

GEICO

GUJARAT ENERGY TRANSMISSION CORPORATION LIMITED

STATE LOAD DESPATCH CENTRE, GOTRI, VADODARA

(CIN): U40100GJ1999SGC036018

Tel: (0265) 2352103, 2322206 Fax: (0265) 2352019, 2356469 Website: www.sldcguj.com,

Email: acesldc.getco@gebmail.com, seopsldc.getco@gebmail.com

No: SLDC/Petition/2022/Hybrid/Storage/484

Date: 01.03.2022

To,
The Secretary,
Gujarat Electricity Regulatory Commission,
6th Floor, GIFT One Road 5C, Zone 5, GIFT CITY
Gandhinagar - 382355, Gujarat

Subject:

Petition under Section 181 read with 32(3), 86(1)(h) of the Electricity Act, 2003 and Regulation 19 of Notification No. 1 of 2019 for amendment of the Notification No. 1 of 2019, namely, the Gujarat Electricity Regulatory Commission (Forecasting, Scheduling, Deviation Settlement and Related Matters of Solar and Wind Generation Sources) Regulations, 2019 and Procedure on Forecasting, Scheduling, DSM & related matters Solar and Wind generation sources Regulation 2019.

Respected Sir,

With reference to the above subject, please find the petition for Amendment Of Gujarat Electricity Regulatory Commission (Forecasting, Scheduling, Deviation Settlement And Related Matters Of Solar And Wind Generation Sources) Regulations, 2019 And The Implementation Procedure, in five copies (One original + four photo copies).

The Petition fees of RS. 10,000/- (Rupees Ten Thousand Only) is paid through BOI UTR No. BKIDN22059183249 Dated. 28.02.2022.

This is for kind information and needful action please.

Thanking you,

Yours faithfully,
For State Load Dispatch Centre-Gujarat,


(A B. Rathod)

Additional Chief Engineer (SLDC)

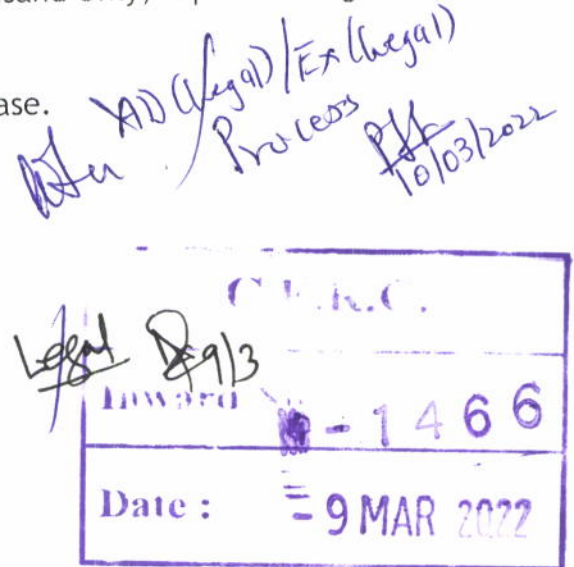
Enclosure: As above

Copy to:

Qualified Co-ordinating Agency or QCA

1 Unilink Engineering Corporation Pvt. Ltd.
A -401, Siddhivinayak Towers,
Near Kataria Arcade, B/H DCP Office,
S. G. Highway, Makarba,
Ahmedabad - 380051, Gujarat

2 REConnect Energy Solution Pvt. Ltd.
173, A Sector, Scheme No.54,
Indore - 452010, Madhya Pradesh



- 3 Manikaran Analytics Limited
3/A, Aastha, 460, E. M. Bypass
Kolkata - 700707, West Bengal
- 4 Kreate Technologies LLP
1003, 10th Floor, Antriksh Bhawan,
22KG Marg, Connaught Place,
New Delhi - 110001
- 5 Energymeteo Control Solution Private Limited
809, Parshwanath Business Park,
Nr. Auda Garden, Prahladnagar,
Ahmedabad - 380015, Gujarat
- 6 Tata Power Trading Company Limited
Corporate Center,
A Block, 34, Sant Tukaram Road,
Carnac Bunder,
Mumbai - 400009, Maharashtra
- State Transmission Utility**
- 7 Gujarat Energy Transmission Corporation Limited (GETCO)
Sardar Patel Vidyut Bhavan,
Race Course,
Vadodara - 390007, Gujarat
- Distribution Company**
- 8 Uttar Gujarat Vij Company Limited
Visnagar Road,
Mehsana - 384001, Gujarat
- 9 Madhya Gujarat Vij Company Limited
Sardar Patel Vidyut Bhavan,
Race Course,
Vadodara - 390 007, Gujarat
- 10 Dakshin Gujarat Vij Company Limited
"Urja Sadan"
Nana Varachha Road,
Kapodara,
Surat - 395 006, Gujarat
- 11 Paschim Gujarat Vij Company Limited
"Paschim Gujarat Vij Seva Sadan"
Off. Nana Maya Main Road, Laxminagar,
Rajkot - 360004, Gujarat
- Nodal Agency**
- 12 Gujarat Energy Development Agency
4th floor, Block No. 11 & 12
Udyog Bhavan, Sector -11
Gandhinagar - 382 017, Gujarat



Bank of India

GETCO LTD. SLDC-BARODA (NON-OPERATIVE A/C)

250120110000042

FEBRUARY-2022

No	Date of Transction	Description	Cheque No.	Cr/ Dr	Received Amount	Balance Amount
114	28-02-2022 17:25	Dr..for Payment UTR :BKIDN22059183249	301402	DR	10000.00	18788.01

(See Clause 27)

General Heading for Proceedings

BEFORE THE GUJARAT ELECTRICITY REGULATORY COMMISSION GANDHINAGAR

FILING NO.

CASE NO.

(To be filled by the office)

IN THE MATTER OF:

Petition under Section 181 read with 32(3), 86(1)(h) of the Electricity Act, 2003 and Regulation 19 of Notification No. 1 of 2019 for amendment of the Notification No. 1 of 2019, namely, the Gujarat Electricity Regulatory Commission (Forecasting, Scheduling, Deviation Settlement and Related Matters of Solar and Wind Generation Sources) Regulations, 2019 and Procedure on Forecasting, Scheduling, DSM & related matters Solar and Wind generation sources Regulation 2019.

AND**IN THE MATTER OF:**

State Load Despatch Centre
Gujarat Energy Transmission Corporation Ltd.,
132kV Sub station Compound,
Gotri Road, Gotri
Vadodara - 390021, Gujarat

Versus

Qualified Co-ordinating Agency or QCA

1. Unilink Engineering Corporation Pvt. Ltd.
A -401, Siddhivinayak Towers,
Near Kataria Arcade, B/H DCP Office,
S. G. Highway, Makarba,
Ahmedabad - 380051, Gujarat

AD (Legal)/Ex (Legal)
Process
PH
04/03/2022

INVOICE No - 1322
Date : - 4 MAR 2022

Unilink



2. REConnect Energy Solution Pvt. Ltd.
173, A Sector, Scheme No.54,
Indore – 452010, Madhya Pradesh
3. Manikaran Analytics Limited
3/A, Aastha, 460, E. M. Bypass
Kolkata – 700707, West Bengal
4. Kreate Technologies LLP
1003, 10th Floor, Antriksh Bhawan,
22KG Marg, Connaught Place,
New Delhi – 110001
5. Energymeteo Control Solution Private Limited
809, Parshwanath Business Park,
Nr. Auda Garden, Prahladnagar,
Ahmedabad – 380015, Gujarat
6. Tata Power Trading Company Limited
Corporate Center,
A Block, 34, Sant Tukaram Road,
Carnac Bunder,
Mumbai – 400009, Maharashtra
- State Transmission Utility
7. Gujarat Energy Transmission Corporation Limited (GETCO)
Sardar Patel Vidyut Bhavan,
Race Course,
Vadodara – 390007, Gujarat
- Distribution Company
8. Uttar Gujarat Vij Company Limited
Visnagar Road,
Mehsana – 384001, Gujarat
9. Madhya Gujarat Vij Company Limited

Signature

Sardar Patel Vidyut Bhavan,
Race Course,
Vadodara - 390 007, Gujarat

10. Dakshin Gujarat Vij Company Limited

"Urja Sadan"

Nana Varachha Road,

Kapodara,

Surat - 395 006, Gujarat

11. Paschim Gujarat Vij Company Limited

"Paschim Gujarat Vij Seva Sadan"

Off. Nana Mava Main Road, Laxminagar,

Rajkot - 360004, Gujarat

Nodal Agency

12. Gujarat Energy Development Agency

4th floor, Block No. 11 & 12

Udyog Bhavan, Sector -11

Gandhinagar - 382 017, Gujarat

DECLARATION

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

Place: Vadodara

Date: 28.02.2022

01.03.2022


Additional Chief Engineer (SLDC)
GETCO, VADODARA.

Signature of the Petitioner

Włodzisław Włodarczyk (SJD)
Włodzisław Włodarczyk

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BEFORE THE HONORABLE GUJARAT ELECTRICITY REGULATORY COMMISSION**AT GANDHINAGAR**

PETITION NO. _____ OF 2022

IN THE MATTER OF

Petition under Section 181 read with 32(3), 86(1)(h) of the Electricity Act, 2003 and Regulation 19 of Notification No. 1 of 2019 for amendment of the Notification No. 1 of 2019, namely, the Gujarat Electricity Regulatory Commission (Forecasting, Scheduling, Deviation Settlement and Related Matters of Solar and Wind Generation Sources) Regulations, 2019 and Procedure on Forecasting, Scheduling, DSM & related matters Solar and Wind generation sources Regulation 2019.

