revenue Requirement (ARR) for FY 2017-18 & FY 2018-19, Provisional Truing up of ARR for FY 2019-20 and ARR & Tariff for the 4th Control Period from FY 2020-21 to FY 2024-25

Coram
Shri I. M. Bohari, Member
Shri Mukesh Khullar, Member

Dated: 30 March, 2020

ORDER

In accordance with Regulation 5 of the Maharashtra Electricity Regulatory Commission (Multi-Year Tariff) Regulations ('MYT Regulations'), 2019, Brihanmumbai Electric Supply and Transport Undertaking (BEST) filed its Multi Year Tariff Petition for Truing up for FY 2017-18 & FY 2018-19, Provisional Truing up for FY 2019-20 and Aggregate Revenue Requirement (ARR) & Tariff for the 4th Control Period from FY 2020-21 to FY 2024-25. The original Petition was filed on 29 November, 2019 and the revised Petition was filed on 7 January, 2020.

The Petition has been submitted in accordance with the MERC (Multi Year Tariff) Regulations ("MYT Regulations"), 2015 for Truing-up for FY 2017-18, Truing-up for FY 2018-19 and Provisional Truing-up for FY 2019-20 and in accordance with MYT Regulations, 2019 for ARR and Tariff for the 4th Control Period from FY 2020-21 to FY 2024-25.

The Commission, in exercise of the powers vested in it under Sections 61 and 62 of the Electricity Act (EA), 2003 and all other powers enabling it in this behalf, and after taking into consideration the submissions made by BEST, upon Public consultation process, and upon considering all other relevant material, has approved the Truing-up of ARR for FY 2017-18 and FY 2018-19, Provisional Truing-up of ARR for FY 2019-20 and ARR & Tariff for the Fourth Control Period from 2020-21 to 2024-25.

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Table 12: Summary of Power Purchase by BEST from TPC-G for FY 2017-18, as approved by the Commission

Particulars	MYT Petition			Approved in this Order		
	Quantum (MU)	Total Cost (Rs. Crore)	Rate (Rs./kWh)	Quantum (MU)	Total Cost (Rs. Crore)	Rate (Rs./kWh)
Unit -5	1,548.87	790.20	5.10	1,548.87	790.20	5.10
Unit -6	(10.27)	79.67		(10.27)	79.67	
Unit -7	672.61	201.70	3.00	672.61	201.70	3.00
Unit -8	651.20	339.56	5.21	651.20	339.56	5.21
Hydro	763.01	166.13	2.18	763.01	166.13	2.18
Thermal Incentive	-	0.17	-	-	0.17	-
Total	**3,625.43**	**1,577.42**	**4.35**	**3,625.43**	**1,577.42**	**4.35**

Table 13: Summary of Power Purchase by BEST from TPC-G for FY 2018-19, as approved by the Commission

Particulars	MYT Petition			Approved in this Order		
	Quantum (MU)	Total Cost (Rs. Crore)	Rate (Rs./kWh)	Quantum (MU)	Total Cost (Rs. Crore)	Rate (Rs./kWh)
Unit -5	1,498.41	815.67	5.44	1,498.41	815.67	5.44
Unit -6	-	-	-	-	-	-
Unit -7	701.74	231.76	3.30	701.74	231.76	3.30
Unit -8	754.03	408.67	5.42	754.03	408.67	5.42
Hydro	791.49	166.11	2.10	791.49	166.11	2.10
Thermal Incentive	-	2.22	-	-	2.22	-
Total	**3,745.67**	**1,624.43**	**4.34**	**3,745.67**	**1,624.43**	**4.34**

4.4.2.5 **Accordingly, the Commission approves Rs. 1,577.42 Crore and Rs. 1,624.43 Crore as the cost of power purchased from TPC-G for FY 2017-18 and FY 2018-19, respectively.**

4.4.2.6 **The Commission also approves TPC-G past revenue Gap/ (Surplus) payment of Rs. 95.15 in FY 2018-19 as submitted by BEST in line with MTR Order in Case No. 203 of 2017.**

4.4.3 **Procurement from Renewable Energy (RE) Sources:**

BEST's Submission

4.4.3.1 BEST has submitted the RE purchase details for FY 2017-18 and FY 2018-19 as shown in the Table below.

Table 14: RE purchase details for FY 2017-18 and FY 2018-19, as submitted by BEST

Particulars	MTR Order			MYT Petition		
	Quantum (MU)	Total Cost (Rs. Crore)	Rate (Rs./kWh)	Quantum (MU)	Total Cost (Rs. Crore)	Rate (Rs./ kWh)
FY 2017-18						
Welspun Energy Maharashtra	31.50	26.96	8.56	33.06	27.85	8.43
REC Procurement-Solar	-	6.83	-	-	-	
REC Procurement-Non-Solar	-	57.63	-	-	58.19	-
Short Term Non Solar Purchase	190.61	123.16	6.46	190.61	123.25	6.47
Short Term Mini Micro Hydro Purchase	0.42	0.24	5.74	0.42	0.24	5.78
RPS Rebate	-	(2.57)	-	-	(4.09)	-
Total	**222.53**	**212.25**	**9.54**	**224.09**	**205.44**	**9.17**
FY 2018-19						
Welspun Energy Maharashtra	31.50	26.96	-	32.40	26.96	8.32
REC Procurement-Solar	110.03	38.79	3.53	-	22.04	-
REC Procurement-Non-Solar	564.95	192.72	3.41	-	64.23	-
REC GST				-	(0.63)	-
Short Term Non Solar Purchase	-	-	-	68.22	48.11	7.05
RPS Rebate				-	(0.74)	-
Total	**706.48**	**258.47**	**3.66**	**100.62**	**159.97**	**15.90**

Note: Average power purchase rate is higher on account of inclusion of REC purchase cost.

4.4.3.2 BEST has provided the detailed break-up of cost of non-solar renewable energy procured from bagasse, biogas, biomass, small hydro and mini hydro after adjusting the rebate as given in the Table below.

Table 15: Non-Solar RE purchase including additional charges for FY 2017-18 and FY 2018-19, as submitted by BEST

Source	FY 2017-18		FY 2018-19	
	Units (MU)	Amount (Rs. Crore)	Units (MU)	Amount (Rs. Crore)
Bagasse	2.37	1.38	8.24	4.97
Biomass	189.32	121.75	60.47	39.88
Small hydro	0..36	0.18		
Mini hydro	0.46	0.24		
Prior payment FY 2017 and 2018				2.42
Total	**192.51**	**123.50**	**68.72**	**48.11**

Commission's Analysis and Ruling

4.4.3.3 BEST, on the directions of the Commission, has submitted the source-wise RE purchase for FY 2017-18 and FY 2018-19, separately indicating the quantum of purchase, landed cost, wheeling loss, wheeling charges and preferential Tariff approved by the Commission. The same has formed the basis for the approval of the power purchase cost from RE Sources for FY 2017-18 and FY 2018-19 as elaborated in the subsequent paragraphs.

4.4.3.4 **Non-Solar RE Purchase:** The total landed price at InSTS periphery for all non-solar RE purchases as submitted by BEST includes the Wheeling charge, short term open access charge and scheduling charge to wheel power to BEST's license area from non-solar RE projects connected to the MSEDCL network in Maharashtra. The detail of the non-solar RE power purchase approved by the Commission is given in the Table below:

Table 16: Details of Non-Solar RE purchases for FY 2017-18, as approved by the Commission

Name of RE Generator	Type of RE Sources	Energy at Delivery Point (Generator Terminal) (MU)	Wheeling Loss (MU)	Energy at InSTS (MU)	RE Tariff (Rs./kwh)	Energy Charges (Rs. Crore)	Short Term Open Accesses Charges (Rs. Crore)	Total Charges (Rs. Crore)	RE Unit Rate (Rs./kwh)
		a	b	c=a-b	d	e=a x d	f	g=e+f	h=g/a
Greta Energy Ltd	Biomass	106.74	-	106.74	6.53	69.70	0.09	69.79	6.54
A.A. Energy	Biomass	61.42	-	61.42	6.41	39.37	0.09	39.46	6.42
Manas Agro Ind & Infra Ltd	Biomass Co-gen	21.16	1.27	19.89	6.29	13.31	0.23	13.54	6.40
Lokmangal Agro Ltd	Bagasee	2.37	0.14	2.23	6.24	1.48	0.06	1.54	6.49
Shyadri Renewable Energy Pvt Ltd.	Small Hydro	0.36	0.03	0.33	5.06	0.18	-	0.18	5.06
Krishna Valley Power Pvt Ltd.	Mini Hydro	0.46	0.42	0.42	5.26	0.24	-	0.24	5.26
Total		**192.51**	**1.86**	**191.02**		**124.28**	**0.47**	**124.76**	**6.53**

Table 17: Details of Non-Solar RE purchases for FY 2018-19, as approved by the Commission

Name of RE Generator	Type of RE Sources	Energy at Delivery Point (Generator Terminal) (MU)	Wheeling Loss (MU)	Energy at InSTS (MU)	RE Tariff (Rs./kwh)	Energy Charges (Rs. Crore)	Short Term Open Accesses Charges (Rs. Crore)	Total Charges (Rs. Crore)	RE Unit Rate (Rs./kwh)
		a	b	c=a-b	d	e=a x d	f	g=e+f	h=g/a
Greta Energy Ltd	Biomass	60.47	-	60.47	6.66	40.25	0.09	40.34	6.67
Lokmangal Agro Ltd	Bagasee	8.24	0.49	7.75	6.33	5.21	0.13	5.35	6.49
Prior payment of FY 2016-17 and FY 2017-18								2.42	
Total		**68.72**	**0.49**	**68.22**		**45.47**	**0.22**	**48.11**	**7.05**

4.4.3.5 As submitted by BEST, payment of Rs. 123.50 Crore was made in FY 2017-18 for non-solar RE Power purchase of Rs. 124.76 Crore and remaining payment was made in FY 2018-19.

4.4.3.6 BEST has purchased the above non-solar RE Power at approved preferential Tariffs and the same has been verified by the Commission. However, the Commission notes that BEST has been purchasing non-Solar RE Power only through short term contracts at preferential tariffs. This leads to situations where the quantum of power envisaged as available at the planning stage is not actually available when required. This is evident from the fact that while the availability of non-Solar RE was 192.51 MUs in FY 2017-18, only 68.72 MUs have been purchased by BEST in FY 2018-19. Further, there is also variation in power quantum available from the same source as well in these two years. These instances lead to requirement of purchasing RECs to meet the RPO obligations. Purchase of REC has to be accompanied by purchase of actual power from bilateral sources which may lead to the effective cost of power purchase being higher as compared to that through purchase of RE power. In view of substantial reduction in RE rate, purchase of RECs should be done only in situations wherein the RE power is not available even after reasonable efforts put in by the utility. In the present case, BEST has been purchasing non-Solar RE power mainly through short term contracts which does not provide any certainty regarding availability of RE power. In this regard, BEST should explore options to contract non-solar power on a long term basis adopting the competitive bidding route going forward and approach the Commission in a timely manner to seek necessary approvals.

4.4.3.7 **Solar RE Purchase:** BEST has submitted that it meets the solar RE purchase obligation through a long term power purchase agreement entered with M/s. Welspun Energy Maharashtra for FY 2017-18 and FY 2018-19. As per agreement,

BEST procures entire solar power from 20 MW solar plant of M/s Welspun Energy Maharashtra. During FY 2017-18, BEST has purchased 31.50 MU at rate of Rs. 8.56/kWh as approved in the PPA. Additional power of 1.56 MU is purchased by BEST at rate of Rs. 1.00/kWh from Welspun Energy and also paid past period due of Rs. 0.74 Crore. Therefore, average cost of power purchase for 33.06 MU of solar power purchase from M/s Welspun Energy Maharashtra is Rs. 8.43/kWh. For FY 2018-19, BEST has purchased 32.40 MU at rate of Rs. 8.32/kWh as approved in the PPA.

4.4.3.8 **REC Purchase:** BEST has also submitted the documentary evidence regarding the number of RECs purchased and their cost. The Commission has verified the actual cost from the documentary evidence and considered the same as submitted by BEST. Further, the Commission notes that BEST has purchased RECs to meet the RPO obligation along with additional bilateral power which impacts the overall average power purchase cost. Further, as submitted by BEST, the Solar RECs were not available in FY 2017-18 and accordingly, entire requirement of RECs for meeting the RPO shortfall for FY 2017-18 and FY 2018-19 cumulatively was purchased in FY 2018-19. This has led to an increase in the average power purchase cost from RE sources to Rs. 16.03/kWh in FY 2018-19 from Rs. 9.35/kWh in FY 2017-18. Considering that the cost of RE power has shown a decreasing trend in the recent years, BEST should explore contracting RE power on medium / long term basis rather than purchasing RECs along with additional bilateral power which may lead to financial burden on the consumers. The Power procurement cannot be planned based on the certainty of REC procurement and the process should end with RE Power procurement and only in case of shortfall, REC purchase should be resorted to. The intent of the RPO is to encourage consumption of RE power and hence BEST should initiate timely steps to contract such RE Power for future consumption and seek necessary approvals from the Commission.

4.4.3.9 **Summary of Power Purchase from RE source (solar & non-solar):** Accordingly, the Commission approves the RE purchase from solar and non-solar sources for FY 2017-18 and FY 2018-19 as shown in Table below:

Billing Demand - LT Tariff categories:

Monthly Billing Demand will be the higher of the following:

a) 65% of the actual Maximum Demand recorded in the month during 0600 hours to 2200 hours;
b) 40% of the Contract Demand.

Note:

- *Only the Demand registered during the period 0600 to 2200 Hrs. will be considered for determination of the Billing Demand.*
- *In case of a change in Contract Demand, the above period will be reckoned from the month following the month in which the change in Contract Demand is effected.*

Billing Demand - HT Tariff categories:

Monthly Billing Demand will be the higher of the following:

a) Actual Maximum Demand recorded in the month during 0600 hours to 2200 hours;
b) 75% of the highest Billing Demand recorded during the preceding eleven months, subject to the limit of Contract Demand;
c) 55% of the Contract Demand*.

*For FY 2020-21: 55%, FY 2021-22: 60%, FY 2022-23: 65%, FY 2023-24: 70%, FY 2024-25: 75%

Note:

- *Only the Demand registered during the period 0600 to 2200 Hrs. will be considered for determination of the Billing Demand.*
- *In case of a change in Contract Demand, the above period will be reckoned from the month following the month in which the change of Contract Demand is effected.*

IN THE APPELLATE TRIBUNAL FOR ELECTRICITY AT NEW DELHI

(APPELLATE JURISDICTION)

J U D G M E N T
IN
APPEAL NO. 278 OF 2015 & IA NO.455 OF 2015,
APPEAL NO. 293 OF 2015 & IA NO. 476 OF 2015,
APPEAL NO. 23 OF 2016 & IA NO. 61 OF 2016,
APPEAL NO. 62 OF 2016 & IA NO. 155 OF 2016 AND
APPEAL NO. 24 OF 2016 & IA NO. 65 OF 2016
ON THE FILE OF THE APPELLATE TRIBUNAL FOR ELECTRICITY
NEW DELHI

Dated: **2nd January, 2019**

Present: **HON'BLE MR. JUSTICE N.K. PATIL, JUDICIAL MEMBER**
HON'BLE MR. S.D. DUBEY, TECHNICAL MEMBER

APPEAL NO. 278 OF 2015 &
IA NO.455 OF 2015
AND
APPEAL NO. 293 OF 2015 &
IA NO.476 OF 2015

IN THE MATTER OF

M/s JSW Steel Limited
Salem Works,
P.O. Potteneri, Mecheri T.K.
Salem District – 636 453 .... **Appellant(s)**

VERSUS

Tamil Nadu Electricity Regulatory Commission
TIDCO Office Building,
No. 19-A, Rukmani Lakshmipathy Salai,
Marshalls Road, Egmore,
Chennai – 600 008 .... **Respondent(s)**

APPEAL NO. 23 OF 2016 &
IA NO. 61 OF 2016
AND
APPEAL NO. 62 OF 2016 &
IA NO. 155 OF 2016

IN THE MATTER OF

Tamil Nadu Newsprint and Papers Limited
67, Mount Road, Guindy,
Chennai – 600 032 .... **Appellant(s)**

VERSUS

Tamil Nadu Electricity Regulatory Commission
TIDCO Office Building,
No. 19-A, Rukmani Lakshmipathy Salai,
Marshalls Road, Egmore,
Chennai – 600 008 .... **Respondent(s)**

APPEAL NO. 24 OF 2016 &
IA NO. 65 OF 2016

IN THE MATTER OF

TANFAC Industries Ltd.
Plot No. 14, SIPCOT Industrial Complex,
Cuddalore – 607 005 .... **Appellant(s)**

VERSUS

Tamil Nadu Electricity Regulatory Commission
TIDCO Office Building,
No. 19-A, Rukmani Lakshmipathy Salai,
Marshalls Road, Egmore,
Chennai – 600 008 .... **Respondent(s)**

Counsel for the Appellant(s) ... Shri Senthil Jagadeesan
Shri Rahul Balaji
Ms. Sonakshi Malhan

Counsel for the Respondent(s)... Shri S. Vallinayagam
Ms. Amali for Respondent

JUDGMENT

PER HON'BLE MR. JUSTICE N.K. PATIL, JUDICIAL MEMBER

1. M/s JSW Steel Limited, Tamil Nadu Newsprint and Papers Limited and TANFAC Industries Ltd (in short, ***'the Appellants'***), assailing the validity, legality and propriety of the Impugned Order dated 15.09.2014 in Petition No. 25 of 2012 and the order dated 16.09.2015 in Review Petition No. 1 of 2014 in respect of M/s JSW Steel Limited; Impugned Orders dated 13.11.2015 & 28.01.2016 in Petition Nos. M.P. No. 24 of 2012 & M.P. No. 36 of 2014 respectively in respect of Tamil Nadu Newsprint and Papers Limited; and Impugned Order dated 13.11.2015 in Petition No. M.P. No. 12 of 2013 in respect of TANFAC Industries Ltd, passed by Tamil Nadu Electricity Regulatory Commission, Chennai (in short, ***"Respondent Commission/TNERC)"***, have filed the instant Appeals, being Appeal Nos. 278 of 2015, 293 of 2015, 23 of 2016, 62 of 2016 and Appeal No. 24 of 2016 respectively, under Section 111 of the Electricity Act, 2013.