AND IN THE MATTER OF:

State Load Despatch Centre
Gujarat Energy Transmission Corporation Ltd.,
132kV Sub station Compound,
Gotri Road, Gotri
Vadodara - 390021, Gujarat

PETITIONER

Qualified Co-ordinating Agency or QCA

Unilink Engineering Corporation Pvt. Ltd.
A -401, Siddhivinayak Towers,
Near Kataria Arcade, B/H DCP Office,
S. G. Highway, Makarba,
Ahmedabad - 380051, Gujarat

REConnect Energy Solution Pvt. Ltd.
173, A Sector, Scheme No.54,
Indore - 452010, Madhya Pradesh

Manikaran Analytics Limited
3/A, Aastha, 460, E. M. Bypass
Kolkata - 700707, West Bengal

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809, Parshwanath Business Park,
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Ahmedabad - 380015, Gujarat

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Gujarat Energy Transmission Corporation Limited (GETCO)
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Visnagar Road,
Mehsana - 384001, Gujarat

Madhya Gujarat Vij Company Limited
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Dakshin Gujarat Vij Company Limited
"Urja Sadan"
Nana Varachha Road,
Kapodara,
Surat - 395 006, Gujarat

Paschim Gujarat Vij Company Limited
"Paschim Gujarat Vij Seva Sadan"
Off. Nana Mava Main Road, Laxminagar,
Rajkot - 360004, Gujarat

Nodal Agency

Gujarat Energy Development Agency
4th floor, Block No. 11 & 12
Udyog Bhavan, Sector -11
Gandhinagar - 382 017, Gujarat

RESPONDENT



PETITION FOR AMENDMENT OF GUJARAT ELECTRICITY REGULATORY COMMISSION (FORECASTING, SCHEDULING, DEVIATION SETTLEMENT AND RELATED MATTERS OF SOLAR AND WIND GENERATION SOURCES) REGULATIONS, 2019 AND THE IMPLEMENTATION PROCEDURE

MOST RESPECTFULLY SHOWETH

1. That the present Petition is being filed on behalf of the Petitioner - State Load Despatch Centre in regard to the amendment to the Gujarat Electricity Regulatory Commission (Forecasting, Scheduling, Deviation Settlement and Related Matters of Solar and Wind Generation Sources) Regulations, 2019 (hereinafter '**FSD Regulations**') and the Implementation Procedure related thereto in the State of Gujarat to address the aspects related to Wind - Solar Hybrid Generator and Generators with storage. In addition, the Petitioner has in the experience of implementation of the FSD Regulations and Detailed Procedure observed certain issues and is proposing certain amendments to address the said aspects.
2. It is submitted that the FSD Regulations 2019 was notified on 19.01.2019 and the Implementation Procedure was approved by the Hon'ble Commission on 31.07.2019. The FSD Regulations as at present do not deal with the solar-wind hybrid generators and do not account for the generators with storage.
3. That in the recent times, there has been some proposals for setting up of Solar Wind Hybrid Generators as well as solar and wind projects with storage. One such solar project with storage has already been commissioned on 26.08.2021. In regard to the Wind - Solar Hybrid Generators, it is stated that one such Wind - Solar Hybrid Generator has already been commissioned the project on 01.02.2022. Therefore it is essential for a mechanism to be established at the earliest to deal with the forecasting, scheduling and deviation settlement mechanism for such Hybrid Generators.
4. In regard to the solar project with storage, SLDC had approached the Hon'ble Commission vide Letter dated 28.08.2021. The Hon'ble Commission vide Letter 03.12.2021 had opined as under:

"Commission is of the considered opinion that SLDC should come with a detailed proposal seeking the required amendments in the concerned Regulation by filing petition."



Copies of the Letter dated 28.08.2021 and 03.12.2021 are attached hereto and marked as **Annexure A**.

5. In regard to the wind-solar hybrid project, SLDC had approached the Hon'ble Commission vide Letter dated 14.12.2021 in regard to the above aspect and the requirement of changes in the FSD Regulations to accommodate the above Solar Wind Hybrid generators. A copy of Letter dated 14.12.2021 by the SLDC is attached hereto and marked as **Annexure B**.
6. Accordingly, the SLDC is filing the present Petition to seek amendments in the FSD Regulations and the Implementation Procedure in regard to the wind-solar hybrid generators and In addition, it is submitted that the SLDC is seeking further amendments to the FSD Regulations and Implementation Procedure to address various other aspects as detailed herein.

Wind - Solar Hybrid Generators

7. That the Ministry of New and Renewable Energy (MNRE) notified the National Wind-Solar Hybrid Policy on 14.05.2018. It was noted that solar and wind power being variable in nature and hybridization of these two technologies would help in minimizing the variability apart from optimally utilizing the infrastructure including land and transmission system. A wind-solar plant will be recognized as hybrid plant if the rated power capacity of one resource is at least 25% of the rated power capacity of other resource. Under the category of wind-solar hybrid power plants, Wind Turbine Generators (WTGs) and Solar PV systems will be configured to operate at the same point of grid connection. Copy of the Wind - Solar Hybrid Policy dated 14.05.2018 and amendment dated 13.08.2018 are attached hereto and marked as **Annexure C**.
8. The Policy also state that the Central Electricity Authority and Central Electricity Regulatory Commission shall formulate necessary standards and regulations including metering methodology and standards, forecasting and scheduling regulations, REC mechanism, grant of connectivity and sharing of transmission lines, etc. for wind-solar hybrid systems (Clause 6).
9. The Government of Gujarat issued the Gujarat Wind - Solar Hybrid Power Policy 2018 dated 20.06.2018 also recognized that solar and wind energy



generations are complementary to each other and hybridization of two technologies would help in minimizing the variability. A copy of the Government of Gujarat Wind Solar Hybrid Power Policy 2018 is attached hereto and marked as Annexure D.

10. The Gujarat Policy recognizes two categories of the Wind - Solar Hybrid Power projects: Type A Projects which includes conversion of existing/under construction wind or solar power plants into Hybrid Projects and Type B which includes new wind solar hybrid power generation projects.

11. The Policy inter alia provides:

"15. Forecasting schedule

Hybrid Projects shall give their forecast and energy shall be scheduled for day-to-day operations, which shall be governed by regulations as passed and amended by GERC."

12. This Hon'ble Commission has passed an Order No. 4 of 2021 dated 03.04.2021 in relation to Wind Solar Hybrid Energy Projects. The Order inter alia states as under:

3.2.5 Forecasting and scheduling for Wind Solar hybrid power: The Wind-Solar Hybrid Projects shall require to forecast and schedule their generation in accordance with the GERC (Forecasting, Scheduling, Deviation Settlement and Related Matters of Solar and Wind Generation Sources) Regulations, 2019 notified dated 19th January, 2019 and its amendments issued from time to time.

13. However the FSD Regulations 2019 do not make any specific provision for wind - solar hybrid projects. The FSD Regulations provides for the methodology for forecasting and scheduling of wind and solar energy generators which are connected to the State Grid/Sub-station and methodology of handling deviations by the Generators. The mechanism for wind energy based generation and solar energy based generation is different such as number of revisions allowed (Regulation 5.1 and 5.10 and 5.11), the declared Available Capacity (Regulation 5.12), payment security (Regulation 5.15), deviation charges (Regulation 8.5 & 8.6) etc.
14. M/s Renew Green Energy Solutions Pvt Limited has commissioned hybrid power project (Type A) [on 01.02.2022 & 02.02.2022 for 17.6MW of Wind capacity and on 03.02.2022 for 6.8MW Solar Capacity] at Babariya, Taluka Jamjodhpur, District Jamnagar (Connected to 220 kV Moti gop GETCO S/S).



15. Further the Qualified Coordinating Agency QCA, M/s Manikaran Analytics Limited vide Letter dated 01.12.2021 has written to SLDC for clarification on registration procedure of Forecasting and Scheduling and Deviation Settlement Mechanism regulation to be followed for the upcoming Solar - Wind Hybrid Projects. M/s Manikaran has intimated that some of the developers had approached it for engagement as QCA for their upcoming hybrid projects. In particular, M/s Manikaran sought clarification on the permitted exemption band, number of revisions and consideration of declared available capacity for such projects. A copy of the Letter dated 01.12.2021 is attached hereto and marked as **Annexure E**. Thereafter, the QCA, Manikaran Analytics Limited (Manikaran) has applied for registration of 66kV Babariya (Renew Green Energy Solution Pvt. Ltd.) Hybrid Pooling Station as per existing Implementation procedure Annexure Y (QCA Application Form For and on Behalf of RE Generator / Pooling Station), ANNEXURE - I(a) (Undertaking by QCA), ANNEXURE - I(b) (Consent & Authorization Letter from Wind / Solar Generator for Appointment of QCA) and Bank Guarantee (Submitted for Wind & Solar generator Installed Capacity MW). Thus, the Renew Green Energy Solutions Pvt Limited (66kV Babariya S/S), having wind and solar generators of Renew Surya Uday Pvt Ltd, connected to 220kV Moti gop GETCO S/S, has registered with SLDC on 08.01.2022 through QCA Manikaran. The commissioning date is 01.02.2022 & 02.02.2022 for 17.6 MW wind generator & 03.02.2022 for 6.8 MW solar generator as per GEDA.
16. Since the FSD Regulations provide for different treatment of solar and wind projects, it is essential for amendments to be made in the Regulations to provide for mechanism for hybrid projects which do not fall exclusively within either solar or wind.
17. That in brief, the Petitioner is seeking the incorporation of the following provisions for the Wind Solar Hybrid Generators :
- a. The total revisions allowed to Wind Solar Hybrid Generator to be 16. The revision of schedule of wind generators or solar generators or both at a time shall be considered as a revision.
 - b. The Available capacity (AvC) and forecasting/schedule for solar capacity and Wind capacity of hybrid Generator should be considered separately.