2. The Appellants have sought the following reliefs in the instant Appeals:

(I) Appeal No. 278 of 2015

(a) to set aside the order dated 15.09.2014 in M.P No.25 of 2012 and the order dated 16.09.2015 in RP 1 of 2014 as being a nullity since it has been passed contrary to the provisions of the Electricity Act, 2003 and the order of this Hon'ble Tribunal dated 26.04.2010 in Appeal No 57 of 2009, *Century Rayon Vs. MERC* and declare that the Appellant would be entitled to account for consumption of power generated from its 67.5 MW cogeneration plant towards Renewable Purchase Obligation under the TNERC (Renewable Energy Purchase Obligations), Regulations, 2010;

(b) to pass such further orders as this Hon'ble Tribunal may deem fit in the facts and circumstances of the case and thus render Justice.

(II) Appeal No. 293 of 2015

(a) to set aside the order dated 15.09.2014 in M.P No.25 of 2012 as being a nullity since it has been passed contrary to the provisions of the Electricity Act, 2003 and the order of this Hon'ble Tribunal dated 26.04.2010 Appeal No 57 of 2009, *Century Rayon Vs. MERC* and declare

that the Appellant would be entitled to account for consumption of power generated from its 67.5 MW cogeneration plant towards Renewable Purchase Obligation under the TNERC (Renewable Energy Purchase Obligations), Regulations, 2010;

(b) to pass such further orders as this Hon'ble Tribunal may deem fit in the facts and circumstances of the case and thus render Justice.

(III) Appeal No. 23 of 2016

(a) to set aside the order dated 13.11.2015 in M.P No.24 of 2012 as being a nullity since it has been passed contrary to the provisions of the Electricity Act, 2003 and the order of this Hon'ble Tribunal dated 26.04.2010 Appeal No 57 of 2009, *Century Rayon Vs. MERC* and declare that the Appellant would be entitled to account for consumption of power generated from its 61.5 MW cogeneration plant towards Renewable Purchase Obligation under the TNERC (Renewable Energy Purchase Obligations), Regulations, 2010;

(b) to pass such further orders as this Hon'ble Tribunal may deem fit in the facts and circumstances of the case and thus render Justice.

(IV) Appeal No. 62 of 2016

(a) to set aside the order dated 28.01.2016 in M.P No.36 of 2014 as being a nullity since it has been passed contrary to the provisions of the Electricity Act, 2003 and the order of this Hon'ble Tribunal dated 26.04.2010 Appeal No 57 of 2009, *Century Rayon Vs. MERC* and declare that the Appellant would be entitled to account for consumption of power generated from its 41 MW cogeneration plant towards Renewable Purchase Obligation under the TNERC (Renewable Energy Purchase Obligations), Regulations, 2010;

(b) to pass such further orders as this Hon'ble Tribunal may deem fit in the facts and circumstances of the case and thus render Justice.

(V) Appeal No. 24 of 2016

(a) to set aside the order dated 13.11.2015 in M.P No.12 of 2013 as being a nullity since it has been passed contrary

to the provisions of the Electricity Act, 2003 and the order of this Hon'ble Tribunal dated 26.04.2010 Appeal No 57 of 2009, *Century Rayon Vs. MERC* and declare that the Appellant would be entitled to account for consumption of power generated from its 2.3 MW cogeneration plant towards Renewable Purchase Obligation under the TNERC (Renewable Energy Purchase Obligations), Regulations, 2010;

(b) to pass such further orders as this Hon'ble Tribunal may deem fit in the facts and circumstances of the case and thus render Justice.

Brief facts leading to the instant appeals are as follows:

3. The Appellants herein are the captive co-generators. The Appellant in Appeal Nos. 278 of 2015 and 293 of 2015 (M/s JSW Steel Ltd.) is an integrated steel plant and uses coke as primary fuel source in its manufacturing process. The Appellant in Appeal Nos. 23 of 2016 and 62 of 2016 (M/s Tamil Nadu Newsprint & Papers Ltd.) is a manufacturer of newsprint and printing and writing paper using bagasse and the Appellant in Appeal No. 24 of 2016 (M/s TANFAC Industries Ltd.) manufactures inorganic fluorine based chemicals. The steam is produced from waste

heat recovery. The process of power generation is clean and it is not using fossil fuel.

4. All the Appellants herein, on various dates approached the Tamil Nadu Electricity Regulatory Commission (hereinafter referred to as TNERC/State Regulatory Commission) seeking a declaration that captive co-generation plant of the Appellants is not required to procure power from renewable sources of energy in order to meet their Renewable Purchase Obligation (RPO obligation). Hence, things thus stood.

5. TNERC/State Regulatory Commission erroneously held that the judgment of this Tribunal dated 26.04.2010 in *Century Rayon Vs. Maharashtra Electricity Regulatory Commission & Ors.* has been set aside by the Full Bench judgment of this Tribunal dated 02.12.2013 in *Lloyds Metal & Energy Ltd Vs. Maharashtra Electricity Regulatory Commission & Ors.* and, therefore, the Appellants would not be entitled to the relief as claimed by them. Not being satisfied with the impugned Order passed by the TNERC/State Regulatory Commission, the Appellants felt necessitated to present these Appeals for our consideration on the following issues for determination:

(A) Whether the appellants, co-generators are under a legal obligation to purchase power from renewable sources of energy in order to meet their Renewable Purchase Obligation?

(B) Whether the exemption granted to co-generation plants would depend on the type of fuel used by them?

(C) Whether the judgment of the Hon'ble Tribunal dated 26.04.2010 in *Century Rayon Vs. Maharashtra Electricity Regulatory Commission & Ors* has been set aside in entirety or only in part by the Full Bench Judgment of the Hon'ble Tribunal dated 02.12.2013 in *Lloyds Metal & Energy Ltd V. Maharashtra Electricity Regulatory Commission & ors.?*

(D) Whether the judgment of the Hon'ble Supreme Court in *Hindustan Zinc Ltd Vs. Rajasthan Electricity Regulatory Commission 2015) 12 SCC 611* would apply to the present appeals?

Shri Senthil Jagadeesan, learned counsel for the Appellants submitted the following submissions for our consideration:

6. The submissions of the learned counsel, Shri Senthil Jagadeesan, appearing for the Appellants in respect of Issue No. (A) that, the Act casts a duty on the State to promote generation of electricity from co-generation and renewable sources. As envisaged under Section 86(1)(e) of the Electricity Act, 2003 casts a specific obligation on the various State Electricity Regulatory Commissions constituted under the Electricity Act, 2003 to promote generation of electricity from cogeneration and renewable sources of energy. The said issue came up for consideration

before this Tribunal in *Century Rayon Vs Maharashtra Electricity Regulatory Commission & Ors.* and vide judgment dated 26.04.2010, this Tribunal held in paragraphs 26 & 28 and also relevant paragraphs 45(1) to (vi) and 46 of the said judgment wherein, he vehemently submitted that, by virtue of the said judgment captive consumers having cogenerating plants cannot be fastened with the obligation to procure electricity from renewable energy sources, as that would defeat the object of Section 86(1)(e) of the Electricity Act, 2003 and Cogenerating plants have to be treated at par with renewable energy generating plants for the purpose of RPO obligations. Further, counsel for the Appellant submitted that, the aforesaid judgment has been consistently followed and the position reiterated by this Tribunal in the following judgments:

i. *Emami Paper Mills Ltd. Vs. Odisha Electricity Regulatory Commission* in Appeal No. 54 of 2012 dated 30.01.2013

ii. *Vedanta Aluminium Ltd. Vs. Orissa Electricity Regulatory Commission* in Appeal No. 59 of 2012 dated 31.01.2013

iii. *Hindalco Industries Ltd. Vs. Uttar Pradesh Electricity Regulatory Commission & Ors.* in Appeal No. 125 of 2012 dated 10.04.2013

iv. *India Glycols Ltd. Vs. Uttarakhand Electricity Regulatory Commission & Ors.* in Appeal Nos. 112, 130 and 136 of 2014 dated 01.10.2014.

7. On Issue No. (B), the learned counsel for the Appellant submitted that, this Tribunal in *Century Rayon Case*, has held in paragraph 45 (VI) that " *The intention of the legislature is to clearly promote cogeneration in this industry generally* ***irrespective of the nature of the fuel used for such cogeneration*** *and not cogeneration or generation from renewable energy sources alone."* It was further held in paragraph 46 that, *"46..... While concluding, we must make it clear that the Appeal being generic in nature, our conclusions in this Appeal will be equally applicable to all co-generation based captive consumers who may be using* ***any*** *fuel..."* Further, he submitted that, the aforesaid findings have been followed by this Tribunal in *Emami Paper Mills case* and *Vedanta Aluminium case*, *Hindalco Industries case* and *India Glycols case*. It is pertinent to point out that none of these cases deal with cogeneration plants using renewable energy.

8. Regarding Issue No. (C), the counsel for the Appellant submitted that, the order of reference to the Full Bench dated 23.09.2013 *Lloyds Metal & Energy Ltd. Vs. Maharashtra Electricity Regulatory Commission & Ors.* order dated 23.09.2013 makes it clear that the limited question for reference to the Full Bench is as follows:

"Whether the distribution licensee could be fastened with the obligation to purchase a percentage of its consumption from co-generation irrespective of the fuel used under Section 86(1)(e) of the Act 2003.

9. Further, the Full Bench judgment of this Tribunal dated 02.12.2013 in the case of *Lloyds Metal & Energy Ltd. Vs. Maharashtra Electricity Regulatory Commission & Ors.* reiterates the only question referred to it. It is evident that only paragraph 45(II) of the judgment in *Century Rayon Case* has been set aside by the Full Bench judgment in *Lloyds Metal Case* and not the *Century Rayon* judgment in its entirety. The effect of this being that the distribution licensee could not be compelled to procure electricity from fossil fuel based co-generation against its renewable purchase obligation. However it has no effect on the finding in *Century Rayon Case* that a cogeneration based captive power plant cannot be fastened with Renewable Purchase Obligation irrespective of the nature of the fuel used for such cogeneration. This is further fortified by the fact that this Tribunal has in *India Glycols Case* dated 01.10.2014, much after the judgment of the Full Bench in *Lloyds Metal case*, continued to rely on *Century Rayon case* in so far as the question whether cogeneration based captive power plant can at all be fastened with renewable Purchase Obligation is concerned.

10. Regarding Issue No. (D), the learned counsel for the Appellant submitted that, the Hon'ble Supreme Court *in Hindustan Zinc Ltd. Vs. Rajasthan Electricity Regulatory Commission (2015) 12 SCC 611,* was concerned with the challenge to validity of the Rajasthan Electricity Regulatory Commission (Renewable Energy Obligation) Regulations, 2007 and the Rajasthan Electricity Regulatory Commission (Renewable Energy Certificate and Renewable Purchase Obligation Compliance Framework) Regulations, 2010, which imposed renewable energy obligation on captive gencos and open access consumers. The Hon'ble Supreme Court was not considering the case of co-generation plants, as is involved in the present appeals before this Tribunal. Therefore, the said judgment would have no application whatsoever to the present appeals, as the appellants are not challenging the Regulations and are merely claiming exemption there from by virtue of section 86(1)(e) of the Electricity Act, 2003.

11. It is, further, submitted that all the judgments relied on by the Appellants deal with similar Regulations and this Tribunal has consistently held that co-generation plants are exempt from these regulations by virtue of the special status granted to them by virtue of section 86(1)(e) of the

Act. In fact, this Tribunal has proceeded to hold that even where the Regulations provide for the imposition of the Renewable Purchase Obligation on co-generation, the Regulations need to be read down in view of the interpretation of Section 86(1)(e) of the Electricity Act, 2003. He submitted that, in view of the above submission, it is further fortified by the fact that the Rajasthan Electricity Regulatory Commission has itself vide its order dated 23.03.2017 taken note of the above judgment of the Hon'ble Supreme Court and still went on to hold that no RPO obligation shall be fastened on co-generators. The issues have been set out in para 26 of the judgment.

12. The learned counsel for the Appellant submitted that, if the judgment of the Hon'ble Supreme Court actually covered co-generators as well, it is highly unlikely that the Rajasthan Electricity Regulatory Commission, whose Regulations were under challenge before the Hon'ble Supreme Court, would itself grant relief to the co-generators before it relying on the judgments of this Tribunal in *Century Rayon* and the line of cases cited supra.

13. Lastly, the counsel for the Appellant submitted that, a co-generation facility irrespective of fuel is to be promoted in terms of section 86(1)(e) of

the Electricity Act, 2003; an entity which is to be promoted in terms of section 86(1)(e) of the Electricity Act, 2003 cannot be fastened with renewable purchase obligation under the same provision; and as long as the co-generation is in excess of the renewable purchase obligation, there can be no additional purchase obligation placed on such entities. Therefore, it is most respectfully submitted that, this Tribunal may please allow all the Appeals and hold that the Appellants herein, being co-generation plants are not under a legal obligation to purchase power from renewable sources of energy in order to meet their Renewable Purchase obligation and set aside the impugned order passed by the first Respondent/TNERC in the interest of justice and equity.

PER-CONTRA,
Shri S. Vallinayagam, learned counsel for the Respondent submitted the following submissions for our consideration:

14. The learned counsel, Shri S. Vallinayagam, appearing for the Respondent/TNERC, at the outset, submitted that, after due evaluation of the entire material available on record and case made out by the Appellants, the Respondent Commission/TNERC has rightly recorded the findings and in para 4.4 of the impugned order it would reveal that the findings of the Respondent Commission/TNERC truly reflect the intent and purport of the judgment of this Tribunal in Lloyds case in judgment dated

02.12.2013 in Appeal No. 53 of 2012 as held by this Tribunal in para 32 of the said judgment that fossil fuel based co-generating plants cannot be classified as Renewable Source of Energy. This Tribunal has made a slight distinction between fixing a percentage of Renewable Purchase Obligation and promotion of fossil fuel based co-generation in general by observing in para 39 of the said judgment that, "However, the State Commission can promote fossil fuel based co-generation by other measures such as facilitating sale of surplus electricity available at such co-generation plants in the interest of promoting energy efficiency and grid security.

15. The counsel appearing for the Respondent Commission/TNERC submitted that, in para 39 of the judgment of this Tribunal in Lloyd's case in Appeal No.53 of 2012 would make it expressly clear that this Tribunal distinguished its decision in Century Rayon so as to make a subtle distinction between co-generating plants and non-conventional sources in terms of promotion and hence absolute parity as sought for by the Appellants is not maintainable. As per the Order dated 02.12.2013 in the Lloyd's case in Appeal No.53 of 2012 was the last delivered one and, therefore, the impugned order which is in line with the said decision, does not call for interference. It is crystal clear from the said order that while the

non-conventional sources can be promoted by way of directing the Distribution Licensee or any other persons in the area of the Distribution Licensee to procure non-conventional sources in view of the express language in section 86 (1) (e) of the Electricity Act, 2003, the same cannot be strictly done in the case of co-generators who are entitled only for certain other promotional measures. This Tribunal chose to leave out the aspect of fixing a percentage for procurement of co-generation power from the purview of purchase obligation but added that such fossil fuel-based cogeneration can be promoted by other measures such as facilitating sale of surplus electricity and promotion of energy efficiency. The expression "other measures" occurring in para 39 of the Lloyds case amply proves that it denotes measures on promotion other than that of fixing of a percentage of procurement of non-conventional energy as envisaged under section 86 (1) (e) of the Electricity Act, 2003 and there cannot be a parity of treatment between fossil fuel based co-generation and generation from non-conventional sources in all aspects and Distribution Licensee cannot be compelled to procure fossil fuel based co-generation power. As a natural corollary, it also follows that a fossil fuel based co-generation plant cannot claim adjustment of its energy in the same manner as that of co-generation from non-conventional source and the fossil fuel based co-generating plants are to be treated like any other obligated entity for

fulfilling the regulation of the Commission though which they are entitled to be promoted by way of other measures such as facilitating sale of surplus power and promotion of energy efficiency. Therefore, the Respondent Commission/TNERC has rightly justified in passing the impugned order by assigning cogent reasons and interference by this Court does not call for.

16. Further, the learned counsel for the Respondent Commission/ TNERC submitted that, in the case of Hindustan Zinc Ltd. vs. RERC (Rajasthan Electricity Regulatory Commission) in C.A. No. 4417 of 2015 etc. the Hon'ble Apex Court in its order dated 13.05.2015 has settled the issue and, therefore, the issue has attained finality. The Hon'ble Apex Court has upheld the regulation of Rajasthan Electricity Regulatory Commission which extended the Renewable Purchase Obligation to Open Access Consumers and Captive Generators in addition to Distribution Licensee as intravires Articles 14, 19 (1) (g), 21 and 53 (A) (g) of the Constitution of India. The regulation of this Commission being *parimateria* to the regulation of RERC and not having excluded the consumers owning grid connected CGPs from the purview of Renewable Purchase Obligation, the judgment of the Apex Court in Rajasthan ERC's case will be squarely applicable to TNERC and in the result the Co-generating Plants cannot seek exemption from Renewable Purchase Obligation or

claim adjustment of energy generated out of their co-generating plants. Therefore, there is no legal infirmity in the impugned order and hence the same is within the ratio laid down by this Tribunal and the Hon'ble Apex Court. On this count also interference by this Tribunal does not call for.

17. The counsel for the Respondent Commission contended that, the view of the Commission that co-generation from sources other than renewable sources cannot be exempted from Renewable Purchase Obligation has further been recognized and found favour in the revised National Tariff Policy, 2016. The following provision of National Tariff Policy, 2016 is reproduced below for reference:-

> *"(I) Pursuant to provisions of section 86 (1) (e) of the Act, the Appropriate Commission shall fix a minimum percentage of the total consumption of electricity in the area of a distribution licensee for purchase of energy from renewable energy sources, taking into account availability of such resources and its impact on retail tariffs. Cost of purchase of renewable energy shall be taken into account while determining tariff by SERCs. Long term growth trajectory of Renewable Purchase Obligations (RPOs) will be prescribed by the Ministry of Power in consultation with MNRE.*
>
> *Provided that cogeneration from sources other than renewable sources shall not be excluded from the applicability of RPOs".*

The above provision of the National Electricity Policy, 2016 unequivocally states and unambiguously debars the exclusion of co-generation from sources other than renewable sources from the purview of RPO which means that fossil fuel co-generation is subject to RPO mechanism and exclusion from the purview of RPO cannot be claimed.

18. The submissions regarding claim of each appellant for non-conventional status in the set of appeals under reference are as follows:

(A) **Appeal No. 23 of 2016** filed by Tamil Nadu Newsprint and Papers Limited against the Orders of the Respondent Commission/TNERC in M.P. No. 24 of 2012 dated 13.11.2015:

19. The Appellant is the manufacturer of Newsprint and Printing and writing paper using bagasse. The Appellant has 6 boilers (Boiler No.1 to 6) of capacity varying from 60 Tonnes per Hour (TPH) to 125 TPH to produce high pressure steam. These boilers are fired using any combination of various fuel sources comprising mainly coal and oil and to a lesser extent the process left over such as pith and agro based products. The high-pressure steam produced in these boilers are used to power the 4 turbo generators of varying capacities (TG No.1 to 4 totaling to 61.12 MW) to produce electrical energy. In the process of power generation, the steam drops in pressure level and the resultant low

pressure is used for paper manufacturing process. In view of the same, the appellant claims that the process qualifies for co-generation status as it produces steam energy which is required in the paper manufacturing process and electricity simultaneously. There is also a Recovery boiler No.3 fired using black liquor as fuel. The steam produced by the Recovery Boiler No.3 is used to power turbo-generator (TG5) of capacity 20 MW. Black liquor is an industrial waste containing bio-mass that is produced during the manufacture of pulp from bagasse. Bagasse is a refuse material from sugarcane after extraction of sugarcane juice for sugar making. The appellant has therefore got registered the recovery boiler and TG5 as Renewable Energy Power Plant with National Load Despatch Centre, New Delhi and the benefit of Renewable Energy Certificates for the self-consumption of power generated from TG5 is being availed by the Appellant and therefore, there is no dispute with regard to TG5.

20. The present appeal is concerned, therefore, with respect to fastening of RPO to the power produced by TG1 to TG4 only. Here, it is to be noted that as per Regulation 2(1) of Renewable Energy Purchase Obligations Regulations 2010 and Regulation 2 (1) (g) of New and Renewable Energy Sources Regulations 2008 for the purpose of accounting for RPO, the source of power generation shall be Non-

Conventional and Renewable Energy Sources. But the steam produced by the Boilers No. 1 to 6 is by using any combination of coal, lignite, agro fuels, pith as fuel and such steam is used to power the TG1 to TG4 turbo generator sets. As no fuel which is primarily of renewable energy is used to power the stream, it does not qualify for accounting RPO and therefore, the claim of the appellant is not sustainable

(B) **Appeal No. 278 of 2015** filed by M/s. JSW Steel Limited against the Orders of the Respondent Commission/TNERC in M.P. No. 25 of 2012 dated 15.09.2014 (R.P. No.1 of 2014 dated 16.09.2015)

21. The Appellant's plant is an integrated steel plant. The Appellant states that it uses coke as primary fuel source in its manufacturing process as it is of higher calorific value. The hot exhaust gas from the coking oven and the blast furnace which has combustible residues such as carbon monoxide, hydrogen and nitrogen are used to power boilers and generate steam which in turn is used to power steam turbo generators (2 steam TGs of 30 MW and one TG of 7.5 MW) and produce electricity. That is to say, the waste heat in the form of exhaust from the coke oven and the blast furnace is the primary raw material in the captive power plant. The appellant claims that the process adopted by the them qualify

as 'bottoming cycle cogeneration' as it produces very high temperature waste industrial gas which in turn is used to generate electricity.

22. It is submitted that the generation of energy is based on waste heat recovery. However, the primary fuel used for in the production of high temperature waste industrial gas is coke. Coke is derived from coal. As no fuel which is primarily renewable in nature is used, the appellant plant has to be treated only as fossil fuel based co-generating plant and therefore not eligible for accounting for RPO under TNERC's Renewable Energy Purchase Obligations Regulations, 2010.

(C) **Appeal No. 24 of 2016** filed by TANFAC Industries Limited against the Orders of the Respondent Commission/TNERC in M.P. No. 12 of 2013 dated 13.11.2015:

23. The Appellant Company manufactures inorganic fluorine-based chemicals such as Aluminium Fluoride, Anhydrous Hydrofluoric acid, Sodium Silico Fluoride, Potassium Fluoride, Potassium bi-fluoride and various other fluorine-based chemicals and sulphuric acid. It states that it has installed a captive power plant of 2.3 MW capacity using the steam generated out of waste heat recovered from sulphuric acid plant. Sulphur is received in the form of powder or granules and is melted in sulphur pit

and pumped to sulphur furnace. The air blower system supplies air for sulphur burning and subsequent oxidation in the furnace. This air is dried using a drying tower that involves circulation of concentrated acid before entering furnace. The furnace is operating at a temperature of about 1000^0C and provided with adequate refractory lining to withstand high temperature. The formation of sulphur dioxide gas is an exothermic reaction and the waste heat generated is utilized in a waste heat recovery boiler. Subsequently the gases are fed to a convertor which is lined with heat resistant refractory and vanadium pentoxide catalyst is used in the convertor beds where sulphur dioxide is converted into sulphuric trioxide. The sulphur trioxide gas is taken to absorption towers *viz* Inter pass absorption tower and final absorption tower where acid is being circulated and 98.5% sulphuric acid is produced continuously

24. The Appellant company has installed a captive power plant of 2.3 MW capacity using the steam generated out of waste heat recovered from Sulphuric acid plant. It states that the process of power generation is clean and eco-friendly as it is not using fossil fuel. The steam produced from the waste heat recovery of sulphuric acid plant is used simultaneously for power generation as well for process steam using a pressure reducing valve.

25. The generation of energy is based on waste heat recovery. However, the process of production of high temperature waste heat is from sulphur which is not a fuel from a primarily renewable source. Hence, the Appellant's co-generation plant cannot be considered as renewable source based co-generating plant.

26. The counsel for the Respondent Commission/TNERC submitted that, the latest law on the scope and extent of promotion of co-generation was delivered by this Tribunal in Lloyd's case wherein the Tribunal pronounced a comprehensive judgment by referring to its earlier decision dated 26.04.2010 in Century Rayon in Appeal No.57 of 2009, the Report of the Standing Committee on Energy in enactment of Electricity Act, 2003, the amendment dated 20.1.2011 to Clause 6.4 of National Tariff Policy, Clauses 5.12.1 and 5.12.2 of National Electricity Policy by holding that the legislative intent is only to promote non-conventional sources and co-generation from non-conventional sources and not co-generation in any form. The observation of this Tribunal in para-24 of the Lloyd's case referring to the heading of clause 6.4 of National Tariff Policy for arriving at such conclusion and the observation at Para-15 categorically holding that electricity generation from fossil fuel is not a generation from non-

conventional source of energy or renewable source of energy has set at rest the legal position on the scope and extent of promotion co-generation from fossil fuel. A generator using renewable source for generating electrical energy can alone seek the benefits provided under the RPO Regulations. This Tribunal after arriving at such conclusion also proceeded to lay down the extent to which the co-generation from fossil fuel is permissible in para-39 of Lloyd's case which is re-produced below:

> *"39. Upon conjoint reading of the provisions of the Electricity Act, the National Electricity Policy, Tariff Policy and the intent of the legislature while passing the Electricity Act as reflected in the Report of the Standing Committee on Energy presented to Lok Sabha on 19.12.2002, we have come to the conclusion that a distribution company cannot be fastened with the obligation to purchase a percentage of its consumption from fossil fuel based co-generation under Section 86(1)(e) of the Electricity Act, 2003. Such purchase obligation 86(1)(e) can be fastened only from electricity generated from renewable sources of energy. However, the State Commission can promote fossil fuel-based co-generation by other measures such as facilitating sale of surplus electricity available at such co-generation plants in the interest of promoting energy efficiency and grid security, etc."*

27. Further, he submitted that, it may be seen that this Tribunal also laid down the promotional measures which are to be borne in mind by the State Commissions in promotion of co-generation from the fossil fuel-

based co-generation such as facilitating sale of surplus energy in order to promote energy efficiency and grid security. This Tribunal, it is submitted, has restricted the scope of promotional measures to such co-generation by means of fossil fuel to a limited extent of sale of surplus power after adverting to the Clause 6.4 of National Tariff Policy, Clause 5.12.1 and 5.12.2 of National Electricity Policy and Report of Standing Committee on Energy and leaving out the accounting of energy from such sources for the purpose of exclusion from RPO. Hence the claim of the fossil fuel-based co-generation plants for promotional measures akin to generation of electricity from non-conventional sources and also co-generation from non-conventional sources is against the legislative intent and against the ratio of this Tribunal in Lloyd's case and the reliance of the appellant on Century Rayon and Hindalco is, therefore, misplaced and arises out of incorrect appreciation of the latest law laid down in Lloyd's case. It is, further, submitted that, the fact that the steam generated from other than Renewable source and used in the process of generation of electricity, such plant cannot be treated as co-generation from renewable sources. The legislative and executive intent of Parliament and Government of India respectively is only to promote non-conventional fuel or co-generation from non-conventional fuel. For seeking on parity with non-conventional sources, the fuel must be one of non-conventional source.

More importantly, the ratio laid down by the Supreme Court in Hindustan Zinc Vs RERC in its judgment dated 13.5.2015 in C.A.No.4417 of 2015 has set at rest the issue once for all by laying down the position of law that the captive plants or open access consumers are not outside the purview of RPO and the regulation of RERC was upheld in view of the stated objective of promotion of environment friendly measures.

28. The learned counsel for the Respondent Commission/TNERC submitted that, the Hindalco judgment dated 10.04.2013 in Appeal No.125 of 2012 was delivered in the context of the UPERC's inaction in giving effect to the judgment dated 26.4.2010 of this Tribunal in Century Rayon's case in Appeal No.57 of 2009. The Hindalco's judgment is nothing but reiteration of the ratio laid down in Century Rayon and no law was laid down in the said case unlike the Lloyd's case wherein a new law was laid down by this Tribunal and hence, the reliance of the Appellants on Hindalco's case is not sustainable. The Lloyd's case which laid down a new law, it is submitted, is the decision which holds the field at present and the law laid down in the Hindalco's case no longer holds the field. The said position is also strengthened by the subsequent judgment of Apex Court in Hindustan Zinc Vs RERC. The Commission in the impugned order rightly decided the issue based on the decision in the

Lloyd's case. The impugned order is perfectly valid in law as it is in line with the judgment of the Tribunal in Lloyd's case, the legislative intent of the Committee on Energy on the Electricity Bill, Clause 6.4 of NTP and Clause 5.12.1 and 5.12.2 of NEP and the judgment of the Apex Court in Hindustan Zinc case.

29. It is, further, submitted that, the Appellant has strenuously canvassed throughout the appeal that fastening of obligation on the Distribution Licensee to purchase power from co-generation plants irrespective of fuel used by such co-generating plant was the only question dealt with by the Tribunal in Lloyd's case and the question of accounting of power generated out of co-generation by the co-generation plants towards RPO was not dealt with. However, it is submitted that the understanding of the appellant in this regard are erroneous for the reason that the judgment of the Tribunal in Lloyd's case is a comprehensive one as it not only dealt with the fastening of the obligation on the Distribution Licensee in respect of power purchase from co-generation from NCE sources, but also dealt with elaborately the scope and extent of concessions that the power from co-generation is entitled to. The appellants understanding of the Lloyd's judgment is too narrow. The said judgment in Lloyd's case refers to the parliamentary intent on the scope of

promotion of co-generation power, the provisions in the National Policies, namely, NTP and NEP in regard to promotion of co-generation power and set out the extent up to which the power from co-generation is entitled to be promoted. Therefore, it is submitted that the impugned order is in line with the judgment in Lloyd's case which is the latest law on the subject and the reliance on Hindalco's case by the appellant is a misplaced one.

30. The learned counsel for the Respondent Commission/TNERC submitted that, the contention of the appellant that this respondent failed to consider its own order dated 21.6.2012 in M.P.No.31 of 2011 is also devoid of merits for the reason that the said order in M.P.No.31 of 2011 is anterior to the judgment of this Tribunal in Lloyd's case referred to above on the subject and it was decided with reference to Century Rayon's case at a time when there was no judgment on Lloyd's case. Therefore, the reliance of the said order dated 21.6.2012 of the Commission in M.P.No.31 of 2011 by the appellant is not sustainable in the light of the latest law laid down in Lloyd's case by the Tribunal and the judgment of the Apex Court in Hindustan Zinc case.

31. The counsel for the Respondent Commission/TNRC submitted that, in view of the facts and circumstances, as stated above, the instant

appeals filed by the Appellants are liable to be dismissed as devoid of merits.

ISSUEWISE CONSIDERATION & ANALYSIS:

32. The learned counsel for the Appellant and the learned counsel for the Respondent/State Regulatory Commission, at the outset, fairly submitted that, these five appeals may kindly be taken up together as the common reliefs are sought in all these appeals and an appropriate judgment may kindly be passed in the interest of justice and equity.

33. Submissions of the learned counsel appearing for the Appellant and the Respondent/State Regulatory Commission, as stated above, are placed on record.

34. After a marathon hearing of learned counsel for the Appellant and the Respondent/State Regulatory Commission and after careful critical evaluation of the entire relevant material available on records and going through the impugned Orders passed by the Respondent/State Regulatory Commission and after perusal of the written submissions filed by the respective counsel appearing for the Appellant and the Respondent/State Regulatory Commission, issues that arise for our consideration are as follows:

I. Whether the appellants, co-generators are under a legal obligation to purchase power from renewable sources of energy in order to meet their Renewable Purchase Obligation?

II. Whether the exemption granted to co-generation plants would depend on the type of fuel used by them?

III. Whether the judgment of this Tribunal dated 26.04.2010 in *Century Rayon vs. Maharashtra Electricity Regulatory Commission & Ors* has been set aside in entirety or only in part by the Full Bench Judgment of this Tribunal dated 02.12.2013 in *Lloyds Metal & Energy Ltd v. Maharashtra Electricity Regulatory Commission & ors.?*

IV. Whether the judgment of the Hon'ble Supreme Court in *Hindustan Zinc Ltd vs. Rajasthan Electricity Regulatory Commission 2015) 12 SCC 611* would apply to the present appeals?

RE: ISSUE NOS. (I) & (II)

Whether the appellants, co-generators are under a legal obligation to purchase power from renewable sources of energy in order to meet their Renewable Purchase Obligation?

Whether the exemption granted to co-generation plants would depend on the type of fuel used by them?

Since both the issues are interconnected we are taking and deciding them together

35. On these issues the learned counsel for the Appellant, at the outset, submitted that, as per section 86(1)(e) of the Electricity Act, 2003 casts a specific obligation on the various State Electricity Regulatory Commissions set up under the Act to promote generation of electricity from cogeneration and renewable sources of energy. This aspect of the matter has been considered by this Tribunal in *Century Rayon vs. Maharashtra Electricity Regulatory Commission & Ors.* (in paragraphs 45 & 46 of the judgment dated 26.04.2010). He vehemently submitted that, by virtue of the said judgment, Captive consumers having cogenerating plants cannot be fastened with the obligation to procure electricity from renewable energy sources, as that would defeat the object of section 86(1)(e) of the Electricity Act, 2003 and cogenerating plants have to be treated at par with renewable energy generating plants for the purpose of RPO obligations. The aforesaid judgment has been consistently followed by this Tribunal in several judgments i.e.:

(i) *Emami Paper Mills Ltd. Vs. Odisha Electricity Regulatory Commission* in Appeal No. 54 of 2012 dated 30.01.2013

(ii) *Vedanta Aluminium Ltd. Vs. Orissa Electricity Regulatory Commission* in Appeal No. 59 of 2012 dated 31.01.2013

(iii) *Hindalco Industries Ltd. Vs. Uttar Pradesh Electricity Regulatory Commission & Ors.* in Appeal No. 125 of 2012 dated 10.04.2013

(iv) *India Glycols Ltd. Vs. Uttarakhand Electricity Regulatory Commission & Ors.* in Appeal Nos. 112, 130 and 136 of 2014 dated 01.10.2014.