- c. For deviation Settlement mechanism, for the solar capacity, the DSM will be applicable on forecasting errors as per Regulation 8.6 of FSD Regulations and for wind capacity, the DSM will be applicable on forecasting errors as per Regulation 8.5 of FSD Regulations.
- d. The energy injection from wind and solar capacity at receiving end of GETCO substation shall be worked out separately on the basis of meter reading of common meter installed at receiving end substation appropriately apportioned as per the respective meter reading of wind and solar end meters.

18. Further Clause No. 2.8.3 of Order No. 4 of 2021 provides as under:

“..... As proposed by GETCO, in case the generation from a hybrid projects exceeds the allocated/sanctioned transmission capacity limit, same shall be considered as inadvertent injection of power for which no payment or credit shall be given. The Commission clarifies that for both Type A and Type B projects, the allocated/sanctioned transmission capacity shall be at least equal to the installed capacity of Wind or Solar project whichever is higher. As provided in National Wind Solar hybrid power policy 2018 as well as Gujarat Wind-solar Hybrid power policy 2018 storage is allowed in hybrid project for optimizing the output.”

Solar and Wind Generators with storage

- 19. Government of India with Government of Gujarat sought to set up first of its kind demonstration project i.e. solarisation of Modhera Sun Temple and Town at nearby village: Sujanpura, Taluka: Becharaji, Dist: Mehsana. Government of Gujarat has issued various relaxations to the Solar Policy vide G.R. Noi. SLR-11/2017/692(P2).B1 dated 08.06.2020. A copy of the GR dated 08.06.2020 is attached hereto and marked as **Annexure F**.
- 20. The project is integrated with 15 MWh BESS (Battery Energy Storage System). It is a ground mounted Solar PV Project of 6 MW AC (7.083MW DC) integrated with 2 X 7.5MWh BESS and is being implemented by Gujarat Power Corporation Limited (GPCL). The project has been registered with GEDA. GPCL wrote to the Petitioner vide Letter dated 08.06.2021 and requested to provide grid connectivity. Further vide Letter dated 23.08.2021, GPCL informed that the installation was complete and they are scheduling the commissioning test. GPCL has conducted commissioning test on 26.08.2021.



21. The QCA, M/s Kreate Technologies LLP (Kreate) has applied for registration of GPCL (Modhera) Solar PV with BESS as per existing Implementation procedure Annexure Y (QCA Application Form For and on Behalf of RE Generator / Pooling Station), ANNEXURE - I(a) (Undertaking by QCA), ANNEXURE - I(b) (Consent & Authorization Letter from Wind / Solar Generator for Appointment of QCA) and Bank Guarantee (Submitted for Solar generator Installed Capacity MW). Thus, the GPCL (66KV Modhera) BESS connected to 66kV Modhera GETCO S/s, has registered with SLDC on 07.10.2021 through QCA Kreate. The commissioning date is 26.08.2021 for 6MW solar generator with 15 MWh BESS, as per GEDA.
22. That it is anticipated that there may be wind projects with storage in the future. Further the Wind Solar Hybrid Policy dated 14.05.2018 also recognizes that the storage may be added to the hybrid projects (Clause 5.4).
23. The nature of such projects with storage is different than the solar and wind projects without storage. The storage would reduce the variability of the output power from such projects and give higher energy output for the given capacity and would ensure availability of firmer power for a particular period. When FSD Regulations had been framed, such projects with storage were not considered and the mechanism was considered for wind and solar projects with higher variability.
24. That in brief, the Petitioner is seeking the following mechanism for solar projects with storage:
 - a. During the day time, 9 revisions would be allowed and the RE DSM for solar power would be applicable on forecasting error as per FSD Regulations.
 - b. During the night time, the schedule would be replaced by actual energy injected into the grid as an action of discharging the storage.
 - c. At any time of operation, the Available capacity should not be more than the AC capacity of the solar generator/pooling station.
25. That in brief, the Petitioner is seeking the following mechanism for wind projects with storage:
 - a. Total 16 revisions would be allowed and RE DSM for wind power would be applicable on forecasting error as per the FSD Regulations.



- b. At any time of operation, the Available capacity should not be more than the AC capacity of Wind Generator/ Pooling Station.

Other Amendments

26. In addition to the above, the SLDC is also proposing certain amendments to the FSD Regulations based on the experience of the past years.
- a. Provision for I) Bank Guarantee validity for three years as against the present One year validity which requires logistical issues of requiring annual renewals and II) Bank guarantee amount for 110% of DSM payment for 12 weeks. Further allowing the Bank Guarantee to be submitted by the Govt./ PSU generator, in addition to registered self/ lead Renewable (RE) Generators or the QCA as the case may be.
 - b. SLDC has observed that some generators are not entering into the arrangement with the QCA or seeking another QCA for the same pooling station despite the fact that there can be only one QCA for one pooling station. Though it is clear that the QCA should be appointed by majority (greater than 50% of installed capacity), the Regulations may specifically provide for the generators to appoint such QCA or be considered in default.
 - c. Clarify that the default in payment by a Generator relates both to the payment security as well as deviation charges and provision of action to be taken in case of such default.
27. SLDC is also seeking amendments in the Implementation Procedure to further clarify the aspects.
28. In view of the above, it is submitted that the Petitioner is seeking the following amendments in the FSD Regulations:
- a. Introduction of definition of Defaulting Generator under Regulation 3 by addition of Regulation i-1:

i-1) Defaulting generator



'Defaulting Generator' means the generator which is not complying any of regulatory provision as under, through QCA or self or lead generator, as case may be:

- Failure to register with SLDC through QCA or Self/ lead RE generator before date of commissioning of the power project
- Failure to renew registration with SLDC in permissible time limit
- Failure to submit the Payment Security initially or up to a month from the date of encasement/ withdrawal
- Failure to renew the Payment Security up to a month from the date of expiry of BG/ RLC
- Failure to pay the Deviation charges for consecutive four weeks (by the due date of last (fourth) UI/ DSM bill)
- Failure to de-register with the nodal agency the capacity being Scraped/ Discarded/ removed Due to life span completion/ liquidation
- Failure to fulfill any of regulatory provision

b. Amendment in Regulation 5.1 (the amendment is highlighted):

5.1. This code provides methodology for day-ahead/intra-day scheduling of wind and solar energy generator(s) and wind-solar hybrid generator(s) which are connected to the State Grid/Sub-Station, and revision of schedule(s) and methodology of handling deviations of such wind and solar energy generator(s) and wind-solar hybrid generator(s) and its deviation charges. Revision of schedule shall be allowed if the revision is more than 2% of the previous schedule. For wind energy based generation (maximum 16 intra-day revisions) and solar energy based generation (maximum 9 intra-day revisions) shall be allowed. For wind-solar hybrid generation, maximum 16 intra-day revisions shall be allowed.

The schedule of storage should be separately for wind generator with storage, solar generator with storage and wind-solar hybrid generator with storage. The schedule and revision of schedule of storage power shall not be the part of total schedule. For the revision of schedule of the storage power of solar, wind or wind-solar hybrid, there shall be no cap limit for the revisions. The criteria of 2% of the previous schedule as applicable for revision of schedule shall not be applicable in case of revision of schedule of storage power.

c. Addition of new Regulation 5.1A:

5.1A The energy injection from wind and solar capacity of wind-solar hybrid generator(s) at receiving end of GETCO substation shall be worked out separately on the basis of meter reading of common meter installed at receiving end substation appropriately apportioned as per the respective meter reading of wind and solar end meters as per formula as under.

$$\text{Apportioned Solar Energy} = \left[\frac{\text{Main Meter Energy (M) (Actual Energy)}}{\text{Solar Meter Energy (SG) + Wind Meter Energy (WG)}} \right] \times \text{Solar Meter Energy (SG)}$$

$$\text{Apportioned Wind Energy} = \left[\frac{\text{Main Meter Energy (M) (Actual Energy)}}{\text{Solar Meter Energy (SG) + Wind Meter Energy (WG)}} \right] \times \text{Wind Meter Energy (WG)}$$

All the accounting shall be in 15-minute time block wise and energy after curtailment will be considered as Actual Energy.

In case the generation from a hybrid projects exceeds the allocated/ sanctioned transmission capacity limit, same shall be considered as inadvertent injection of power for which no payment or credit shall be given.

In such case, energy after curtailment will be considered as 'Actual Injection' for calculation of Percentage Absolute error as per Regulation No. 3.1 (a)

d. Modification of Regulation 5.11 (the amendment is highlighted):

"5.11. The schedule of solar generator/generators connected to the State grid (excluding collective transactions) may be revised by giving advance notice to the SLDC. Such revisions shall be effective from 4th time block, the first being the time-block in which notice was given. There may be maximum of 9 revisions during the day starting from 05:30 hours to 19:00 hours of that day.

During the night time, the schedule would be replaced by actual energy injected into the grid as an action of discharging the storage, in case of solar generator with storage."

e. Addition of new Regulation 5.11A:

The schedule of wind-solar hybrid generators connected to the State grid (excluding collective transactions) may be revised by giving advance notice to the SLDC. Such revisions shall be effective from 4th time block, the first being the time-block in which notice was given. There may be maximum of 16 revisions during the day. The schedule revision of wind generator or solar generator or both at a time shall be considered as a revision.

f. Amendment in Regulation 5.12 (the amendment is highlighted):

5.12. The declared Available Capacity (AvC) for a wind generating plant shall be applicable for the entire 24 hours in a day whereas considering the availability of solar irradiation only during the day, the AvC for a solar generating plants shall be applicable only between 05:30 to 19:00 hours.

The AvC and forecasting/ schedule for solar capacity and wind capacity of hybrid Generator shall be considered separately for wind and solar generation.

Amend.

In case of solar generator(s) with storage, wind generator(s) with storage and wind-solar hybrid generator(s) with storage, the AvC, at any time, should not be more than the AC installed capacity of the wind and solar generator(s)/Pooling Station respectively.

- g. Amendment in the Regulation 5.15 as under (the amendment is highlighted):

5.15
.....

For second year and onwards the payment security shall be reviewed based on the average deviations observed during the first year (previous year) and applying the aforesaid mechanism, the security amount shall be worked out and the same shall be provided by the QCA/ RE Generator.

The derived payment security amount will be fixed for next three (3) years. All registered QCA/Self RE Generator /Lead RE Generators shall need to submit Bank Guarantee /Revolving LC accordingly for three years and needs to be renewed at every three years.

- h. Amendment in the Regulation 6 as under (the amendment is highlighted)

“

Failure of QCA in carrying out above activities shall not relieve the Generators/Developers from the penalties etc. provided in these Regulations.

QCA shall be treated as a Forecasting and Scheduling Entity and will be the single point of contact with SLDC. QCA shall get registered with the SLDC.

In case of the majority (more than 50% of installed capacity) of the Installed Capacity of wind and/ or solar generators of the pooling station have consented for a particular QCA, then remaining generators shall have to appoint same agency as a QCA. In case of non-compliance, the generator shall be considered as a defaulting generator and action may be taken accordingly.”

- i. Addition of new Regulation 8.6A:

In case of actual generation of a wind-solar hybrid generator, the scheduling and forecasting for the solar capacity and wind capacity shall be considered separately. In event of actual generation being less or more than the scheduled generation, the deviation mechanism for solar capacity of the wind-solar hybrid generator would be as per Regulation 8.6 and for wind capacity of the wind-solar hybrid generator would be as per Regulation 8.5.

j. Amendment in Regulation 7.1(i) (the amendment is highlighted):

(i) The QCA shall have the experience of minimum 1 year in the field of Wind/Solar Power forecasting and scheduling. The QCA with experience of minimum 1 year in the field of Wind/Solar Power forecasting and scheduling, shall also be eligible for solar generator with storage, wind generator with storage, wind-solar hybrid generator with storage, wind-solar hybrid generator as applicable as per the experience in wind/solar power forecasting and scheduling.

k. Amendment in the Regulation 13.2 as under (the amendment is highlighted):

"13.2. The wind/solar generators/ wind-solar hybrid generators/ generators with storage/ QCA shall provide payment security to SLDC in the form of Bank Guarantee and/or revolving LC covering 110% of DSM payment for ~~one month~~ 12 (twelve) weeks of average deviation observed during previous year."

l. Amendment in Regulation 13.3 (the amendment is highlighted):

13.3 In case the wind or solar generator defaults in payment (i.e. Payment Security & Deviation Charges) to QCA, then QCA shall inform about the default by the generator to the SLDC and request disconnection of such defaulting generator from the grid. Further, SLDC shall take the direct action against defaulting generator, which are registered as a Self/ lead RE Generator.

In case any generator does not comply with the any of regulatory provisions within six months from the date of blocking of energy, SLDC may inform GEDA for disconnection of such defaulting generator from the grid. GEDA in co-ordination with Discom/ STU/ QCA, shall disconnect such defaulting generator from grid. The generator may re-connect with the grid only after settlement of all required compliances or otherwise it shall remain permanently disconnected. The generator shall apply for the re-connection order to GEDA with all applicable 'No dues' certificate. The GEDA shall issue re-connection order in co-ordination with Discom/ STU/ QCA after work completed in all respects. The generator shall be exclusively responsible for any loss in this regard.

GEDA shall have the power for decommissioning of such defaulting generator after one year from the disconnection of said defaulting generator. GEDA shall intimate details of such decommissioning generators accordingly, to all concerned.

m. Amendment in Regulation 13.6 (the amendment is highlighted):

16.2. Finalization of a methodology shall be on majority (~~>= 51%~~ more than 50%) consensus basis measured in terms of MW capacity and a methodology once finalized shall not be changed without majority consensus.

Amend.

29. The Petitioner is also seeking the following amendments in the Implementation Procedure:

a. Amendment in Clause 2.2 (the amendment is highlighted):

2.2 Every RE generator or QCA shall require to submit day ahead "Available Capacity (AvC)" and "Total Schedule/Forecast Declared Capacity (DC) / Forecast" in 15 minute interval for 96 blocks in the EASS Scheduling software ~~as per link <https://www.sldeguj.org/ledestar/ccs/> by using unique ID and password, which is provided by SLDC to RE generator or QCA as further visually elaborated by screen shot in Annexure 2.~~

The GEDA Commissioning Certificate/ e-mail is also required along with all other relevant documents required for scheduling & accounting of RE Pooling Station.

b. Amendment and addition in Clause 4 (the amendment is highlighted):

.....

In this case, practically it shall be not feasible, by SLDC, to isolate particular RE generator from the internal network of RE farm as generally connected in cascading network along with other generators. However, the monthly energy certification issued by SLDC shall be blocked and not released till payment realization. Due to this, the defaulter generator shall cease to get benefit of set off under captive / preferential tariff from Discom / energy set off by third party under sell / renewable energy certificate.

In case the wind or solar generator defaults in any payment or otherwise in any regulatory compliance, then QCA shall inform SLDC about the defaulting generator for needful action as per regulatory provision. QCA shall submit the detailed list of defaulting generators, alongwith reason, to SLDC for necessary action. QCA is responsible for intimation of each defaulting generator status by 10th day of each month. Provided that, QCA shall needs to submit complete payment security and DSM payments time to time on behalf of defaulting generator. Furthermore, QCA shall bear the charges on behalf of defaulting generator up to disconnection from the grid.

Further, SLDC shall take the direct action, if any required, against defaulting generator, which are registered as a Self/ Self-lead RE Generator.

In case any generator does not comply with the any of regulatory provisions within six months from the date of blocking of energy, SLDC may inform GEDA for disconnection of such defaulting generator from the grid. GEDA in co-ordination with Discom/ STU/ QCA, shall disconnect such defaulting generator from grid. The generator may re-connect with the grid only after settlement of all required compliances or otherwise it shall remain permanently disconnected. The generator shall apply for the re-connection order

to GEDA with all applicable 'No dues' certificate. The GEDA shall issue re-connection order in co-ordination with Discom/ STU/ QCA after work completed in all respects. The generator shall be exclusively responsible for any loss in this regard.

GEDA shall have the power for decommissioning of such defaulting generator after one year from the disconnection of said defaulting generator. GEDA shall intimate details of such decommissioning generators accordingly, to all concerned.

- c. Addition after Clause 4 of the Procedure in relation to Regulation 15.3 of the FSD Regulations:

4A: General

Quote

The data furnished by SLDC shall be open to all entities for checking/verification for a period of 15 days. In case any mistake is detected, SLDC shall forthwith make a complete check and rectify the mistakes.

Unquote

The last approved version of schedule in the Scheduling software shall be considered as the datum schedule for commercial purpose for the respective day and the Schedule/AvC data of that day shall be open for checking/ verification for a period of 15 days only, from that day. In case any mistake is intimated by any stakeholder within 15 days from respective day, SLDC shall forthwith make a complete check and rectify the mistakes, if any. No change shall be considered there after.

The Actual Energy data furnished by SLDC shall be open to all entities for checking/verification for a period of 15 days of respective day of respective week after publishing UI/DSM account. In case any mistake is detected, SLDC shall, within two months, make a complete check and rectify the mistakes. No change shall be considered there after.

- d. Amendment in Clause 6.2 (the amendment is highlighted):

6.2
.....

The QCA shall submit the application for each pooling station separately. {The application fee of Rs.10,000 (Ten Thousand Rupees Only) plus applicable Taxes, if any, shall be applicable for each pooling station as per contract period entered between QCA & RE Generators of pooling station, maximum up to 3 (three) year validity.