36. This Tribunal in the case of *Century Rayon vs. Maharashtra Electricity Regulatory Commission & Ors.* has held in para 45(vi) that, "*The intention of the legislature is to clearly promote cogeneration in this industry generally irrespective of the nature of the fuel used for such cogeneration and not cogeneration or generation from renewable energy sources alone.*" This Tribunal in para 46 the said judgment also held that, "*.... While concluding, we must make it clear that the Appeal being generic in nature, our conclusions in this Appeal will be equally applicable to all co-generation based captive consumers who may be using any fuel...*" The aforesaid findings has been followed by this Tribunal in the cases of Emami Paper Mills Ltd v Odisha Electricity Regulatory Commission; Vedanta Aluminium Ltd v Orissa Electricity Regulatory Commission; Hindalco Industries Ltd v Uttar Pradesh Electricity Regulatory Commission & Ors. and India Glycols Ltd v Uttarakhand Electricity Regulatory Commission & Ors. it is significant to note that none of these cases deals

with co-generation plant using renewable energy. The counsel for the Appellants submitted that, the appellants, co-generators, are not under a legal obligation to purchase power from renewable sources of energy in order to meet their Renewable Purchase Obligation. This aspect of the matter neither looked nor considered or followed and consistent view has been taken by this Tribunal in its several judgments, as stated above.Therefore, impugned Orders passed by the Respondent /State Regulatory Commission is liable to be set aside on this ground.

37. ***Per-contra,*** the learned counsel for the Respondent/State Regulatory Commission, inter-alia, contended and submitted that, the Respondent/State Regulatory Commission after thorough evaluation of the entire relevant material available on record and after taking into consideration the case made out by the Appellants has rightly recorded its findings in paragraph 4.4 of the impugned Order. It emerges that the finding of the Respondent/State Regulatory Commission truly reflect the intent and purport of the judgment of this Tribunal in Lloyds case in judgment dated 02.12.2013 in Appeal No. 53 of 2012 as held by this Tribunal in para 32 of the said judgment that fossil fuel based co-generating plants cannot be classified as Renewable Source of Energy. This Tribunal has made a slight distinction between fixing a percentage of

Renewable Purchase Obligation and promotion of fossil fuel based co-generation in general by observing in para 39 of the said judgment that, "However, the State Commission can promote fossil fuel based co-generation by other measures such as facilitating sale of surplus electricity available at such co-generation plants in the interest of promoting energy efficiency and grid security". Therefore, in view of the well settled law laid down by this Tribunal as held in para 39 of the judgment in Lloyd's case in Appeal No.53 of 2012 would make it expressly clear that this Tribunal distinguished its decision in Century Rayon so as to make a clear distinction between co-generating plants and non-conventional sources in terms of promotion and hence absolute parity as sought for the Appellants is not maintainable. Therefore, appellants, co-generators are under a legal obligation to purchase power from renewable sources of energy in order to meet their Renewable Purchase Obligation. Therefore, the Respondent/State Regulatory Commission has rightly justified in passing the impugned order by assigning the cogent reasons which is in line with the said decision and, hence, interference by this Court does not call for.

38. Further, he submitted that, it is crystal clear from the said order that while the non-conventional sources can be promoted by way of directing the Distribution Licensee or any other persons in the area of the

Distribution Licensee to procure non-conventional sources in view of the express language in section 86 (1) (e) of the Electricity Act, 2003, the same cannot be strictly done in the case of co-generators who are entitled only for certain other promotional measures. This Tribunal chose to leave out the aspect of fixing a percentage for procurement of co-generation power from the purview of purchase obligation but added that such fossil fuel-based cogeneration can be promoted by other measures such as facilitating sale of surplus electricity and promotion of energy efficiency. The expression "other measures" occurring in para 39 of the Lloyds case amply proves that it denotes measures on promotion other than that of fixing of a percentage of procurement of non-conventional energy as envisaged under section 86 (1) (e) of the Electricity Act, 2003 and there cannot be a parity of treatment between fossil fuel based co-generation and generation from non-conventional sources in all aspects and Distribution Licensee cannot be compelled to procure fossil fuel based co-generation power. As a natural corollary, it also follows that a fossil fuel based co-generation plant cannot claim adjustment of its energy in the same manner as that of co-generation from non-conventional source and the fossil fuel based co-generating plants are to be treated like any other obligated entity for fulfilling the regulation of the Commission though they are entitled to be promoted by way of other measures such as facilitating

sale of surplus power and promotion of energy efficiency. Therefore, the Respondent/State Regulatory Commission has rightly justified in passing the impugned order by assigning cogent reasons. The Appellant has failed to make out any case before the Respondent/State Regulatory Commission and this Tribunal also. Therefore, the Order impugned passed by the Respondent/State Regulatory Commission is liable to be upheld.

OUR CONCLUSION ON ISSUE NOS. (I) & (II)

39. The appellants are all captive co-generators. As per section 2(12) of the Electricity Act, 2003 defines cogeneration as under:

> *"Cogeneration" means a process which simultaneously produces two or more forms of useful energy (including electricity).*

The State to promote generation of electricity from co-generation and renewable sources as envisaged under section 86(1)(e) of the Electricity Act, 2003 casts a specific obligation on the various State Electricity Regulatory Commissions set up under the Act to promote generation of electricity from cogeneration and renewable sources of energy. The aforesaid question arose for consideration before this Tribunal in the case of *Century Rayon vs. Maharashtra Electricity Regulatory Commission & Ors.* reported in

2010 SCC OnLine APTEL 37 : [2010] APTEL 37 vide judgment dated 26.04.2010 wherein paragraphs 45 & 46 of the judgment read hereunder:

"45. Summary of our conclusions is given below:-

(I) The plain reading of Section 86(1)(e) does not show that the expression 'co-generation' mean Judgment in Appeal No. 57 of 2009 cogeneration from renewable sources alone. The meaning of the term 'co- generation' has to be understood as defined in definition Section 2 (12) of the Act.

(II) As per Section 86(1)(e), there are two categories of `generators namely (1) co-generators (2) Generators of electricity through renewable sources of energy. It is clear from this Section that both these categories must be promoted by the State Commission by directing the distribution licensees to purchase electricity from both of these categories.

(III) The fastening of the obligation on the co-generator to procure electricity from renewable energy procures would defeat the object of Section 86 (1)(e).

(IV) The clear meaning of the words contained in Section 86(1)(e) is that both are different and both are required to be promoted and as such the fastening of liability on one in preference to the other is totally contrary to the legislative interest.

(V) Under the scheme of the Act, both renewable source of energy and cogeneration power plant, are equally entitled to be promoted by State Commission through the suitable methods and suitable directions, in view of the fact that cogeneration plants, who provide many number of benefits to environment as well as to the

public at large, are to be entitled to be treated at par with the other renewable energy sources.

(VI) The intention of the legislature is to clearly promote cogeneration in this industry generally irrespective of the nature of the fuel used for such cogeneration and not cogeneration or generation from renewable energy sources alone.

46. In view of the above conclusions, we are of the considered opinion that the finding rendered by the Commission suffers from infirmity. Therefore, the same is liable to be set side. Accordingly, the same is set aside. Appeal is allowed in terms of the above conclusions as well as the findings referred to in aforesaid paras 16,17,22 and 44. While concluding, we must make it clear that the Appeal being generic in nature, our conclusions in this Appeal will be equally applicable to all co-generation based captive consumers who may be using any fuel. We order accordingly. No costs." *[Emphasis supplied]*

40. It is manifest on the face of the judgment, as stated supra, the Captive consumers having cogenerating plants cannot be fastened with the obligation to procure electricity from renewable energy sources, as that would defeat the object of section 86(1)(e) of the Electricity Act, 2003 and cogenerating plants have to be treated at par with renewable energy generating plants for the purpose of RPO obligations. It is pertinent to note that the aforesaid judgment has been consistently followed by this Tribunal in several cases e.g. *Emami Paper Mills Ltd. Vs. Odisha*

Electricity Regulatory Commission in Appeal No. 54 of 2012 dated 30.01.2013 reported in 2013 SCC OnLine APTEL 23 : [2013] APTEL 74 (Para 5, paras 38 to 40, which reads hereunder:

> *"5. In the light of the rival contentions, the following question may arise for consideration: "Whether the Appellant, the co-generator is under a legal obligation to purchase power from the renewable sources of energy for meeting the Renewable Purchase Obligation of its captive load?"*
>
> ....
>
> *38. As laid down by this Tribunal in Century Rayon case, we reiterate that the mere use of fossil fuel would not make cogeneration plant as a conventional plant. The State Commission cannot give its own interpretation on this aspect which is not available in the Regulations and which is against the ratio and the interpretation of provision given in the judgement by this Tribunal.*
> *39. We feel anguished to remark that unfortunately, the State Commission has not followed the judicial propriety by ignoring the well laid principles contained in the judgement of this Tribunal, which is binding on the authority.*
>
> *40. Summary of our findings: i) This Tribunal in its judgment in Appeal No.57 of 2009 has specifically observed that the intention of the legislature is to clearly promote the cogeneration also irrespective of the nature of the fuel used and fastening of the obligation on the cogenerator would defeat the object of Section 86(1)(e). The Tribunal also mentioned in the above judgment that the conclusion in Appeal No.57 of 2009 of being generic in nature, would apply to all the co-generation based captive consumers who may be using any fuel. Therefore, reasoning given by the*

State Commission for distinguishing the judgment of this Tribunal, which is binding on the State Commission, is wrong.

ii) The definition of the obligated entity would not cover a case where a person is consuming power from co-generation plant. iii) The State Commission by the impugned order, in order to remove difficulties faced by the obligated entities, has clarified that the obligation in respect of co-generation can be met from solar and nonsolar sources but the solar and non-solar purchase obligation has to be met mandatorily by the obligated entities and consuming electricity only from the co-generation sources shall not relieve any obligated entity. When such relaxation has been made, the same relaxation must have been allowed in respect of consumers meeting electricity consumption from captive Co-generation Plant in excess of the total RCPO Obligations. Failure to do so would amount to violation of Section 86(1)(e) of the electricity Act, which provides that both cogeneration as well as generation of electricity from renewable source of energy must be encouraged as per the finding of this Tribunal in Appeal No.57 of 2009. Unfortunately the State Commission has failed to follow the judgment given by this Tribunal in Century Rayon case." *[Emphasis supplied]*

Therefore, in view of the aforesaid judgment, this Tribunal consistently followed and position reiterated by this Tribunal in the above judgments. Inspite of consistent view taken by this Tribunal, the Respondent/State Regulatory Commission has failed to take judicial note and appreciate the matter and on contrary, proceeded to pass the impugned Order without evaluation of the material

available on records and the case made out by the Appellant. We are of the considered view that the Respondent/State Regulatory Commission has failed to consider the same and on contrary has passed the impugned order. Therefore, the impugned order passed by the Respondent/State Regulatory Commission is liable to be set aside on this ground. **Hence, we answered these issues in favour of the Appellants.**

RE: ISSUE NO. (III)

Whether the judgment of this Tribunal dated 26.04.2010 in Century Rayon vs. Maharashtra Electricity Regulatory Commission & Ors has been set aside in entirety or only in part by the Full Bench Judgment of this Tribunal dated 02.12.2013 in Lloyds Metal & Energy Ltd v. Maharashtra Electricity Regulatory Commission & ors.?

41. On this issue, the learned counsel for the Appellants submitted that, the case of Lloyds Metal & Energy Ltd. v Maharashtra Electricity Regulatory Commission & Ors has been referred to the Full Bench of this Tribunal for re-examination of interpretation given in the Century Rayon case Whether the distribution licensee could be fastened with the obligation to purchase a percentage of its consumption from co-generation irrespective of the fuel used under Section 86(1)(e) of the Electricity Act, 2003. The Full Bench of this Tribunal, in Lloyds Metal case, after

thorough evaluation of the entire material available on records and after considering the submissions of the learned counsel appearing for both the parties, has set aside only the findings in so far as recorded at paga 45(II) of the judgment in Century Rayon case and not the Century Rayon judgment in its entirety. This aspect of the matter has neither been looked into nor considered by the Respondent/State Regulatory Commission and without application of mind hold that the entire judgment of the Century Rayon case has been set aside. The said reasoning given by the Respondent/State Regulatory Commission and placing reliance on the judgment in totality is unsustainable in law. Further, the counsel for the Appellants, to substantiate his submission, quick to point out and placed reliance on the judgment of this Tribunal in *India Glycols case* dated 01.10.2014, wherein this Tribunal, much after the judgment of the Full Bench in *Lloyds Metal case*, continued to rely on *Century Rayon case* in so far as the question whether cogeneration based captive power plant can at all be fastened with renewable Purchase Obligation is concerned as held in para 10 of the said judgment. Therefore, impugned Orders passed by the Respondent/State Regulatory Commission are liable to be vitiated on this ground also.

42. *Per-contra*, the learned counsel for the Respondent/State Regulatory Commission, inter-alia, contended and substantiated the reasoning assigned by the Respondent/State Regulatory Commission in the impugned Orders which is in consonance with the reasoning assigned in the judgment of this Tribunal in Lloyds Metal case and rightly considered in paragraph 39 of the said judgment. Therefore, there is no substance in the submissions of the learned counsel for the Appellants. The Respondent/State Regulatory Commission has rightly justified by assigning the valid and cogent reasons passed just and reasonable orders. Hence, interference by this Tribunal does not call for.

OUR CONCLUSION ON ISSUE NO. (III)

43. It is pertinent to note that the order of reference to the Full Bench dated 23.09.2013 in the case of *Lloyds Metal & Energy Ltd. Vs. Maharashtra Electricity Regulatory Commission & Ors.* order dated 23.09.2013 makes it clear that the limited question for reference to the Full Bench is as follows:

> ***"Whether the distribution licensee could be fastened with the obligation to purchase a percentage of its consumption from co-generation irrespective of the fuel used under Section 86(1)(e) of the Act 2003.***

Registry is directed to get the Administrative Order from the Chairperson to post it before the Full Bench for re-examination of the interpretation given in the Century Rayon Case on this question."

The Full Bench of this Tribunal vide its order dated 02.12.2013 in the case of *Lloyds Metal & Energy Ltd. vs. Maharashtra Electricity Regulatory Commission & Ors., after thoughtful consideration of all the relevant material available on records,* answered the question as referred for consideration which read thus:

"This important aspect has not been considered in the Century Rayon judgment, where in this Tribunal had held that the Sate commission has to promote both co-generation as well as generation of electricity from renewable sources of energy. Accordingly, we feel that the State Commission could promote the fossil fuel based co-generation by any other measures such as facilitate sale of electricity from such sources, grid connectivity, etc. by the State Commission could not compel the Distribution Licensee to procure electricity from fossil fuel based co-generation against the purchase obligation to be specified under Section 86(1)(e) of the Electricity Act, 2003." *[Emphasis supplied]*

It is evident that only paragraph 45(II) of the judgment in *Century Rayon Case* has been set aside by the Full Bench judgment in *Lloyds Metal Case* and not the *Century Rayon* judgment in its entirety. The effect of this being that the distribution licensee could not be compelled to procure electricity from fossil fuel based co-

generation against its renewable purchase obligation. However, it has no effect on the finding in *Century Rayon Case* that a cogeneration based captive power plant cannot be fastened with Renewable Purchase Obligation irrespective of the nature of the fuel used for such cogeneration.

44. It is, further, fortified by the fact that this Tribunal has in *India Glycols Case* dated 01.10.2014, much after the judgment of the Full Bench in *Lloyds Metal case*, continued to rely on *Century Rayon case* in so far as the question whether cogeneration based captive power plant can at all be fastened with renewable Purchase Obligation is concerned as held in para 10, 20 to 23 which read as under:

> *"10. The only issue that arise for our consideration is whether cogeneration based captive power plant can at all be fastened with Renewable Purchase Obligation (RPO) and whether the Notification, dated 3.11.2010, could have at all fastened on each of the Appellants, in defiance of the statutory mandate of Section 86(1)(e) of the Electricity Act, 2003 as also ignoring the decision dated 26.4.2010 of this Appellate Tribunal in Century Rayon case?*
>
> ....
>
> *20. In view of the above considerations and analysis, we note that the impugned order passed by the State Commission suffers from the vice of illegality and the same is against the legal proposition laid down by this Appellate Tribunal in its*

judgment, dated 26.4.2010, in Appeal No. 57 of 2009 in the case of Century Rayon vs MERC. The approach of the State Commission in passing the impugned orders appears to be quite illegal, invalid and unjust, which cannot be appreciated by this Appellate Tribunal by any stretch of imagination.

21. Consequently, we observe that the impugned orders, dated 13.3.2014 (subject matter in Appeal No. 112 of 2014) and, dated 10.4.2014 (subject matter in Appeal Nos. 130 and 136 of 2014), suffer from illegality and perversity. We find force in the submissions of the Appellants and they are entitled to the relief claimed by them before the State Commission in the form of filing reply to show cause notices and also by filing petitions. The findings recorded by the State Commission in the impugned order, are illegal, perverse and are based on improper and erroneous appreciation of the facts and law. The approach adopted by the State Commission is also not appreciable as the State Commission should have exercised its power to relax in order to implement the judgment, dated 26.4.2010, passed by this Appellate Tribunal in Appeal No. 57 of 2009 in the case of Century Rayon vs. MERC, and also to give relief to the Appellants-petitioners. All the findings recorded by the State Commission in the impugned orders, so far as the Appellants-petitioners are concerned, are hereby set-aside and the impugned orders are liable to be quashed. Accordingly, in view of the above findings and observations, the issue is decided in favour of the Appellant and against the Respondent.

22. We further observe and make it clear that each of the Appellants, who filed the petitions before the State

Commission, claiming that each of the them being a co-generation based captive power plant/captive user was under no obligation to make purchases of Renewable Energy Certificates under the Principal Regulations, 2010, is entitled to the benefit of the judgment, dated 26.4.2010, passed by this Appellate Tribunal in Appeal No. 57 of 2009 in the case of Century Rayon vs. MERC, and they are accordingly, exempted from the obligation of procuring renewable energy and fulfilling their renewable energy obligation for FYs 2011-12, 2012-13 and 2013-14 (upto 27.12.2013).

23. SUMMARY OF OUR FINDINGS

The Co-generation based Captive Power Plant/Captive user cannot be fastened with renewable purchase obligation as provided under UERC (Compliance of RPO) Regulations, 2010, as subsequently, amended by UERC (Compliance of RPO) (First Amendment) Regulations, 2013. The judgment, dated 26.4.2010 of this Appellate Tribunal in Appeal No. 57 of 2009 in the case of Century Rayon vs. MERC, whereby the provisions of Section 86(1)(e) of the Electricity Act, 2003 were interpreted and in compliance of which the learned State Commission has amended the definition 'Obligated entity' as was then existing in UERC (Compliance of RPO) Regulations, 2010 by UERC (Compliance of RPO) (First Amendment) Regulations, 2013, shall be held to be applicable from the date of the judgment itself. Though, in compliance of the said judgment, dated 26.4.2010, the Regulations were amended in the year 2013 by the State Commission. It was a fit case where the State Commission should have exercised its power to relax according to its own Regulations in order to give

effect to the judgment, dated 26.4.2010, passed by this Appellate Tribunal in Appeal No. 57 of 2009, in the case of Century Rayon vs. MERC in letter and spirit, in order to give relief to the Co-generation based Captive Power Plants/Captive users entitled to it."

[Emphasis supplied]

In view of the aforementioned facts and circumstances, we are of the considered view that the reasoning assigned by the Respondent/State Regulatory Commission cannot be sustainable; hence, it is liable to be vitiated. Therefore, answered the issue No. (III) in favour of the Appellants.

RE: ISSUE NO. (IV)

Whether the judgment of the Hon'ble Supreme Court in Hindustan Zinc Ltd vs. Rajasthan Electricity Regulatory Commission 2015) 12 SCC 611 would apply to the present appeals?

45. The learned counsel for the Appellants, on this issue, submitted that, the Hon'ble Supreme Court *in Hindustan Zinc Ltd. vs. Rajasthan Electricity Regulatory Commission (2015) 12 SCC 611,* was concerned with the challenge to validity of the Rajasthan Electricity Regulatory Commission (Renewable Energy Obligation) Regulations, 2007 and the Rajasthan Electricity Regulatory Commission (Renewable Energy Certificate and

Renewable Purchase Obligation Compliance Framework) Regulations, 2010, which imposed renewable energy obligation on captive generators and open access consumers wherein the Hon'ble Supreme Court was not considering the case of co-generation plants, as is involved in the present appeals before this Tribunal. Therefore the said judgment would have no application whatsoever to the present appeals, as the appellants are not challenging the Regulations and are merely claiming exemption therefrom in the light of section 86(1)(e) of the Electricity Act, 2003.

46. Further, the counsel for the Appellant contended that, all the judgments relied on by the appellants deal with similar Regulations and this Tribunal has consistently held that co-generation plants are exempted from these regulations by virtue of the special status granted to them in view of section 86(1)(e) of the Electricity Act, 2003. In fact, this Tribunal has proceeded to hold that even where the Regulations provide for the imposition of the Renewable Purchase Obligation on co-generation, the Regulations need to be read down in view of the interpretation of Section 86(1)(e) of the Electricity Act, 2003. The above submission is further fortified by the fact that the Rajasthan Electricity Regulatory Commission has itself vide its order dated 23.03.2017 taken note of the above judgment of the Hon'ble Supreme Court as held in relevant para 15 of the

judgment and still went on to hold that no RPO obligation shall be fastened on co-generators. The said issues have been referred in para 26 of the judgment. The answer to this issue after taking note of the judgments of this Tribunal in Century Rayon case, Emami Paper Mills case, Vedanta Aluminium case, Hindalco Industries case and India Glycols case. In view of the well settled legal position, Commission is of the considered view that no RPO liability shall be fastened on such generators who generate electricity through Waste Heat Recovery for their own purpose and consume it, subject to the condition that generation from Waste Heat Recovery generation plant is in excess of the total RPO required to be complied by the CPP. Therefore, counsel for the Appellants submitted that, if the judgment of the Hon'ble Supreme Court actually covered co-generators as well, it is highly unlikely that the Rajasthan Electricity Regulatory Commission, whose Regulations were under challenge before the Hon'ble Supreme Court, would itself grant relief to the co-generators before it relying on the judgments of this Tribunal in *Century Rayon* case. Therefore, he submitted that, a co-generation facility irrespective of fuel is to be promoted in terms of section 86(1)(e) of the Electricity Act, 2003 and an entity which is to be promoted in terms of section 86(1)(e) of the Electricity Act cannot be fastened with renewable purchase obligation under the same provision and as long as the co-

generation is in excess of the renewable purchase obligation, there can be no additional purchase obligation placed on such entities. Therefore, he most respectfully submitted that, this Tribunal may please allow all the Appeals and hold that the appellants herein, being co-generation plants, are not under a legal obligation to purchase power from renewable sources of energy in order to meet their Renewable Purchase obligation in the interest of justice and equity.

47. *Per-contra,* Shri S. Vallinayagam, learned counsel for the Respondent/ State Regulatory Commission submitted that, in the case of Hindustan Zinc Ltd. vs. RERC (Rajasthan Electricity Regulatory Commission) in C.A. No. 4417 of 2015 etc., the Hon'ble Apex Court in its order dated 13.05.2015 has settled the issue and, therefore, the issue has attained finality. The Hon'ble Apex Court has upheld the regulation of Rajasthan Electricity Regulatory Commission which extended the Renewable Purchase Obligation to Open Access Consumers and Captive Generators in addition to Distribution Licensee. The regulation of this Commission being *parimateria* to the regulation of RERC and not having excluded the consumers owning grid connected CGPs from the purview of Renewable Purchase Obligation, the judgment of the Apex Court in Rajasthan Electricity Regulatory Commission's case will be squarely

applicable to Respondent/TNERC and in the result the Co-generating Plants cannot seek exemption from Renewable Purchase Obligation or claim adjustment of energy generated out of their co-generating plants. Therefore, there is no legal infirmity in the impugned order and, hence, the same is within the ratio laid down by this Tribunal and the Hon'ble Apex Court. Therefore, interference by this Tribunal does not call for on this count also.

48. The counsel for the Respondent Commission contended that, the view of the Commission that co-generation from sources other than renewable sources cannot be exempted from Renewable Purchase Obligation has further been recognized and found favour in the revised National Tariff Policy, 2016. The following provision of National Tariff Policy, 2016 is reproduced below for reference:

> *"(I) Pursuant to provisions of section 86 (1) (e) of the Act, the Appropriate Commission shall fix a minimum percentage of the total consumption of electricity in the area of a distribution licensee for purchase of energy from renewable energy sources, taking into account availability of such resources and its impact on retail tariffs. Cost of purchase of renewable energy shall be taken into account while determining tariff by SERCs. Long term growth trajectory of Renewable Purchase Obligations (RPOs) will be prescribed by the Ministry of Power in consultation with MNRE.*

Provided that cogeneration from sources other than renewable sources shall not be excluded from the applicability of RPOs".

[Emphasis supplied]

The above provision of the National Electricity Policy, 2016 unequivocally states and unambiguously debars the exclusion of co-generation from sources other than renewable sources from the purview of RPO which means that fossil fuel co-generation is subject to RPO mechanism and exclusion from the purview of RPO cannot be claimed.

49. Further, the counsel for the Respondent/State Regulatory Commission contended that the latest law on the scope and extent of promotion of co-generation was delivered by this Tribunal in Lloyd's case wherein the Tribunal pronounced a comprehensive judgment by referring to its earlier decision dated 26.04.2010 in Century Rayon in Appeal No.57 of 2009, the Report of the Standing Committee on Energy in enactment of Electricity Act, 2003, the amendment dated 20.1.2011 to Clause 6.4 of National Tariff Policy, Clauses 5.12.1 and 5.12.2 of National Electricity Policy by holding that the legislative intent is only to promote non-conventional sources and co-generation from non-conventional sources and not co-generation in any form. The observation of this Tribunal in para-24 of the Lloyd's case referring to the heading of clause 6.4 of

National Tariff Policy for arriving at such conclusion and the observation at Para-15 categorically holding that electricity generation from fossil fuel is not a generation from non-conventional source of energy or renewable source of energy has set at rest the legal position on the scope and extent of promotion of co-generation from fossil fuel. A generator using renewable source for generating electrical energy can alone seek the benefits provided under the RPO Regulations. This Tribunal after arriving at such conclusion also proceeded to lay down the extent to which the co-generation from fossil fuel is permissible in para-39 of Lloyd's case which is re-produced below:

> *"39. Upon conjoint reading of the provisions of the Electricity Act, the National Electricity Policy, Tariff Policy and the intent of the legislature while passing the Electricity Act as reflected in the Report of the Standing Committee on Energy presented to Lok Sabha on 19.12.2002, we have come to the conclusion that a distribution company cannot be fastened with the obligation to purchase a percentage of its consumption from fossil fuel based co-generation under Section 86(1)(e) of the Electricity Act, 2003. Such purchase obligation 86(1)(e) can be fastened only from electricity generated from renewable sources of energy. However, the State Commission can promote fossil fuel-based co-generation by other measures such as facilitating sale of surplus electricity available at such co-generation plants in the interest of promoting energy efficiency and grid security, etc."*
>
> *[Emphasis supplied]*

50. The counsel for the Respondent/State Regulatory Commission submitted that, the Hindalco's judgment is nothing but reiteration of the ratio laid down in Century Rayon and no law was laid down in the said case unlike the Lloyd's case wherein a new law was laid down by this Tribunal and hence, the reliance of the Appellants on Hindalco's case is not applicable. The Lloyd's case which laid down a new law, it is submitted, is the decision which holds the field at present and the law laid down in the Hindalco's case no longer holds the field. The said position is also strengthened by the subsequent judgment of Apex Court in Hindustan Zinc Vs RERC. The Commission in the impugned order rightly decided the issue based on the decision in the Lloyd's case. The impugned order is perfectly valid in law as it is in line with the judgment of the Tribunal in Lloyd's case, the legislative intent of the Committee on Energy on the Electricity Bill, Clause 6.4 of NTP and Clause 5.12.1 and 5.12.2 of NEP and the judgment of the Apex Court in Hindustan Zinc case. The learned counsel for the Respondent/State Regulatory Commission, further, submitted that, the Appellant has strenuously canvassed throughout the appeal that fastening of obligation on the Distribution Licensee to purchase power from co-generation plants irrespective of fuel used by such co-generating plant was the only question dealt with by the Tribunal in Lloyd's case and the question of accounting of power

generated out of co-generation by the co-generation plants towards RPO was not dealt with. However, it is submitted that the understanding of the appellant in this regard are erroneous for the reason that the judgment of the Tribunal in Lloyd's case is a comprehensive one as it not only dealt with the fastening of the obligation on the Distribution Licensee in respect of power purchase from co-generation from NCE sources, but also dealt with elaborately the scope and extent of concessions that the power from co-generation is entitled to. The appellants understanding of the Lloyd's judgment is too narrow. The said judgment in Lloyd's case refers to the parliamentary intent on the scope of promotion of co-generation power, the provisions in the National Policies, namely, NTP and NEP in regard to promotion of co-generation power and set out the extent up to which the power from co-generation is entitled to be promoted. Therefore, it is submitted that the impugned order is in line with the judgment in Lloyd's case which is the latest law on the subject and the reliance on Hindalco's case by the appellant is a misplaced one. The learned counsel for the Respondent/State Regulatory Commission submitted that, the Respondent/State Regulatory Commission, after due consideration of the entire relevant materials available on records and in the light of the well settled position of law laid down by this Tribunal and the Hon'ble Apex Court, has rightly justified in passing the just and reasonable order and,

therefore, interference by this Tribunal does not call for. Hence, the appeals filed by the Appellants are liable to be dismissed as devoid of merits.

OUR CONCLUSION ON ISSUE NO. (IV)

51. In the case of Hindustan Zinc Ltd. vs. Rajasthan Electricity Regulatory Commission (2015) 12 SCC 611, wherein the validity of the Rajasthan Electricity Regulatory Commission (Renewable Energy Obligation) Regulations, 2007 and Rajasthan Electricity Regulatory Commission (Renewable Energy Certificate and Renewable Purchase Obligation Compliance Framework) Regulations, 2010, has been questioned which imposed renewable energy obligation on captive gencos and open access consumers. It is significant to note that, the Hon'ble Apex Court was not considering the case of co-generation plants, as rightly pointed out by the learned counsel for the Appellants, is involved in the present appeals before this Tribunal. Therefore the said judgment is not applicable to the facts and circumstances of the instant appeals as the appellants are not questioning the correctness of the Regulations and are merely claiming exemption therefrom as envisaged under Section 86(1)(e) of the Electricity Act, 2003. It is also rightly pointed out by the learned counsel for the Appellants that, this Tribunal has consistently held

that co-generation plants are exempted from these regulations by virtue of the special status granted to them in the light of Section 86(1)(e) of the Electricity Act, 2003. It is not in dispute that this Tribunal has proceeded to hold that even where the Regulations provide for the imposition of the Renewable Purchase Obligation on co-generation, the Regulations need to be read down in view of the interpretation of Section 86(1)(e) of the Electricity Act, 2003.

52. The above contention is further fortified by the fact that, Rajasthan Electricity Regulatory Commission has itself vide its Order dated 23.03.2017 in Petition Nos. RERC/839/16 and RERC/840/16 in para 15(xi) wherein considered that, *"Various Special Leave Petitions (SLPs) were filed before the Hon'ble Supreme Court of India challenging the order dated 31.08.2012 of Hon'ble Division Bench of Rajasthan High Court and the Hon'ble Supreme Court of India vide order dated 13.05.2015 upheld the validity of the RPO Regulations, 2007 and RPO Compliance Regulations, 2010."* Further, it referred in para 15(xxi) that, *"In view of the judgments passed by the Hon'ble Supreme Court of India, Hon'ble High Court of Rajasthan and the Hon'ble APTEL upholding the validity of the Regulations of 2007 & 2010 and the directions issued by this Commission, it is, therefore, requested that the completed data regarding the Energy*

Generation and RPO Compliance may be ordered to be submitted to the Petitioner for assessment of RE Surcharge and after assessment of the shortfall, the Respondents be directed to pay the RE Surcharge assessed on the basis of the shortfall in RPO Compliance for the period 23.03.2007 to 22.12.2010" and also followed the well settled position of law and consistently followed is that there cannot be RPO being imposed on co-generation facilities wherein they discussed and considered the judgment of this Tribunal i.e. Century Rayon, Emami Paper Mills Ltd, Vedanta Aluminium Ltd, Hindalco Industries Ltd, India Glycols Ltd and observed that, as per the above judgment, it is a settled position of law that an entity which is to be promoted in terms of section 86(1)(e) of the Electricity Act, 2003 cannot be fastened with renewable purchase obligation under the same provision. Further, consumer meeting electricity consumption from captive co-generation plant in excess of the total specified RPO from waste heat technology does not have any obligation to procure electricity from other renewable source of electricity separately from solar or non-solar. Above position is followed by the various State Electricity Regulatory Commissions in the country. The Rajasthan Electricity Regulatory Commission has also considered Section 81(1)f) of the Electricity Act, 2003 and also taken note of the judgment of this Tribunal passed in Century Rayon vs Maharashtra Electricity Regulatory

Commission & Ors in Appeal No. 57 of 2009 dated 26.04.2010, which reads as under:

"Summary of our conclusions is given below:-

(I) The plain reading of Section 86(1)(e) does not show that the expression 'co-generation' means cogeneration from renewable sources alone. The meaning of the term 'co-generation' has to be understood as defined in definition Section 2 (12) of the Act.

(II) As per Section 86(1)(e), there are two categories of `generators namely (1) co-generators (2) Generators of electricity through renewable sources of energy. It is clear from this Section that both these categories must be promoted by the State Commission by directing the distribution licensees to purchase electricity from both of these categories.

(III) The fastening of the obligation on the co-generator to procure electricity from renewable energy procures would defeat the object of Section 86 (1)(e).

(IV) The clear meaning of the words contained in Section 86(1)(e) is that both are different and both are required to be promoted and as such the fastening of liability on one in preference to the other is totally contrary to the legislative interest.

(V) Under the scheme of the Act, both renewable source of energy and cogeneration power plant, are equally entitled to be promoted by State Commission through the suitable methods and suitable directions, in view of the fact that cogeneration

plants, who provide many number of benefits to environment as well as to the public at large, are to be entitled to be treated at par with the other renewable energy sources.

(VI) The intention of the legislature is to clearly promote cogeneration in this industry generally irrespective of the nature of the fuel used for such cogeneration and not cogeneration or generation from renewable energy sources alone."