- e. Amendment in Clause 6.3 (amendment is highlighted)

The QCA applicant needs to renew the registration as per prevailing criteria at every 3 (three) year (from the date of registration approved) by accompanying of Nonrefundable fees of Rs. 25,000/- (Twenty five Thousand Rupees Only) plus applicable Taxes, if any, OR otherwise the registration of QCA shall be treated as cancelled.

Provided that the application for renew of QCA registration shall be made at least three months prior to expiry of registration.

The QCA needs to renew the registration for each respective pooling station separately as per prevailing criteria at every 3 (three) year (from the date of registration of Pooling Station) by accompanying of Non-refundable fees of Rs. 10,000/- (Ten Thousand Rupees Only) plus applicable Taxes, if any OR otherwise the registration of QCA for the pooling station shall be treated as cancelled.

Provided that the application for renew of Pooling Station registration by QCA shall be made at least two months prior to expiry of registration.

f. Amendment in Clause 6.5 (the amendment is highlighted):

6.5
.....

QCA shall apply for and on behalf of RE pooling station/ generators with Annexure 'Y', Annexure I(a), Annexure I(b) and applicable Bank Guarantee / Revolving LC. In case of lead RE generator registration through QCA, the Annexure I(c) is also required.

Self/ Lead RE Generator shall apply with Annexure 'X1', Annexure 'Y1', and applicable Bank Guarantee / Revolving LC. However, in case of Lead RE Generator, Annexure I(a1) & Annexure I(c) is also required. As per applicability criteria of aggregate RE capacity more than 1 MW on common distribution feeder and terminated at a sub-station of distribution company / STU / CTU, the lead RE Generator shall carry out all activities for combine installed capacity, as per regulation. In case of aggregate capacity registration, it is exclusive responsibility of group generators to declare the lead RE generator.

The Self/ lead RE Pooling Station needs to renew the registration as per prevailing criteria at every 3 (three) year (from the date of registration of Pooling Station) OR otherwise the registration of Self/ lead RE Pooling Station shall be treated as cancelled.

Provided that the application for renew of Self/ lead RE Pooling Station registration shall be made at least two months prior to expiry of registration.

The details of name of pooling station, capacity etc. in application documents and payment security needs to be incorporated promptly as per authentic documents. The static data and relevant details is also part of registration. On the filing of complete set of application documents and supporting documents, the application of registration shall be processed for registration.

Amend

The registration through QCA/ RE generator may apply for planned capacity, subject to condition of more than 50% consent of generators. However, the additional documents are required to be submitted from time to time to fulfil the registration in case of capacity changes. There shall be no separate registration fees is applicable in this case. However, there shall be 10 days' time for processing of application on receiving of the complete documents.

In case of name change of QCA / RE Generator, the official registration document notified by government, other relevant authentic documents and GEDA certificate of changed/ new name, as the case may be, is required. However, the re-registration is not required and it shall be considered as registered with new name. But in case of change of capacity of RE pooling station / generator, the relevant application documents is required to be submitted as per registration procedure. Further, the relevant application documents is also required be submitted as per registration procedure in case of change of lead generator by group generator. There shall be 10 days' time for processing of above subjected applications on receiving of the complete documents.

In above case of change in name, change in capacity and change in lead generator, the application fees shall not be applicable. However, the renewal of registration at every three year shall take place with respect to registration of original application.

The Annexures I(c) referred to in Clause 6.5 which are to be added to the Procedure is attached hereto and marked as **Appendix 1 (Colly)**.

- g. Amendment in Clause 6.6, 6.7 and 6.8 (the amendment is highlighted):

6.6.....
.....

While in actual assessment, if DSM amount of any pooling station increases beyond 110% of above rate then additional supplementary balance Bank Guarantee/ revolving LC shall be demanded.

6.7 For second year and onwards the payment security shall be reviewed based on the average deviations observed during the first year (previous year) and applying the aforesaid mechanism, the security amount shall be worked out for each pooling station / Generators and the same shall be provided by the QCA / RE Generators. Now onward payment security derived on average deviation observed during previous year and same will be fixed for next three (3) years. Hence, all registered QCA / Self RE Generator /Lead RE Generators shall need to submit Bank Guarantee /Revolving LC accordingly for three years and the same needs to be renewed at every three years.

Actual

The payment security shall be applicable for wind and solar generator respectively in case of wind generator with storage, solar generator with storage and wind-solar hybrid generator with storage. The payment security shall also be applicable for wind and solar generator respectively in case of wind-solar hybrid generator. However, the single Bank Guarantee / Revolving LC may be provided in case of wind-solar hybrid generator.

In case of Govt./ PSU only, the Specific format of Bank Guarantee for Govt./ PSUs is provided for submission of direct payment security by Govt./ PSU to SLDC. However, the QCA is accountable for submission of BG of Govt./ PSU, in case RE pooling station is registered through QCA.

Any changes as per Government norms like Stamp paper value, Bank Guarantee claim period, BG/ RLC format etc. shall be applicable time to time and the QCA/RE Generator shall be responsible and liable for the same.

6.8 The wind / solar generators / wind-solar hybrid generators/ generators with storage/ QCA shall provide payment security to SLDC in the form of Bank Guarantee and / or revolving LC covering 110% of DSM payment for ~~one month~~ 12 (twelve) weeks of average deviation observed during previous year, in proportion to installed capacity of pooling station being added.

The Form of Banker's Undertaking referred to in Clause 6.7 which are to be added to the Procedure is attached hereto and marked as Appendix 2 (Colly).

h. Amendment in Clause 7 (the amendment is highlighted):

7. Clarification for QCA and Self/ lead generator:

i. Amendment in Clause 7.2 (the amendment is highlighted):

"7.2 As explain above, SLDC shall not require any individual financial security of RE Generator but needs total BG / RLC as per prevailing rate for total capacity of RE Project. However, QCA / Self RE Generator / Lead RE Generators, as the case may be, may submit the multiple BG / RLC up to the total installed capacity of pooling station, in case of increase in capacity only. QCA / Self RE Generator / Lead RE Generators, as the case may be, is responsible for submission of the complete Payment Security of respective Pooling Station."

j. Addition of Clauses after Clause 7.4:

7.5 The registration in case of changeover (with consent of majority of greater than 50% of capacity at the pooling station) is permitted after three months from the date of earlier registration. (This is including notice of 1 month as

per Clause No. 3.4, from new QCA or self/ lead RE generator as the case may be)

- 7.6 In case of changeover of QCA, (1) commitment of new QCA from changeover date as per Annexure A (2) intimation to concerned generators of Pooling Station by new QCA as per Annexure B (3) intimation to existing QCA by new QCA as per Annexure C is required.

Provided the above documents is also applicable in case of changeover from QCA to Self/ Lead RE generator and Self/ Lead RE generator to QCA vice-versa.

- 7.7 The six month notice period is required for deregistration of QCA from SLDC. Further, QCA is responsible for intimation of deregistration to each generator of respective Pooling Station before six month.

The Annexures A, B and C referred to in Clause 7.6 which are to be added to the Procedure is attached hereto and marked as **Appendix 3 (Colly)**.

30. In addition it is submitted that the reference to EASS (Energy Accounting and Scheduling Software) in the Procedure may be modified to Scheduling Software at all places. Though not exhaustive, the clauses where EASS is referenced are Clause 1.1, 2.2, 2.3, 2.4, 2.5, 2.7, 2.8.
31. Further the reference to wind and solar generators in the Regulations and Procedure would include wind, solar and wind-solar hybrid generators and generators with storage unless the context otherwise requires the reference to only wind or only solar generators. Similarly reference to wind generators would include wind generators with storage and solar generators would refer to solar generators with storage unless the context otherwise requires the reference to only wind or only solar generators.
32. All other clauses in the FSD Regulations and Implementation Procedure shall remain applicable to the solar generators with storage, wind generators with storage, wind-solar hybrid generators and wind-solar hybrid generators with storage.
33. That SLDC craves leave to file appropriate additional submissions in support for the modification of the FSD Regulations and Implementation Procedure.

34. PRAYER:

The Petitioner hereby most respectfully submits and prays as under:

- a. The Hon'ble Commission may kindly modify Gujarat Electricity Regulatory Commission (Forecasting, Scheduling, Deviation Settlement and Related Matters of Solar and Wind Generation Sources) Regulations, 2019 as sought in Para 28 and 31;
- b. The Hon'ble Commission may kindly modify Procedure on Forecasting, Scheduling, DSM & related matters Solar and Wind generation sources Regulation 2019 as sought in Para 29, 30 and 31 read with Appendix 1,2,3;
- c. Pass any other order(s) which the Hon'ble Commission may deem just and proper in the circumstances of the matter.

[Signature]
Additional Chief Engineer (SLDC)
GETCO, VADODARA.

PETITIONER

**DECLARATION**

Declaration that the subject matter of present 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 order in relation thereto.

DATE: 01.02.2022

PLACE: Vadodara

[Signature]
Additional Chief Engineer (SLDC)
GETCO, VADODARA.

PETITIONER





**BEFORE THE HONORABLE GUJARAT ELECTRICITY REGULATORY COMMISSION
AT GANDHINAGAR**

PETITION NO. _____ OF 2022

IN THE MATTER OF

Petition under Section 181 read with 32(3), 86(1)(h) of the Electricity Act, 2003 and Regulation 19 of Notification No. 1 of 2019 for amendment of the Notification No. 1 of 2019, namely, the Gujarat Electricity Regulatory Commission (Forecasting, Scheduling, Deviation Settlement and Related Matters of Solar and Wind Generation Sources) Regulations, 2019 and Procedure on Forecasting, Scheduling, DSM & related matters Solar and Wind generation sources Regulation 2019.