[Emphasis supplied]

The Rajasthan Electricity Regulatory Commission has also considered the judgment of this Tribunal, as stated supra, in cases of Emami Paper Mills Ltd; Vedanta Aluminum Ltd; Hindalco Industries Ltd.and India Glycols Ltd; and held that:

"In view of the settled legal position, Commission is of the considered view that no RPO liability shall be fastened on such generators who generate electricity through Waste Heat Recovery for their own purpose and consume it, subject to the condition that generation from Waste Heat Recovery generation plant is in excess of the total RPO required to be complied by the CPP. If generation is lesser than the requirement to the extent of shortfall general rule applies. So far as distinction tried to be made by RREC between solar and non-solar for the purpose of compliance, in the Commission's view does not merit acceptance. Once Captive Power Plant generating electricity through Waste Heat Recovery, cannot be fastened with RPO liability under Section 86 (1) (e), there is no question of

imposition of solar RPO also as the same falls in the category of Renewable Energy."

[Emphasis supplied]

53. It is rightly pointed out by the counsel for the Appellant that, the judgment of the Hon'ble Apex Court actually covered co-generators as well has got some substance and it is highly unlikely that the Rajasthan Electricity Regulatory Commission, whose Regulations were under challenge before the Hon'ble Apex Court, would itself grant relief to the co-generators before it relying on the judgment of this Tribunal in *Century Rayon* case. Therefore, we hold that a co-generation facility irrespective of fuel is to be promoted in terms of section 86(1)(e) of the Electricity Act, 2003; an entity which is to be promoted in terms of section 86(1)(e) of the Electricity Act, 2003 cannot be fastened with renewable purchase obligation under the same provision; and as long as the co-generation is in excess of the renewable purchase obligation, there can be no additional purchase obligation placed on such entities.

54. In view of the facts and circumstances, as stated supra, we hold that, the Appellants herein, being co-generation plants, are not under a legal obligation to purchase power from renewable sources of energy in order to meet their Renewable Purchase obligation in the interest of justice and equity.

Hence, the issue Nos. (I) to (IV) raised for our consideration in the instant appeals, as stated supra, are answered in favour of the Appellants.

ORDER

Having regards to the factual and legal aspects of the matter, as stated supra, the instant Appeals, being Appeal Nos. 278 of 2015, 293 of 2015, 23 of 2016, 62 of 2016 and 24 of 2016 filed by the Appellants are allowed.

The Impugned Orders dated 15.09.2014 in Petition No. M.P. No. 25 of 2012 and the Order dated 16.09.2015 in R.P. No. 1 of 2014; Impugned Order dated 15.09.2014 in Petition Nos. M.P. No. 25 of 2012; Impugned Orders dated 13.11.2015 & 28.01.2016 in Petition Nos. M.P. No. 24 of 2012 & M.P. No. 36 of 2014 respectively and Impugned Order dated 13.11.2015 in Petition No. M.P. No. 12 of 2013 passed by Tamil Nadu Electricity Regulatory Commission are hereby set aside.

With these observations, these five appeals filed by the Appellants stand disposed of.

IA NO.455 OF 2015, IA NO. 476 OF 2015,
IA NO. 61 OF 2016, IA NO. 155 OF 2016 &
IA NO. 65 OF 2016

In view of the Appeal Nos. 278 of 2015, 293 of 2015, 23 of 2016, 62 of 2016 and 24 of 2016 on the file of the Appellant Tribunal for Electricity, New Delhi, being disposed of, the reliefs sought in IAs, being IA Nos. 455 of 2015, 476 of 2015, 61 of 2016, 155 of 2016 & 65 of 2016, do not survive for consideration.

Parties to bear their own costs.

PRONOUNCED IN THE OPEN COURT ON THIS 2ND DAY OF JANUARY, 2019.

(S.D. Dubey)
Technical Member

(Justice N.K. Patil)
Judicial Member

√ **REPORTABLE**

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BEFORE THE GUJARAT ELECTRICITY REGULATORY COMMISSION,

GANDHINAGAR

PETITION NO._____ OF 2022

Reliance Industries Limited .... Petitioners

Versus

_____ .... Respondents

VAKALATNAMA

We, Reliance Industries Limited;
do hereby Nominate, authorize and appoint

GANDHI LAW ASSOCIATES
ADVOCATES & SOLICITORS
1504/5/6, Tower-A, Navratna Corporate Park, Iscon-Ambli Road, Near Ashok Vatika, Ambli, Ahmedabad – 380 058

Represented by Keyur D. Gandhi, Nirav Joshi, Nisarg Desai, Raheel S. Patel, Kunal J. Vyas, Divya Pravalikha Batthini, Aalay Shah, Devarsh Trivedi, Divyesh Bais, Yash Dadhich hereinafter called the Advocates, to be my/our Advocates in the above noted matter and authorize them: -

To act, appear and plead in the above noted matter in this Hon'ble Court and/or any Quasi-Judicial Authority or any other Court where the same may be tried or heard or in the appellate courts.

To sign, file and present representations, pleadings, applications, appeals, cross objections or petitions for execution, review, revision, restoration, withdrawal, compromise or other petitions, replies objections or affidavits or other documents as may be deemed necessary or proper for the prosecution of the said case at all stages.

To file and take back documents.

To withdraw or compromise the said case of submit to arbitration any differences or disputes that may arise in or touching upon any matter relating to the said case.

To take out execution proceedings.

To deposit, draw and receive moneys, cheques and grant receipts therefore and to do all things and acts which may be necessary to be done for the progress and in the course of the prosecution of the said case.

To appoint, instruct any other legal practitioner, authorizing him to exercise the power and authorities hereby conferred upon the advocate/s;

AND we agree to ratify all acts done by the aforesaid advocate/s in pursuance of this authority.

Dated this the 19 day of December 2022.

Nisarg Desai

Accepted
Contact Details for service:

Phone : +91-_____
Email: efiling@gandhilaw.in

For, Reliance Industries Ltd.

Ashish B Shah

Client(s) Signature : Authorised Signatory
Name :
Designation :
Company Seal :

BEFORE THE GUJARAT ELECTRICITY REGULATORY COMMISSION AT GANDHINAGAR

PETITION NO. 2160 OF 2022

Reliance Industries Limited ....Petitioner

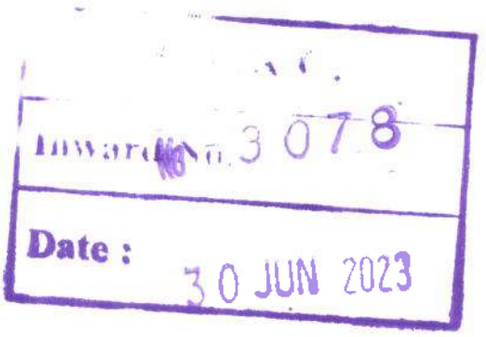
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Visarg Desai

Date: 30.06.2023 **For, Gandhi Law Associates**

Place: Ahmedabad **Advocates for Petitioner**



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BEFORE THE GUJARAT ELECTRICITY REGULATORY COMMISSION AT GANDHINAGAR

PETITION NO. 2160 OF 2022

D. H. SADHWANI STATE OF GUJ. REG. NO. 1084 EXP. DT. 7-1-2026

Reliance Industries Limited
Having its office at:
"Vraj", Off. Sindhu Bhavan Road,
Opp. Kadamb Villa Bungalow,
Besides Orion Ceremonial Laws,
Boadkdev, Ahmedabad- 380054 ....Petitioner

AFFIDAVIT OF COMPLIANCE PURSUANT TO ORDER DATED 30.05.2023 OF THE HON'BLE COMMISSION

MOST RESPECTFULLY SHOWETH:

1. The Petitioner is filing the present Affidavit in due compliance of the directions issued in the order dated 30.05.2023 of this Hon'ble Commission. Copy of the order dated 30.05.2023 of the Hon'ble Commission is annexed hereto and marked as **Annexure-I**.

2. The Hon'ble Commission, vide its order dated 30.05.2023 in the captioned Petition, had directed the Petitioner to issue public notices in two daily newspapers i.e. one in English language and one in vernacular language having wide circulation inviting suggestions/views/comments/objections from the stakeholders. Accordingly, the Petitioner has published Public Notice in Gujarati Newspaper 'Divya Bhaskar' dated 17.06.2023 and English Newspaper 'The Indian Express' dated 17.06.2023. Copies of the Public Notices in English as well as Gujarati Newspaper is annexed hereto and marked as **ANNEXURE-II Collectively**.


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3. This Hon'ble Commission has further directed the Petitioner to upload the Petition along with all relevant documents on the website of the Company and call for objections/suggestions from the concerned stakeholders within 30 days of the public notice. The petitioner submits that in due compliance of the said direction, the Petitioner has uploaded the public notice, Petition along with all documents on its website at **https://www.ril.com/InvestorRelations/Petitions.aspx** calling upon the stakeholders to submit their objections/suggestions within 30 days of the issuance of public notice.

4. The Petitioner submits that the present Affidavit may be treated as due compliance of the directions issued in the Order dated 30.05.2023 of this Hon'ble Commission.

For, Reliance Industries Ltd.

Ashish B Shah

Authorised Signatory

DEPONENT

NOTARY
D. H. SADHWANI
STATE OF GUJ.
REG. NO. 1084
EXP. DT. 7-1-2026
GOVERNMENT OF INDIA

GOVERNMENT OF IN

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BEFORE THE GUJARAT ELECTRICITY REGULATORY COMMISSION AT GANDHINAGAR

PETITION NO. 2160 OF 2022

Reliance Industries Limited
"Vraj", Off. Sindhu Bhavan Road,
Opp. Kadamb Villa Bungalow,
Besides Orion Ceremonial Laws,
Boadkdev, Ahmedabad- 380054 ....Petitioner

AFFIDAVIT

I, Ashish Shah, s/o Late Bhalchandra Shah, aged 56 years residing at Ahmedabad do solemnly affirm and say as follows:

That I am working as Senior General Manager of the Petitioner Reliance Industries Limited and authorized signatory of the Petitioner Company herein and I have read the present Affidavit and I am competent and duly authorized by the Petitioner Company to file this Affidavit.

IDENTIFIED BY ME- ADVOCATE / CLERK

Solemnly affirmed at Ahmedabad on this 27th day of June, 2023 that the contents of the above affidavit are true to my knowledge and belief (as derived from the records), based on information believed to be true and no part of it is false and nothing material has been concealed therefrom.

For, Reliance Industries Ltd.
Ashish B Shah
Authorised Signatory

DEPONENT

SR.NO. 9360/2023
SOLEMNLY AFFIRMED
BEFORE ME
D.H.SADHWANI NOTARY
DATE 28-6-2023

ANNEXURE - I
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BEFORE THE GUJARAT ELECTRICITY REGULATORY COMMISSION

GANDHINAGAR

Petition No. 2160 of 2022

In the matter of:

Petition under Regulations 4, 5 and 9.1 of the GERC (Procurement of Energy from Renewable Sources) Regulations, 2010 and the GERC (Procurement of Energy from Renewable Sources) (First Amendment) Regulations, 2014 and the GERC (Procurement of Energy from Renewable Sources) (Second Amendment) Regulations, 2018 and the GERC (Procurement of Energy from Renewable Sources) (Third Amendment) Regulations, 2022.

Petitioner:	Reliance Industries Limited
Represented by:	Learned Advocate Mr. Nisarg Desai with Mr. Yash Dadhich

CORAM:

Anil Mukim, Chairman
Mehul M. Gandhi, Member
S. R. Pandey, Member

Date: 30/05/2023

Daily Order

1. The matter was heard on 17.05.2023.
2. Learned Advocate Mr. Nisarg Desai appearing on behalf of the Petitioner submitted that the present Petition is filed for seeking appropriate directions under Regulations 4, 5, and Proviso 5 and 6 of the Regulation 9.1 along with Regulation 12 of the GERC (Procurement of Energy from Renewable Sources) Regulations, 2010 to carry forward the compliance requirement of RPO for the FY 2021-22 within one year from the date which Commission decides, on account of difficulty in complying with the Renewable Purchase Obligation for its plants located in the State of Gujarat, due to certain exigencies beyond the control of the Petitioner.
3. It is further submitted that the Petitioner has earlier filed other Petitions seeking relief for rollover of RPO before the Commission being Petition No.'s 1781 of 2019 for FY 2017-18 to FY 2018-19 and 1792 of 2019 for F Y 2018-19 to F Y 2019-20, and Petition No. 1892 of 2020 for FY 2019-20 to F Y 2020-21 and Petition No. 2007 of 2021 for F Y 2020-21 to F Y 2021-22 which were heard by the bench of Hon'ble member(MMG) and Hon'ble member (SRP)

are pending for decision. In the above petition the Commission has invited comments and suggestions from the Stakeholders by directing the Petitioner to issue public notice and invite comments and suggestions which were complied, by the Petitioner. Similar Procedure needs to follow in the present matter also. Accordingly, the decision of the Commission in this matter with regards to prepublication and invite comment/suggestions from the stakeholders is to be also relevant and applicable as decided in above pending matter.

4. The Petitioner has in the present matter also prayed to relax and waive the provisions of GERC (RPO) Regulations, 2010 and to give effect to and implement the Ministry of Power's circulars so as to ensure the capping of RPO for captive power plant as per the clarification Order dated. 01.02.2019 of the Ministry of Power. The Petitioner has also prayed to revise the RPO target for the year 2021-22 and also to allow fulfillment of solar RPO through purchase of non-solar renewable energy/REC and vise-versa and thereby removing the difficulties in permitting the fulfillment of RPO liability through inter-changeability.

5. We have considered the submissions of the Petitioner. We note that the Petitioner is seeking permission of the Commission to revise RPO Percentage for compliance of FY 2021-22 and also carry forward the same to FY 2022-23 within one year from the date which the Commission decide in terms of the provisions of the GERC (Procurement of Energy from Renewable Sources) Regulations, 2010 as amended from time to time. The Petitioner has further sought relief to provides capping of RPO percentage as per the Orders of Ministry of Power, Government of India for the Petitioner's CPPs units compliances.

6. We note that the present Petition is filed for clarification under Section 86(1) (e) of the Electricity Act, 2003 and GERC (Procurement of Energy from Renewable Energy Sources) Regulations, 2010 and its amendments and for deciding the capping of the Renewable Purchase Obligation (RPO) for CPP units of the Petitioner at Hazira and Dahej. The aforesaid Regulations have been notified by the Commission in exercise of the powers conferred under Sections 61, 66, 86 (1)(e) and 181 of the Electricity Act, 2003 and all powers enabling it in that behalf and further amendments have also been issued from time to time. Since, the present matter pertains to Section 86(1)(e) and aforesaid Regulations, the Commission has the power to decide the same. Hence, we decide to admit the present Petition.

7. We also note that the Petitioner is as such seeking carry forward of its RPO compliance from FY 2021-22 within one year from the date which Commission decide. Hence, we are of the view that it is necessary to hear stakeholders etc. prior to granting the prayers in the present matter for which, the Petitioner is required to give public notice in two daily newspapers, one in English language and one in vernacular language having wide circulation and invite

suggestions/views/comments/objections from the stakeholders on the present Petition and thereafter, the Commission can decide the matter.

8. Accordingly, we hold that a public hearing needs to be conducted to take into consideration the views/comments/suggestions/objections of the stakeholders before deciding the present matter. The Petitioner is, therefore, directed to issue a public notice in one daily Gujarati Newspaper and one English Newspaper having wide circulation in the State/National level stating that they have filed Petition No. 2160 of 2022 before the Commission praying to carry forward the RPO compliance of FY 2021-22 within one year from the date which the Commission decide in respect of fulfilment of Renewable Purchase Obligations (RPO) in terms of Regulation 5, 6 and 9.1 of the GERC RPO Regulations, 2010 as amended from time to time. The Petitioner is also directed to upload the present Petition with all the documents on its website and invite comments and suggestions from the stakeholders on the said Petition on affidavit within 30 days from the date of issuance of public notice. The Petitioner shall also state in the public notice that the stakeholders/objectors shall file their objections/suggestions in the Petition to the Secretary, Gujarat Electricity Regulatory Commission, 6th Floor, GIFT ONE, Road 5C, Zone 5, GIFT City, Gandhinagar - 382355 in five copies along with affidavit in support of their submissions with a direct copy to the Petitioner. Upon receipt of the comments/views/objections/suggestions from the stakeholders, the Petitioner is at liberty to file its reply, if any, to the Commission. The staff of the Commission is also directed to upload the Petition along with all relevant documents on the website of the Commission inviting comments/objections/suggestions/views from stakeholder after a compliance affidavit stating that public notices as directed above are issued in newspaper and uploading of Petition is filed by the Petitioner along with published copy of public notices issued by the Petitioner is provided to the Commission.

9. The staff of the Commission is also directed to inform/issue hearing notice for the present Petition to stakeholders/objectors who file their submissions/objections/comments before the Commission in the present matter.

10. The next date of hearing will be intimated separately.

11. We order accordingly.

Sd/-	Sd/-	Sd/-
(S.R. Pandey)	**(Mehul M. Gandhi)**	**(Anil Mukim)**
Member	**Member**	**Chairman**

Place: Gandhinagar
Date: 30/05/2023.