AND IN THE MATTER OF:

State Load Despatch Centre
Gujarat Energy Transmission Corporation Ltd.,
132kV Sub station Compound,
Gotri Road, Gotri,
Vadodara - 390021, Gujarat

Reg. No. 2312
Date : 01 / 02 / 2022

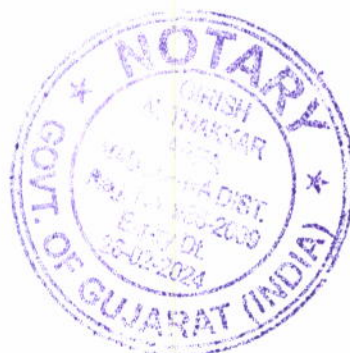
Arjun
Additional Chief Engineer (SLDC)
GETCO, VADODARA.
PETITIONER

AFFIDAVIT

I, Arjun Rathod, son of Shri Balubhai Rathod, aged 46 years, residing at Vadodara, Gujarat, do solemnly affirm and state as under:

1. I am Additional Chief Engineer in the SLDC- GETCO, and am duly authorized by the said Petitioner to make this affidavit.
2. I say that the contents of the accompanying Petition are based on the records of the Petitioner maintained in normal course of business and believed by the Deponent to be true.
3. I say that the annexures are true copies.

Arjun
Additional Chief Engineer (SLDC)
GETCO, VADODARA.
DEPONENT





DETROIT, MICHIGAN
DETROIT, MICHIGAN

VERIFICATION:

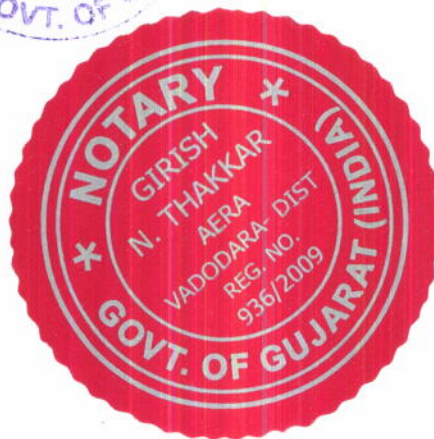
I, the deponent above named do hereby verify that the contents of my above affidavit are true to my knowledge, no part of it is false and nothing material has been concealed there from.

Verified at Vadodra on this 15th day of March 2022.



DEPONENT

Additional Chief Engineer (SLDC)
GETCO, VADODARA.



Solemnly Affirmed/Declared
Sworn Before me by .

GIRISH N. THAKKAR
NOTARY (Govt. of Gujarat)

01/03/2022

My Commission Expires
on 26-Feb.-2024
GIRISH N. THAKKAR
NOTARY (Govt. of Gujarat) INDIA

GERC Notification No.1 2019 Forecasting, Scheduling, DSM & related matters Solar and Wind generation sources regulation 2019.

Implementation Procedure

ANNEXURE - I(c)

Authorization Order for Lead Generator

Date: _____

To,
The Chief Engineer,
State Load Despatch Center, GETCO,
132kV Gotri Sub Station Compound,
Near T.B. Hospital,
Gotri Road,
Vadodara - 390021,
Gujarat.

Sub: Authorization Order for Lead Generator.

Respected Sir,

I/we as the **Wind/Solar** generator _____ (**Own plant Name**), having installed capacity _____ **MW** is authorizing _____ (**Lead Generator Name**) as the **Lead Generator** for Forecasting, Scheduling and Commercial Settlement, as per GERC (Forecasting, Scheduling, Deviation Settlement and Related Matters of Solar and Wind Generation Sources) Regulation, 2019 and its amendment time to time, if any, and procedure thereof, for _____ (**Pooling Station Name**).

Regards,

Signed and seal by RE Generator of Pooling station

<<Sign of Authority>> <<Signing Authority Name>> <<Signing Authority Designation>>	<<Name & Sealed of Firm / Company / Agency>>
--	--



Amul

GERC Notification No.1 2019 Forecasting, Scheduling, DSM & related matters Solar and Wind generation sources regulation 2019.

Implementation Procedure

NON JUDICIAL STAMP PAPER OF RS. _____ (As per norms)

FORM OF BANKER'S UNDERTAKING

FORMAT FOR THE UNCONDITIONAL AND IRRECOVABLE BANK GUARANTEE FOR QUALIFIED CO-ORDINATING AGENCY OR QCA – PROVISION FOR GOVERNMENT PSU

To,
Chief Engineer,
SLDC, GETCO
Gotri Road,
Vadodara

BG. No.
Issue Date
Expiry Date
Extended Claim Date
Amount

In consideration of the [Insert name of the Company, Address] who has applied as **QUALIFIED CO-ORDINATING AGENCY (QCA)** for (**Name of Wind Pooling Station/ Solar Plant - as the case may be**) of **MW installed capacity**, connected to (**Name of GETCO S/s**) is to submit Bank Guarantee as per regulation No.5.15 of Notification No.1 of 2019 of Gujarat Electricity Regulatory Commission (Forecasting, Scheduling, Deviation Settlement and Related Matters of Solar and Wind Generation Sources) Regulation, 2019, equivalent to 110% against deviation charges, **amounting of total Rupees only.**

We [Insert name and address of the bank issuing the guarantee and address of the Registered office] (hereinafter referred to as "Guarantor Bank") hereby agrees unequivocally, irrevocably and unconditionally to pay to the SLDC at Vadodara forthwith on demand in writing from the SLDC or any Officer authorized by it in this behalf, any amount up to and not exceeding Rupees only [Insert the amount of the bank guarantee].

This Bank Guarantee shall be valid and binding on the Guarantor Bank up to _____ (Date of Expiry of BG) with a right to seek encashment for a period up to _____ days (As per norms) from the said Date (Date of Expiry of BG) and shall in no event be terminable by notice or any change in the constitution of the Bank or the term of the Agreement or by any other reasons whatsoever and our liability hereunder shall not be impaired or discharged by any extension of time or variations or alternations made, given, or agreed with or without our knowledge or consent, by or between parties to the respective agreement.

Our liability under this Guarantee is restricted to Rupees... (Rs. only). Our Guarantee shall remain in force until [Insert Date of Expiry of BG]. The SLDC shall be entitled to invoke this Guarantee any time up to _____ days (As per norms) from the last date of the validity of this Guarantee i.e [Date of Expiry of BG + _____ days (As per norms)] by issuance of a written demand to invoke this guarantee.



Attnal

GERC Notification No.1 2019 Forecasting, Scheduling, DSM & related matters Solar and Wind generation sources regulation 2019.

Implementation Procedure

The BANK GUARANTEE can also be presented at the _____ [hereinafter referred to as Local Branch at Vadodara along with Branch code] of the _____ (Issuing Bank of BG) for its Invocation.

The Guarantor Bank hereby expressly agrees that it shall not require any proof in addition to the written demand from the SLDC, made in any format, raised at the above-mentioned address or local branch at Vadodara of the Guarantor Bank, in order to make the said payment to the SLDC at Vadodara.

The Guarantor Bank shall make payment hereunder on first demand without demur and without raising any restriction or conditions and notwithstanding any objection by, [Insert name of Company] and/or any other person.

This is Bank Guarantee as a financial security towards the RE DSM bill (as per Hon'ble GERC regulation) shall be issued by SLDC and to be settled by QUALIFIED CO-ORDINATING AGENCY (QCA) for (Name of Wind Pooling Station/ Solar Plant - as the case may be) of MW total installed capacity, where in (Name of Government / PSU) is a one of the pool member having MW capacity and authorizes SLDC to get this BG encash in case of defaulter of QCA at (Name of Wind Pooling Station/ Solar Plant - as the case may be) against SLDC RE DSM bill, irrespective of individual defaulter generator of respective pooling station.

The Guarantor Bank shall not require the SLDC to justify the invocation of this BANK GUARANTEE, nor shall the Guarantor Bank have any recourse against the SLDC in respect of any payment made hereunder.

This BANK GUARANTEE shall be a primary obligation of the Guarantor Bank and accordingly SLDC shall not be obliged before enforcing this BANK GUARANTEE to take any action in any court or arbitral proceedings against the >....., to make any claim against or any demand on the >..... or to give any notice to the >..... or to enforce any security held by SLDC or to exercise, levy or enforce any distress, diligence or other process against

This BANK GUARANTEE shall be interpreted in accordance with the laws of India and the courts at Vadodara shall have exclusive jurisdiction.

The Guarantor Bank represents that this BANK GUARANTEE has been established in such form and with such content that it is fully enforceable in accordance with its terms as against the Guarantor Bank in the manner provided herein.

This BANK GUARANTEE shall not be affected in any manner by reason of merger, amalgamation, restructuring, liquidation, winding up, dissolution or any other change in the constitution of the Guarantor Bank.

The Guarantor Bank hereby agrees and acknowledges that the SLDC shall have a right to invoke this Bank Guarantee either in part or in full, as it may deem fit.



[Signature]

GERC Notification No.1 2019 Forecasting, Scheduling, DSM & related matters Solar and Wind generation sources regulation 2019.