ANNEXURE-II [collectively]

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જાહેર ચેતવણી/નોટિસ તથા જાહેર ચેતવણીનો ખુલાસારૂપી જવાબ મોજે : ગ્યાસપુર, તા. વટવા, જી. અમદાવાદ

અમો એસ. વી. ઠાકોર, એડવોકેટ તે અમારા અસીલ મહંમદ ઈસ્માઈલ મહંમદ હનીફ શેખનાની સુચના અને ફરમાશથી આથી મોહંમદતલ્હા ઝાહીદહુસેન મનસુરીનાએ તા. ૧૧-૦૬-૨૦૨૩ ના રોજ ગુજરાત સમાચાર દૈનીક પત્રકમાં એડવોકેટશ્રી મૌલીક એસ. શેઠ, ઠે. ૬૦૧-૬૦૪, પેટ્રોન, પંડીત દીનદયાલ હોલ પાસે, રાજપથ-રંગોલી રોડ, અમદાવાદ-૩૮૦૦૫૪ થકી પ્રસીધ્ધ કરાવેલ જાહેર ચેતવણી કે જે રજીસ્ટ્રેશન ડીસ્ટ્રીકટ સબ ડીસ્ટ્રીકટ અમદાવાદ ૫(નારોલ) ના વટવા તાલુકાના મોજે ગ્યાસપુરની સીમના રે. સર્વે બ્લોક નં. ૨૪૭/બ/૪/૧ ની ૧૩૫૦ ચો. મી. બીનખેતીની જમીનની મીલકત કે જેને અત્રે "સદર જમીન" એ રીતે સંબોધેલ છે તે જાહેર ચેતવણી તથા તેમા જણાવેલ તમામ વિગતો શરૂથી જ ખોટી અને કાયદાની જોગવાઈઓથી વીરૂધ્ધની અને ગેરકાયદેસરની હોય તેથી અમારા અસીલ તેને કોઈપણ પ્રકારે કે સંજોગોમાં કબુલ રાખતા નથી અને તેનો સ્પષ્ટપણે ઈન્કાર કરે છે.

સદર વાદગ્રસ્ત જાહેર ચેતવણીમાં સદર જમીન પરત્વે મજકુર મોહંમદતલ્હા ઝાહીદહુસેન મનસુરી કે જેઓને મજકુર પ્રકરણે સરળતા ખાતર "વેચાણ આપનાર" એ રીતે સંબોધન કરેલ છે તેવા વેચાણ આપનારનાનો કોઈપણ પ્રકારનો કોઈ હક્ક કે અધીકાર પોષાતો ન હોવા છતાં તેમજ સદર જમીનના રેવન્યુ રેકર્ડમાં પણ તેઓના નામ માલીક કે કબજેદાર તરીકે ચાલી આવેલ ન હોવા છતાં તે અંગે ગેરકાયદેસર અને ખોટી રીતે તેઓની સંયુક્ત માલીકી કબજા ભોગવટાની હોવાની ખોટી અને ગેરકાયદેસરની અને સરકારી રેકર્ડથી વીરૂધ્ધની વિગતો જણાવી અમારા અસીલની બદનક્ષી સ્વરૂપની ગેરકાયદેસરની રજુઆતો કરવામા આવેલ હોય તેથી અમારા અસીલ તેનો સ્પષ્ટપણે ઈન્કારી કરી તે અંગે કાયદેસરની કાર્યવાહી કરવાની તજવીજમાં જ છે જેની લાગતા વળગતા તમામે કાળજીપુર્વક નોંધ લેવી.

વધુમાં અમારા અસીલની કાયદેસરના માલીકી કબજા ભોગવટાના હક્કો અને અધીકારોવાળી જમીનને મજકુર મોહંમદતલ્હા ઝાહીદહુસેન મનસુરી વેચાણ આપનારનાએ સરકારી રેકર્ડથી વીરૂધ્ધ પબ્લીકલી તેઓની માલીકીની કબજાવાળી અમારા અસીલની જાણકારી બહાર અને સંમતી વગર બીનહકકે અને બીનઅધીકારે પ્રસીધ્ધ કરાવી અમારા અસીલના કાયદેસરના માલીકી કબજા ભોગવટાના પોષાતા હક્કો ડુબાડવાનુ ગંભીર પ્રકારનુ બદનક્ષી સહીતનુ ગુનાહીત કૃત્ય કરેલ છે જેની સામેની કાયદેસરની કાર્યવાહીના પરીણામોની જવાબદારી સદર વેચાણ આપનારાઓની તથા લાગતા વળગતાઓની રહેશે તે નકકી સમજવુ અને તેથી સદર જાહેર ચેતવણી બીનશરતી પરત ખેંચતી યોગ્ય અને કાયદેસરના સ્વરૂપમાં પબ્લીકલી પ્રસીધ્ધ કરાવવા કાળજીપુર્વક નોંધ લેશો.

મજકુર મોહંમદતલ્હા ઝાહીદહુસેન મનસુરીનાએ કોઈપણ પ્રકારે કોઈ કાર્યવાહી કરવામા આવેલ નથી અને તે રીતે મજકુર મોહંમદતલ્હા ઝાહીદહુસેન મનસુરીનાએ રૂલ ઓફ એસ્ટોપલની રૂઈએ અમારા અસીલની તરફેણનો ખરો અને કાયદેસરનો રજી. વેચાણ દસ્તાવેજ તમામ રીતે કબુલ મંજુર અને સ્વીકૃત કરેલ છે જેની લાગતા વળગતા તમામે કાળજીપુર્વક નોંધ લેવી.

સદર જમીનના અમારા અસીલની સદર રજી. વેચાણ દસ્તાવેજના કામે સીટી ડે. કલેકટર (ઈસ્ટ) ની કચેરી તરફથી ગુજરાત અશાંત ધારા હેઠળ જરૂરી પરવાનગી પણ આપવામા આવેલ છે જેની સામે પણ મજકુર વેચાણ આપનાર મોહંમદતલ્હા ઝાહીદહુસેન મનસુરીનાએ તમામ રીતે અને તમામ પ્રકારે સહમતી અને મંજૂરીઓ આપેલ છે અને અન્ય કોઈએ કોઈપણ પ્રકારે કોઈ વાંધો તકરાર લીધેલ નથી અને તે રીતે અમારા અસીલની તરફેણના કાયદેસરના રજી. વેચાણ દસ્તાવેજના કામે જરૂરી તમામ પરવાનગીઓ મેળવવામા આવેલ હોય અને તેવા ખરા અને કાયદેસરના માલીકી હકકો અને અધીકારો સહીત સદર જમીનના રેવન્યુ રેકર્ડમાં અમારા અસીલનુ નામ કાયદેસરના માલીક કબજેદાર ભોગવટેદાર તરીકે દાખલ થયેલ છે જે હાલમાં જારી આવેલ છે જેની લાગતા વળગતા તમામે કાળજીપુર્વક નોંધ લેવી.

સદર વાદગ્રસ્ત ચેતવણીમાં જણાવ્યા મુજબ અમારા અસીલની તરફેણનુ કુલ મુખત્યારનામુ ખોટુ અને ગેરકાયદેસરનુ હોવાનુ તથા તેના આધારે અમારા અસીલે બોગસ રીતે રજી. વેચાણ દસ્તાવેજ કરાવેલ હોવાની અને તે રદ થાને કેન્સલ થવાને પાત્ર હોવાની તેમજ વાદગ્રસ્ત જાહેર ચેતવણીવાળા ઈસમોની સ્વીકૃતી ન હોવાની તેમજ સદર જમીન પચાવી પડાવી લેવાના બદઆશયથી બોગસ પાવર ઓફ એટોર્નીથી વેચાણ દસ્તાવેજ કરાવી લીધેલ હોવાની તેમજ તે અંગેની સલાહ મળ્યા બાદ કાર્યવાહી હાથ ધરેલ હોવાની સઘળી વિગતો માત્ર તથાકથીત કથનો આવેલ હોય જે કાયદાની જોગવાઈઓ આધીન કોઈ કાયદેસરતા પ્રાપ્ત થતી ન હોવા ઉપરાંત તેવા ગેરકાયદેસરના કથનો આધીન અમારા અસીલની શાખ, આબરૂ તથા ધંધાકીય સ્ટેટસને બદનક્ષી સ્વરૂપ હોય તેથી તે અંગે થયેલ નુકશાન અંગે અમારા અસીલ લાગતા વળગતા તમામની સામે કાયદેસરની કાર્યવાહી કરવાની તજવીજમાં જ છે જેની લાગતા વળગતા તમામે કાળજીપુર્વક નોંધ લેશો.

સદર જમીન અંગે મજકુર મજકુર વેચાણ આપનાર મોહંમદતલ્હા ઝાહીદહુસેન મનસુરીનાએ સને ૨૦૧૦ ના અરસામા કુલ મુખત્યારનામુ તથા અશાંત ધારા હેઠળ વેચાણ અંગેની મંજુરી તથા અમારા અસીલની તરફેણના સને ૨૦૧૮ ના અરસામા રજી. વેચાણ દસ્તાવેજ અને તે અંગે અશાંત ધારા હેઠળ જરૂરી પરવાનગી સક્ષમ રેવન્યુ અધીકારી તરફેથી મેળવવાના કામે તથા સદર જમીનના રેવન્યુ રેકર્ડમાં અમારા અસીલનુ નામ દાખલ કરતી વેચાણ નોંધ નં. ૨૫૭૮ સામે સમગ્રપણે કોઈ વાંધો કે તકરાર લીધા સીવાય

...ની જાણકારીમાં અને ...સદર જમીન અંગે તા. ...-૨૦૧૮ ના રોજ અનુ. નં. ...૨૦૧૮ અમારા અસીલની ...ખરો અને કાયદેસરનો ...ચાણ દસ્તાવેજ કરવામા ...જેની રૂઈએ સદર ...ની જમીન પરત્વે અમારા ...કાયદેસરના માલીકી ...ભોગવટાના હકકો અને ...પ્રાપ્ત થયેલ છે જેની ...ર્વક નોંધ લેશો.

...ર જમીનના અમારા ...ી તરફેણના સદર રજી. ...દસ્તાવેજની રૂઈએ સદર ...પરત્વે અમારા અસીલ ...ના માલીકી કબજા ...ના હકકો અને અધીકારો ...આવેલ હોવાનુ કાયદાની ...ન જોગવાઈઓ અનુસાર ...સાબીત થાય છે અને ...અસીલની તરફેણના તેવા ...કાયદેસરના રજી. વેચાણ ...ની રૂઈએ અમારા અસીલે ...મીનના રેવન્યુ રેકર્ડમાં ...નોંધ નં. ૨૫૭૬ દાખલ ...અને જે વેચાણ નોંધ સક્ષમ ...અધીકારીએ કાયદેસરની ...અનુસારીને ક્લમ - ...) મુજબની નોટીસ આપ્યા ...ઈપણ જાતની તકરાર ...વીના તકરારે પ્રમાણીત ...કોવાથી તે રીતે સદર ...રેવન્યુ રેકર્ડમાં અમારા ...નામ કાયદેસરના માલીક ...તરીકે કાયદેસર રીતે ...વા પામેલ છે જેને મજકુર ...આપનાર ઝાહીદહુસેન ...ભાઈ મન્સુરી તથા ...લીમ એહમદભાઈ ...ાઓ સહીત હરકોઈ અન્ય ...આજદીન સુધી કોઈ સીવીલ ...પ્રકારની કોઈપણ પ્રકારે ...ર્યવાહી કરવામા આવેલ ...ને તે રીતે મજકુર ...સેન એહમદભાઈ મન્સુરી ...હંમદસલીમ એહમદભાઈ ...ાએ રૂલ ઓફ એસ્ટોપલની ...મારા અસીલની તરફેણનો ...ને કાયદેસરનો રજી. ...સ્તાવેજ તમામ રીતે કબુલ ...ને સ્વીકૃત કરેલ છે જેની ...વળગતા તમામે ...ર્વક નોંધ લેવી.

...ર જમીનના અમારા ...ી સદર રજી. વેચાણ ...ના કામે સીટી ડે. કલેકટર ...ી કચેરી તરફથી ગુજરાત ...ધારા હેઠળ જરૂરી ...ી પણ આપવામા આવેલ ...સામે પણ મજકુર વેચાણ ... ઝાહીદહુસેન ...ભાઈ મન્સુરી તથા ...લીમ એહમદભાઈ ...ાએ કે અન્ય કોઈએ ...પ્રકારે કોઈ વાંધો તકરાર ...થી અને તે રીતે અમારા ...ી તરફેણના કાયદેસરના ...ચાણ દસ્તાવેજના કામે ... તમામ પરવાનગીઓ ...મા આવેલ હોય અને તેવા ...ને કાયદેસરના માલીકી ...ને અધીકારો સહીત સદર ...રેવન્યુ રેકર્ડમાં અમારા ...નામ કાયદેસરના માલીક ...ભોગવટેદાર તરીકે ...થયેલ છે જે હાલમાં જારી ...છે જેની લાગતા વળગતા ...ળજીપુર્વક નોંધ લેવી.

...વાદગ્રસ્ત ચેતવણીમાં ...મુજબ અમારા અસીલની ...કુલ મુખત્યારનામુ ખોટુ

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ટેન્ડર નં. ૧૬/૨૦૨૩-૨૪ અ.મ્યુ.કો. ખાતે ૪ બીન કન્સેપ્ટ વાળા લીટરબીન એંત્રેનાં ટેન્ડર સ્પેસીફીકેશન તથા શરતો મુજબ સપ્લાય કરવા અંગે

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જાહેર નોટિસ

આથી જાહેર નોટીસ આપી જાહેર જનતાને જણાવવાનું કે, ડીસ્ટ્રીક્ટ આણંદ સબ ડીસ્ટ્રીક્ટ અને તાલુકા તારાપુરના મોજે ગામ વરસડાની સીમના ખાતા નંબર ૯૮૪ ના બ્લોક નંબર ૯૦૬ (જૂના રેવન્યુ સર્વે નંબર ૧૩૬૭) ની કુલ હે.આરે.ચો.મી. ૧-૦૪-૨૧ આકાર રૂા.૬-૦૦ પૈસા ની જુની શરતની ખેતીની જમીનમાંથી કાર્યપાલક ઈજનેર માર્ગ અને મકાન વિભાગ, આણંદની હે.આરે.ચો.મી. ૦-૦૬-૫૮ ની જુની શરતની ખેતીની જમીન બાદ કરતા બાકી રહેતી હે.આરે.ચો.મી. ૦-૯૭-૬૩ ની જુની શરતની ખેતીની જમીન., સલીમભાઈ અલીમહંમદભાઈ વોરાની કુલ સ્વતંત્ર માલીકીપણા અને કબજા ભોગવટાની તથા બોજા રહીત હોવાનું જણાવી અમારા અસીલને વેચાણ આપવાનું નક્કી કરેલ છે., અને અમારા અસીલે અમારી પાસે સદર જમીનના ટાઈટલ ક્લીયરન્સ સર્ટીફીકેટની માંગણી કરેલ છે.

સદર જમીન ઉપર અન્ય કોઈનો કોઈપણ પ્રકારનો લાગભાગ, હક્ક હીત, હીસ્સો, દાવો, અલાખો, બોજો, ચાર્જ, લીયન હોય તો આ જાહેર નોટીસ પ્રસિધ્ધ થયેથી દિન-૭ માં અમોને લેખિત પુરાવાઓ સહીત રજી.એ.ડી.થી નીચે જણાવેલ સરનામે જાણ કરવી અને જો તેમ કરવામાં કસુર થશે તો મુદત વીતે સદર જમીનમાં અન્ય કોઈનો કોઈપણ પ્રકારનો લાગભાગ, હક્ક, હીત, હીસ્સો, દાવો, અલાખો, બોજો, ચાર્જ, લીયન નથી અને જો હોય તો તે જતો કર્યો છે તેમ સમજી સદર જમીનનું ટાઈટલ ક્લીયરન્સ સર્ટીફીકેટ ઈસ્યુ કરવામાં આવશે., અને ત્યારબાદ અમારા અસીલ સદર જમીન વેચાણ લેવાની કાર્યવાહી હાથ ધરશે., અને ત્યારબાદ કોઈની કોઈપણ પ્રકારની તકરાર ચાલશે નહી, તેની જાહેર જનતાએ નોંધ લેવી.

અમદાવાદ,તા:૧૬/૬/૨૦૨૩

એડવ ઓન. શાહ એસોસીએટ્સ
સૌકિન રાજેશભાઈ શાહ
એડવોકેટ

૪૦૮, શાંતિમોલ, નવરંગ ટાવર સામે, સાર્થક સ્કુલ પાસે, સત્તાધાર ચાર રસ્તા પાસે, ઘાટલોડીયા, અમદાવાદ. ફોન નં.- ૨૭૪૮૬૩૬૩, ૨૭૪૫૬૩૬૩

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જાહેર નોટિસ

મેસર્સ રિલાયન્સ ઇન્ડસ્ટ્રીઝ લિમિટેડ (આર.આઇ.એલ.), પુરવઠાની ઉપલબ્ધિની મર્યાદાઓ અને આર.આઇ.એલ.ના કાબુ બહારના અન્ય કારણોને લીધે અને નાણાકીય વર્ષ 2021-22થી આગળના વર્ષ માટે પૂર્તતાની જરૂરિયાતોને કેરી ફોરવર્ડ કરવા માટે, ગુજરાતમાં વિવિધ જગ્યાએ આવેલા તેના પ્લાન્ટ માટે પુનઃપ્રાપ્ય ઊર્જા ખરીદીની જવાબદારીના પાલનમાં મુકેલીના સંબંધમાં, ગુજરાત વિદ્યુત નિયંત્રણ આયોગ (જી.ઇ.આર.સી.) (પુનઃપ્રાપ્ય ઊર્જાના સ્ત્રોતમાંથી ઊર્જાની પ્રાપ્તિ) વિનિયમ 2010-ના વિનિયમ 4, 5 અને 9.1 ના પરંતુક 5 અને 6 હેઠળ અને (જી.ઇ.આર.સી.) (વ્યાપાર વિનિયમોનું સંચાલન)ના વિનિયમો 84 હેઠળ યોગ્ય દિશાનિર્દેશો મેળવવા માટે માનનીય ગુજરાત વિદ્યુત નિયંત્રણ આયોગ (જી.ઇ.આર.સી.) સમક્ષ મેસર્સ રિલાયન્સ ઇન્ડસ્ટ્રીઝ લિમિટેડએ ફાઇલ કરેલ પિટિશન નંબર 2160/2022માં હિતધારકો પાસેથી સૂચનો/અભિપ્રાયો/ટિપ્પણો/વાંધા મંગાવે છે. આર.આઇ.એલ. ઊર્જા મંત્રાલય, ભારત સરકારે બહાર પાડેલ તારીખ 01-02-2019 અને 01-10-2019ના પુનઃપ્રાપ્ય ઊર્જાના સ્ત્રોતોને સંબંધિત RPO સંબંધી સ્પષ્ટીકરણ હુકમોથી ઊર્જા મંત્રાલય મારફત ભારત સરકારના દિશાનિર્દેશો મેળવવા ધારે છે અને ઊર્જા મંત્રાલય, ભારત સરકાર મારફતે તેનું પાલન કરાવવા અને તેના લાભો આર.આઇ.એલ.ને અપાવવા ઇચ્છે છે. નામદાર (GERC) એ તારીખ 30-05-2023ના હુકમથી જાહેર નોટિસ આપીને હિતધારકો પાસેથી ટિપ્પણો/વાંધા/સૂચનો મંગાવવાનો આર.આઇ.એલ.ને આદેશ કર્યો છે. સદરહુ અપીલ અને નામદાર GERC ના તારીખ 30-05-2023ના હુકમ સંબંધિત તમામ દસ્તાવેજો આર.આઇ.એલ.ની વેબસાઇટ https://www.ril.com/InvestorRelations/Petitions.aspx ઉપર અને કમિશનની વેબસાઇટ ઉપર પણ અપલોડ કરેલા છે. હિતધારકો આ જાહેર નોટિસ બહાર પડ્યા તારીખથી 30 દિવસની અંદર, સીધા જ આર.આઇ.એલ.ને નીચે આપેલ સરનામે અને સચિવ, ગુજરાત ઇલેક્ટ્રિસિટી રેગ્યુલેટરી કમિશન, 6ઠ્ઠો માળ, બ્લિસ્ક વન, રોડ 5 સી, ઝોન 5, બ્લિસ્ક સિટી, ગાંધીનગરને પણ 5 નકલો/સેટમાં સદરહુ અપીલમાં તેમની રજૂઆતના સમર્થનમાં સોગંદનામાં સાથે તેમના સૂચનો/અભિપ્રાયો /ટિપ્પણો/વાંધા રજૂ કરી શકશે.

અનંત કાપસે
સીનિયર જનરલ મેનેજર
"વૃજ", ઓરીઓન લોન પાસે, રાજપથ-રંગોલી રોડ,
ઓફ સિંધુભવન રોડ, બોડકદેવ, અમદાવાદ – 380 054

તારીખ: 16.06.2023

કોયદેસરના દસ્તાવેજી પુરાવાનો ખોટા અને ગેરકાયદેસરના અર્થઘટનો કરી સાચા અને અને ખરા દસ્તાવેજી પુરાવાનો ખોટા હોવાની ગેરકાયદેસરની તકરારો લઈ તેનો ખોટો ઉપયોગ કરવાનો ગેરકાયદેસરનો પ્રયત્ન કરી ગંભીર પ્રકારનુ ગુનાહીત કૃત્ય કરેલ હોય

11. સદર વાદગ્રસ્ત જાહેર ચેતવણીમાં જણાવેલ દસ્તાવેજી પુરાવાના સમર્થન વગરની તથાકથીત તમામ ખોટી અને ગેરકાયદેસરની વિગતોનો અત્રે ખરી અને કાયદેસરની હકીકતે અમારા અસીલ તરફથી પ્રત્યુત્તર જાહેરમાં આપવામા આવેલ છે

669

COURT SLAMS 'PSEUDO-SECULAR MEDIA'

stabbed to death, police said, by a 17-year-old girl who ended "re- Indian Express, "We have appre- hended the girl and Parth ing in the FIR, "At around 11.30 pm on Thursday, my son was at

Farm labourer

Apartment in the Poonamnagar area."

ower theft linked

a will start from Shri Temple at Jamalpur Vaishya Sabha – GoI

(Yukta Ahuja is an intern with The Indian Express; with ENS Ahmedabad)

SURAT MUNICIPAL CORPORATION (SMC)

"Surat Mahanagar Seva Sadan"
Gordhandas Chokhawala Marg, Muglisara, Surat - 395003, Gujarat

Bid is invited by SMC online on https://smc.nprocure.com from the bidder meeting the basic eligibility criteria as stated in the respective bid document for below work.

Tender/ RFP No.	Name of Work	Online Bid End Date, Bid Fee, EMD & Pre Bid Conference
DC-ISD-Network-FGFA-02-2023	Bid for Subscription & Warranty Extension for FortiGate & FortiAnalyzer	**Online Bid End Date :** Till 23/06/2023 up to 18:00 hrs **Bid Fee:** Rs. 1,770/- (Rs.1,500+ 18% GST) **EMD:** Rs. 40,000/- **Pre Bid Conference:** Post queries to itman@suratmunicipal.org on or before 19/06/2023, 16:00 hrs.

Please visit https://smc.nprocure.com for more details.

No: P.R.O./157/2023-24 Deputy Commissioner
Date: 15/06/2023 Surat Municipal Corporation

Reliance Industries Limited
Growth is Life

PUBLIC NOTICE

M/s Reliance Industries Ltd (RIL) invites suggestions/ views/ comments/ objections from the stakeholders in Petition No 2160 of 2022 filed by RIL before Hon'ble Gujarat Electricity Regulatory Commission to seek appropriate directions under Regulation 4, 5 as well as proviso 5 and 6 of Regulation 9.1 along with Regulation 12 of Gujarat Electricity Regulatory Commission(GERC) (Procurement of Energy from Renewable Energy Sources), Regulation 2010 to carry forward the compliance requirement of RPO for the FY 2021-22, on account of difficulty in complying with the Renewable Purchase Obligation (RPO) for RIL's plants located in Gujarat, due to exigencies beyond the control of the Petitioner. RIL also seeks to get the directives of the Government of India issued through Ministry of Power vide their "Clarification orders related to Renewable Purchase Obligation (RPO)" dated 01.02.2019 and 01.10.2019 be implemented and benefits thereof be given to RIL. Hon'ble GERC vide order dated 30.05.2023 has directed RIL to call for comments/ objections/ suggestions from the stakeholders by issuing public notice. All the relevant documents of the said petition and GERC order dated 30.05.2023 are uploaded on https://www.ril.com/InvestorRelations/Petitions.aspx and also on website of Commission. The stakeholders can file their suggestion/ views/ comments/ objections along with affidavit in support of their submission in the said petition within 30 days from the issuance of this public notice directly to RIL at the address given below and also to the Secretary, Gujarat Electricity Regulatory Commission, 6th Floor, GIFT ONE, Road 5C, Zone 5, GIFT City, Gandhinagar, in 5 copies/sets.

Anant Kapse
Sr. General Manager - Reliance Industries Limited,
VRAJ, Nr. Orion Lawn, Rajpath-Rangoli Road,
Date: 16.06.2023 Off Sindhu Bhavan Road, Bodakdev, Ahmedabad - 380054

NOTICE

by given that the Share Certificates as detailed below issued by Sun Industries Limited of Face Value Re.1/- each have been lost/ misplaced/ stolen d Shareholder(s) as details herein below.:

Registered der(s):	Folio No(s).:	Distinctive Numbers: From - To	Certificate Nos.:	No. of Equity Shares:
KUMAR	J00206	10885501-10885600	1181	100
A TRIVEDI		16168716-16168815	86213	100
		16168816-16168915	86214	100

ereby cautioned against purchasing or dealing in any way with the above referred es. Any person(s) who has/have a claim in respect of the said equity shares ch claim or claims with Link Intime India Private Limited, C 101, 1st Floor, 247 g, Vikhroli West, Mumbai - 400083 within 7 days from the date of publication of which no claim will be entertained and the Company will proceed to issue ates in respect of the said equity shares.

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MAHANAGAR LUCKNOW 226006
E 2023
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Coal

ndia

stern Coalfields Limited

d as per the details mentioned below:

ll as on the date of interview, be employed in a regular of the following:-
or in the Board of a CPSE);
vices;
0 crore or more;

icalendar year in which the post is advertised shall be

ccountant or a full time MBA/PGDM course having University/Institution. Preference would be given to

rience at a senior level during the last ten years in the anization of repute. Preference would be given to Coal/ Steel/ Mining/ Energy sector will be an added

e of pay as per job description.

r in Government of India or carrying equivalent scale

or equivalent rank in Navy/Air Force on the date of

e Union and the All India Services, will be eligible for

el immediately below the Board level on the date of

o the date of superannuation i.e 60 years whichever

d with a CV of the applicant, along with a brief note, career.
hall submit their applications, through proper channel f the Ministry of Coal (http://www.coal.nic.in).
gned shall be 3.00 PM of 21st day from the date of

eligibility and qualifications/experience criteria

.nic.in

Rajender Prasad Road, New Delhi-110001

CENTRUM Home Loans
Aasha hoilkar ghar banaye

Corporate & Registered Office : Unit No. 801, Centrum House, CST Road, Vidyanagri Marg, Kalina Santacruz (East), Mumbai - 400098, CIN No. U65922MH2016PLC273826

DEMAND NOTICE

Under Section 13(2) of the Securitisation And Reconstruction of Financial Assets And Enforcement Of Security Interest Act, 2002 read with Rule 3 (1) of the Security Interest (Enforcement) Rules, 2002.

The undersigned is the Authorised Officer of **Centrum Housing Finance Ltd** under Securitisation And Reconstruction Of Financial Assets And Enforcement of Security Interest Act, 2002 (the said Act). In exercise of powers conferred under Section 13(12) of the said Act read with Rule 3 of the Security Interest (Enforcement) Rules, 2002, the Authorised Officer has issued Demand Notices under section 13(2) of the said Act, calling upon the following Borrower/s (the "said Borrower"), to repay the amounts mentioned in the respective Demand Notice/s issued to them that are also given below.

In connection with above, Notice is hereby given, once again, to the said Borrower to pay to **Centrum Housing Finance Ltd,** within 60 days from the publication of this Notice, the amounts indicated herein below, together with further interest and other charges till date of repayment of the dues in full. as detailed in the said Demand Notices, from the dates mentioned below till the date of payment and/or realization, payable under the loan agreement read with other documents/writings, if any, executed by the said Borrowers. As security for due repayment of the loan, the following assets have been mortgaged to **Centrum Housing Finance Ltd** by the said Borrowers respectively.

Sr. No.	Name of the Borrower(s)/ Co-Borrower(s)/ Guarantor(s) / Loan Account No./Branch	Total Outstanding Dues (Rs.)	NPA Date / Sec. 13(2) Notice Date / FCL Date	Description of secured asset (immovable property)
1	**Dharmendra Hematlal Tank / Yagnik Hematbhai Tank / Champaben Hematbhai Tank/ RAJJM18002467 / Rajkot**	**Rs.1618619/-** (Rupees Sixteen Lakh Eighteen Thousand Six Hundred Nineteen Only)	11-05-2023 09-06-2023 21-06-2023	**Sub Plot No. 83/1, Adm. 52.01 Sq. Mtr., Tirupati Park 1, Near Vishal Complex, Off Bedi Bandar Road Dhinchda, Dist. & Sub-District - Jamnagar, Jamnagar - 361006, Gujarat. Boundaries:- East-** Sub-Plot **No. 83/3 and 83/7, West-** Plot No. 32, **North-** Plot No. 82, **South-** 7.5 Mtr. wide Road
2	**Yasif Abdulbhai Aamdani / Hasina Yasif Amdani / RAJJM19003451 / Rajkot**	**Rs.728961/-** (Rupees Seven Lakh Twenty Eight Thousand Nine Hundred Sixty One Only)	11-05-2023 09-06-2023 21-06-2023	R S No. 662, Plot No. 232, Sub Plot No. 232/7, Rabani Park, Opp. Kalawadgate, Morkanda Road, Jamnagar - 361001,Gujarat. **Boundaries:- East-** 7.5Mtr. Road ,**West-** Common Plot No. C, **North-** Sub Plot No. 232/6, **South-** Sub Plot No. 232/8
3	**Pintu Dalabhai Chavda / Haresh Dalabhai Chavda / Manjulaben Dalabhai Chavda / RAJRA21005613 / Rajkot**	**Rs.766092/-** (Rupees Seven Lakh Sixty Six Thousand Ninety Two Only)	11-05-2023 09-06-2023 21-06-2023	Survey No. 146/P/11 and 146/P/11/P/1, Type B, Sub Plot No. 2/1, Block No. 4 Khodal Residency, near Aadarsh Residency, Off. Pipaliya Pal Road, Near Shapan Pal, Pipaliya, Lodhika, Rajkot, Rajkot - 360311, Gujarat.,**Boundaries:-East-** Road, **West-** Open Land, **North-** Block No. 3, **South-** Block No. 4
4	**Hina Roshankumar Upadhyay / Roshan Kishanbhai Upadhyay / STVST18001144 / SURAT**	**Rs.1199031/-** (Rupees Eleven Lakh Ninety Nine Thousand Thirty One Only)	11-05-2023 09-06-2023 21-06-2023	Plot No. 323, Adm. 44.65 Sq. Mtr.,Vishwas Residency, land bearing block no. 322 (originally it was block no. 322, 323 and 324, after consolidation at was given block no. 322), **Kuvarada, District - Surat, Sub District** - Mangrol, Surat -394120, Gujarat. **Boundaries:- East** : Road, **West** : Plot no. 350, **North** : Plot no. 322, **South** : Plot no. 324
5	**Suraj Gobardhanbhai Gupta / Jasodaben Gobardhanbhai Gupta / STVST19003755 / SURAT**	**Rs.912083/-** (Rupees Nine Lakh Twelve Thousand Eighty Three Only)	11-05-2023 09-06-2023 22-06-2023	Plot No.49, Adm. 40.14 Sq. Mtr., Ranchod Nagar Society, situated on the land bearing Block No 332/A (Block Nos 332/A and 333/A its Rev. S. Nos. 352/1, 352/2,353,354 and 355) Village Kunverda, Nr. Takshilla International School, Sub District & Taluka - Mangrol,District - Surat, Surat-394120, Gujarat. **Boundaries:- East** : Plot No. 50, **West** : Plot No 48, **North** : Plot No. 77,**South** : Society Road

If the said Borrowers shall fail to make payment to **Centrum Housing Finance Ltd** as aforesaid, **Centrum Housing Finance Ltd** shall proceed against the above secured assets under Section 13(4) of the Act and the applicable Rules, entirely at the risks of the said Borrowers as to the costs and consequences. The said Borrowers are prohibited under the Act from transferring the aforesaid assets, whether by way of sale, lease or otherwise without the prior written consent of **Centrum Housing Finance Ltd.** Any person who contravenes or abets contravention of the provisions of the said Act or Rules made thereunder, shall be liable for imprisonment and/or penalty as provided under the Act.

Place : Gujarat
Date : 17.06.2023

Sd/-
Authorised Officer
For Centrum Housing Finance Ltd

BEFORE THE GUJARAT ELECTRICITY REGULATORY COMMISSION,

GANDHINAGAR

PETITION NO. 216 **OF 2023**

Reliance Industries Limited .... Petitioners

Versus

— .... Respondents

G.E.R.C.
Legal 30/6
Inward No. 3080
Date : 30 JUN 2023

VAKALATNAMA

We, Reliance Industries Limited;
do hereby Nominate, authorize and appoint

GANDHI LAW ASSOCIATES
ADVOCATES & SOLICITORS
1504/5/6, Tower-A, Navratna Corporate Park, Iscon-Ambli Road, Near Ashok Vatika, Ambli, Ahmedabad – 380 058

Represented by Keyur D. Gandhi, Nirav Joshi, Nisarg Desai, Raheel S. Patel, Kunal J. Vyas, Divya Pravalikha Batthini, Aalay Shah, Devarsh Trivedi and Divyesh Bais, Yash Dadhich, Vinayak Goswamy and Hatim Tinwala hereinafter called the Advocates, to be my/our Advocates in the above noted matter and authorize them: -

To act, appear and plead in the above noted matter in this Hon'ble Court and/or any Quasi-Judicial Authority or any other Court where the same may be tried or heard or in the appellate courts.

To sign, file and present representations, pleadings, applications, appeals, cross objections or petitions for execution, review, revision, restoration, withdrawal, compromise or other petitions, replies objections or affidavits or other documents as may be deemed necessary or proper for the prosecution of the said case at all stages.

To file and take back documents.

To withdraw or compromise the said case of submit to arbitration any differences or disputes that may arise in or touching upon any matter relating to the said case.

To take out execution proceedings.

To deposit, draw and receive moneys, cheques and grant receipts therefore and to do all things and acts which may be necessary to be done for the progress and in the course of the prosecution of the said case.

To appoint, instruct any other legal practitioner, authorizing him to exercise the power and authorities hereby conferred upon the advocate/s;

AND we agree to ratify all acts done by the aforesaid advocate/s in pursuance of this authority.

Dated this the 30th day of June, 2023.

Nisarg Desai
Accepted
Contact Details for service:

Phone : +919879411067
Email: efiling@gandhilaw.in

For, Reliance Industries Ltd.
Ashish B Shah
Authorised Signatory

Client(s) Signature : _____
Name : _____
Designation : _____
Company Seal : _____