Implementation Procedure

Any Demand made by SLDC on the Guarantor Bank or its Local Branch (Name and Address of the Branch along with Branch Code) at Vadodara shall be conclusive and binding not withstanding any difference between SLDC and[Name of Company] or any dispute pending before any Court, Tribunal, Arbitrator or any other Authority.

Notwithstanding anything contained hereinabove, our liability under this Guarantee is restricted to Rs. (Rupees. only) and it shall remain in force until[Insert date of validity of BG], with an additional claim period of ____ days (As per norms) from the last date of the validity of this Guarantee i.e..... [Date of Expiry of BG + ____ days (As per norms)]. We are liable to pay the guaranteed amount or any part thereof under this Bank Guarantee only if the SLDC serves upon us a written claim or demand.

In witness whereof the Bank, through its authorized officer, has set its hand and stamp on this day of at

Witness:
1.
Name and Address.

2.
Name and Address

Signature

Name:
Designation with Bank Stamp

Attorney as per power of attorney No.



Handwritten signature in blue ink.

GERC Notification No.1 2019 Forecasting, Scheduling, DSM & related matters Solar and Wind generation sources regulation 2019.

Implementation Procedure

ANNEXURE - A

Commitment Letter from New QCA

Date: _____

To,
The Chief Engineer,
 State Load Despatch Center, GETCO,
 132kV Gotri Sub Station Compound,
 Near T.B. Hospital,
 Gotri Road,
 Vadodara - 390021,
 Gujarat.

Sub: Commitment Letter from QCA _____ (Name of new QCA).

Respected Sir,

"We _____ (Name of new appointed QCA) as a QCA are providing "Commitment" for _____ (Name of RE Pooling Station) RE Pooling Station of _____ MW, connected to _____ STU S/S, as below:

"We _____ (Name of new appointed QCA) are responsible for forecasting, scheduling, DSM & related matter as per Hon'ble GERC (Forecasting, Scheduling, Deviation Settlement and Related Matters of Solar and Wind Generation Sources) Regulations, 2019, Notification No. 1 of 2019 Dated. 19.01.2019 & Procedure thereof, with effect from _____ (i.e. date of changeover)"

Regards,

Signed and seal by QCA (Firm /Company / Agency)

<<Sign of Authority>> <<Signing Authority Name>> <<Signing Authority Designation>>	<<Name & Sealed of Firm / Company / Agency>>
--	--



(Handwritten signature in blue ink)

GERC Notification No.1 2019 Forecasting, Scheduling, DSM & related matters Solar and Wind generation sources regulation 2019.

Implementation Procedure

ANNEXURE - B

Intimation Letter from New QCA to RE Generators

Date: _____

To,
The Chief Engineer,
 State Load Despatch Center, GETCO,
 132kV Gotri Sub Station Compound,
 Near T.B. Hospital,
 Gotri Road,
 Vadodara - 390021,
 Gujarat.

Sub: Intimation Letter from QCA _____ (Name of new QCA).

Respected Sir,

"We _____ (Name of new appointed QCA) as a QCA are providing "Confirmation" for _____ (Name of RE Pooling Station) RE Pooling Station of _____ MW, connected to _____ STU S/S, as below:

"We _____ (Name of new appointed QCA) have "intimated" to all concern Generators of _____ (Name of RE Pooling Station) RE Pooling Station of _____ MW for changeover of QCA, well in advance. We _____ (Name of new appointed QCA) are eligible for forecasting, scheduling, DSM & related matter as per Hon'ble GERC (Forecasting, Scheduling, Deviation Settlement and Related Matters of Solar and Wind Generation Sources) Regulations, 2019, Notification No. 1 of 2019 Dated. 19.01.2019, with effect from _____ (i.e. date of changeover)".

Regards,

Signed and seal by QCA (Firm /Company / Agency)

<<Sign of Authority>> <<Signing Authority Name>> <<Signing Authority Designation>>	<<Name & Sealed of Firm / Company / Agency>>
--	--



Attn: _____

GERC Notification No.1 2019 Forecasting, Scheduling, DSM & related matters Solar and Wind generation sources regulation 2019.

Implementation Procedure

ANNEXURE - C

Intimation Letter from New QCA to Existing QCA

Date: _____

To,
The Chief Engineer,
 State Load Despatch Center, GETCO,
 132kV Gotri Sub Station Compound,
 Near T.B. Hospital,
 Gotri Road,
 Vadodara - 390021,
 Gujarat.

Sub: Intimation Letter from QCA _____ (Name of new QCA).

Respected Sir,

"We _____ (Name of new appointed QCA) as a QCA are providing "Confirmation" for _____ (Name of RE Pooling Station) RE Pooling Station of _____ MW, connected to _____ STU S/S, as below:

"We _____ (Name of new appointed QCA) have "intimated" to _____ (Name of existing QCA) for "changeover" of _____ (Name of RE Pooling Station) RE Pooling Station of _____ MW, well in advance. We _____ (Name of new appointed QCA) are eligible for forecasting, scheduling, DSM & related matter as per Hon'ble GERC (Forecasting, Scheduling, Deviation Settlement and Related Matters of Solar and Wind Generation Sources) Regulations, 2019, Notification No. 1 of 2019 Dated. 19.01.2019, with effect from _____ (i.e. date of changeover)".

Regards,

Signed and seal by QCA (Firm /Company / Agency)

<<Sign of Authority>> <<Signing Authority Name>> <<Signing Authority Designation>>	<<Name & Sealed of Firm / Company / Agency>>
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Amruti

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ANNEXURE-A



GEICO

GUJARAT ENERGY TRANSMISSION CORPORATION LIMITED

STATE LOAD DESPATCH CENTRE, GOTRI, VADODARA

(CIN): U40100GJ1999SGC036018

Tel: (0265) 2352103, 2322206 Fax: (0265) 2352019, 2356469 Website: www.sldcguj.com,
Email: celd@gebmail.com, acesldc.getco@gebmail.com, seopsldc.getco@gebmail.com

No. SLDC/SE(OP)/Modhera Sun-Temple/1723

Date: 28.08.2021

To,

The Secretary,

Gujarat Electricity Regulatory Commission,

6th Floor, GIFT ONE,

Road 5C, Zone 5, GIFT City,

Gandhinagar – 382355,

Gujarat, India

Sub: Scheduling and Energy Accounting Solar PV Plant with BESS.

Ref: (1) Application of GPCL Letter No. 52956 dtd. 08.06.2021

(2) GoG G. R. No. SLR-11/2017/692(P2)/B1 dtd. 08.06.2020 For Various relaxations under Solar Policy 2015 for Solarization project of Modhera Sun Temple and Town.

(3) GEDA Registration No. GEDA/SOL-26494/2020/12/OW/9723 dtd. 06.12.2020.

(4) GPCL Letter No. GPCL/PD/1009/Modhera/53436 Dated 23.08.2021

Respected Sir,

Regarding subject mentioned above, Government of India jointly with Government of Gujarat setting up first of its kind Demonstration project i.e. solarisation of Modhera Sun Temple and Town at nearby village: Sajjanpur, Taluka: Becharaji, Dist.: Mehsana. The project is integrated with MWh BESS (Battery Energy Storage System) and is one of the component of the demonstration project.

It is ground mounted Solar PV Project of 6.0 MW AC (7.083 MW DC) integrated with 2X7.5 MWh BSES and it is implemented by GPCL. This project is registered by GEDA under Solar Policy-2015. M/s GPCL has conducted commissioning test on 26th August, 2021 as per letter at reference (4).

Inauguration of this Demonstration project by our Hon'ble Prime Minister is expected during the first week of September, 2021.

Government of Gujarat has issued various relaxations as per the G. R. under Reference (2) above for this project.

In absence of any Regulation of the Hon'ble Commission for Scheduling and Energy Accounting of such Solar Plant with Battery Energy Storage System (BESS), SLDC

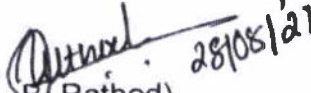
demonstration project.

- *During the daytime, 9 revisions will be allowed and RE-DSM for Solar Power will be applicable on forecasting error as per the Notification No.1 of 2019 of Hon'ble GERC.*
- *During the night time schedule will be replaced by the actual energy injected into the Grid as an action of discharging the BESS.*
- *At any time of operation, the Available capacity should not increase the 6.0 MW i.e. the AC capacity of Solar Plant.*

The above arrangement of Scheduling and Energy Accounting will be provisional. Based on the operational experience gain, SLDC will present the report on this demonstration project with battery storage. In future whatever mechanism is notified by the Hon'ble Commission shall be applicable.

It is requested to apprise the Hon'ble Commission accordingly.

Thanking you,

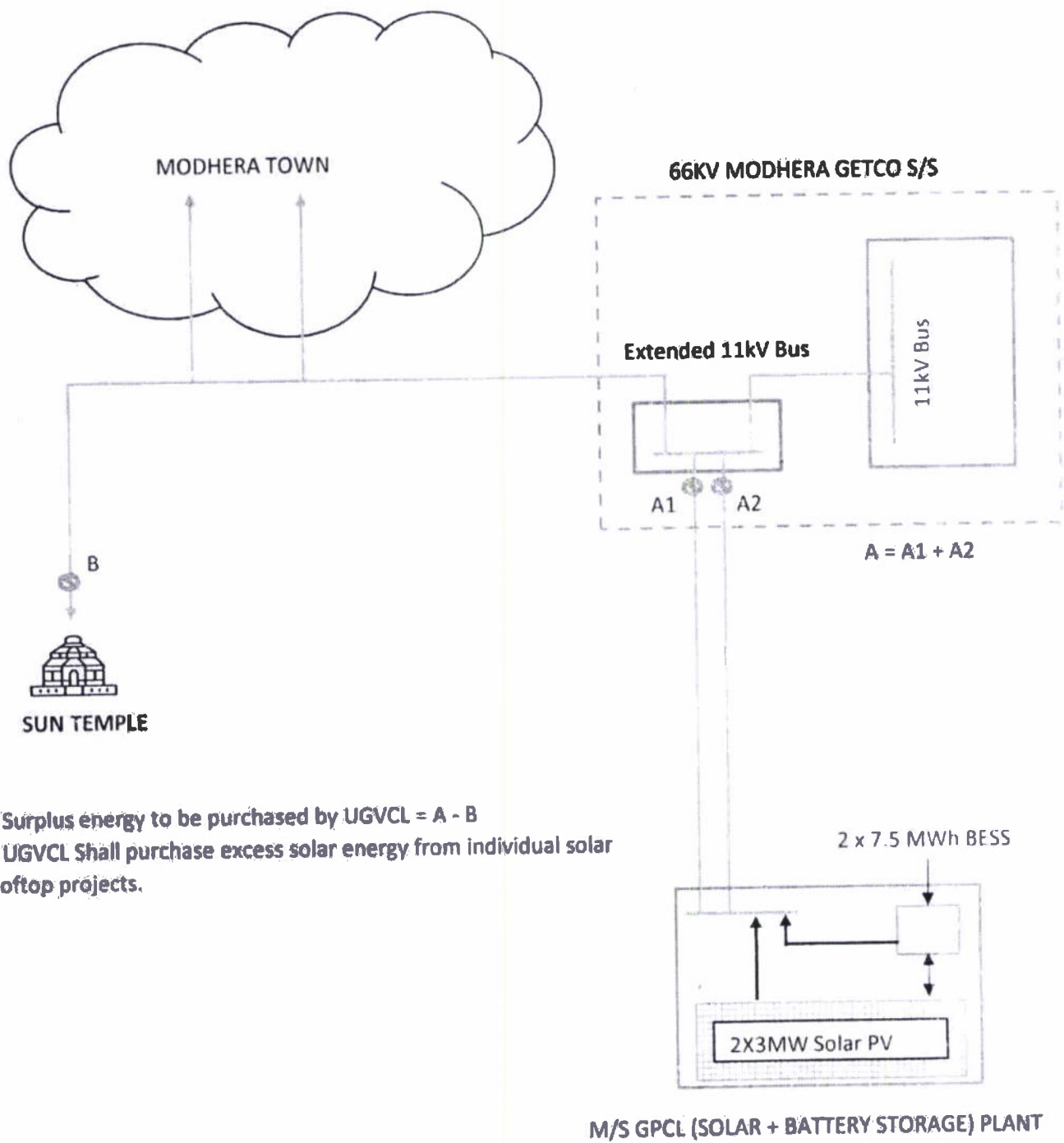

(A. B. Rathod) 28/05/21

Additional Chief Engineer (SLDC)
GETCO, Vadodara, Gujarat

Copy fwcs to:

1. The Managing Director, GETCO, Vadodara
2. The General Manager (Commerce), GUVNL, Vadodara

SOLARISATION OF MODEHERA SUNTEMPLE AND TOWN



1. Surplus energy to be purchased by UGVCL = $A - B$
2. UGVCL Shall purchase excess solar energy from individual solar rooftop projects.

[Signature]

[Signature]

No - 1936



GERC/TECH-1/2021/

Dt. 3 DEC 2021

Gujarat Electricity Regulatory Commission

6th Floor, GIFT ONE,
Road 5-C, Zone 5, GIFT CITY,
Gandhinagar-382 355, GUJARAT, INDIA
Ph. : +91-79-2360 2000 Fax : +91-79-2360 2054/55
E-mail : gerc@gercin.org Website : www.gercin.org

To,
The Additional Chief Engineer
State Load Despatch Centre
132 kV Gotri Sub-Station Compound,
Near T. B. Hospital, Gotri Road,
Vadodara - 390021

SECOP)

Pl. Discuss.

②
512EE(PB)
EE(Sch)

Sub.: - Scheduling and Energy Accounting for Solar PV Plant with BESS

With reference to the captioned subject and your office e-mail dated 28.08.2021 proposing for Scheduling and Energy Accounting for Solar PV Plant with BESS to be set up at Modhera Sun Temple, it is to state that the matter contains technical and commercial issues and the Commission is of the considered opinion that SLDC should come with a detailed proposal seeking the required amendments in the concerned Regulations by filing a Petition, making all the relevant stakeholders as a party in the Petition, in this regard with payment of requisite charges as per the provisions of the GERC (Conduct of Business) Regulations, 2005 and the GERC (Fees, Fines and Charges) Regulations, 2005 and subsequent amendments.

(Roopwant Singh, IAS)
Secretary

Gujarat Electricity Regulatory Commission
Gandhinagar



ANNEXURE-B



GETCO
GUJARAT ENERGY TRANSMISSION CORPORATION LIMITED

STATE LOAD DESPATCH CENTRE, GOTRI, VADODARA

(CIN): U40100GJ1999SGC036018

Tel: (0265) 2352103, 2322206 Fax: (0265) 2352019, 2356469 Website: www.sldcguj.com,
Email: celd@gebmail.com, acesldc.getco@gebmail.com, seopsldc.getco@gebmail.com

No. SLDC/RE/GERC/16/ 2529

Date: 10.12.2021
14.12.2021

To,
The Secretary,
Gujarat Electricity Regulatory Commission,
6th floor, GIFT ONE,
Road 5C, Zone 5, Gift City,
Gandhinagar - 382355

Sub: Scheduling and Energy Accounting Solar - Wind Hybrid Power Project in Gujarat.
Ref: MAL/AMD/SLDC/2021/0112 dt.03.12.21

Respected Sir,

M/s Manikaran Analytics Limited-registered, QCA has submitted a request regarding seeking guidelines for Forecasting & Scheduling of Hybrid RE project registered under Gujarat wind-solar hybrid power policy -2018.

SLDC Gujarat proposes the following procedure for Scheduling and Energy Accounting for new Wind -Solar Hybrid project under Gujarat wind-solar hybrid power policy - 2018 & Tariff Framework for Procurement of Power by Distribution Licensees and Others from Wind-Solar Hybrid Projects and Other Commercial Issues for The State of Gujarat - 2021.

- The total 16 Revisions shall be allowed to the Wind-Solar Hybrid Generator during the day.
- The Available capacity (AvC) & forecasting/schedule for solar capacity & Wind capacity of hybrid Generator shall be considered separately for wind and solar generation as per the Notification No.1 of 2019 of the Hon'ble GERC.
- For deviation settlement mechanism of hybrid generator:
 - For Solar capacity of wind-solar hybrid generator DSM will be applicable on forecasting errors as per the Regulation No. 8.6 of the Notification No 1 of 2019 of the Hon'ble GERC.
 - For Wind capacity of wind-solar hybrid generator DSM will be applicable on forecasting errors as per the Regulation No. 8.5 of the Notification No 1 of 2019 of the Hon'ble GERC.
- The energy injection from wind and solar capacity at receiving end of GETCO substation shall be worked out separately on the basis of meter reading of common meter installed at receiving end substation appropriately apportioned as per the respective meter reading of wind and solar end meters as per formula as under.

Amul



$$\text{Apportioned Solar Energy} = \left[\frac{\text{Main Meter Energy (M) (Actual Energy)}}{\text{Solar Meter Energy (SG) + Wind Meter Energy (WG)}} \right] \times \text{Solar Meter Energy (SG)}$$

$$\text{Apportioned Wind Energy} = \left[\frac{\text{Main Meter Energy (M) (Actual Energy)}}{\text{Solar Meter Energy (SG) + Wind Meter Energy (WG)}} \right] \times \text{Wind Meter Energy (WG)}$$

All the accounting shall be in 15-minute time block wise and energy after curtailment will be considered as Actual Energy.

Further, as per Clause No. 2.8.3 of Hon'ble GERC Order No. 4 of 2021, 'in case the generation from a hybrid projects exceeds the allocated/ sanctioned transmission capacity limit, same shall be considered as inadvertent injection of power for which no payment or credit shall be given'.

In such case, energy after curtailment will be considered as 'Actual Injection' for calculation of Percentage Absolute error as per Regulation No. 3.1 (a) of Hon'ble GERC Notification No. 1 of 2019 as under:

$$\text{Absolute error (\%)} = 100 \times [\text{Actual injection} - \text{Scheduled generation}] / \text{Available capacity}.$$

The above arrangement of Scheduling and Energy Accounting will be provisional and the schematic diagram is attached herewith accordingly. In future, the mechanism as notified by the Hon'ble Commission for hybrid project shall be applicable to such hybrid projects in the grid.

It is requested to apprise the Hon'ble commission accordingly.

Thanking You.


(A. B. Rathod) 14/12/2021
Addl. Chief Engineer (SLDC)
GETCO, Vadodara

Encl.: Schematic Diagram

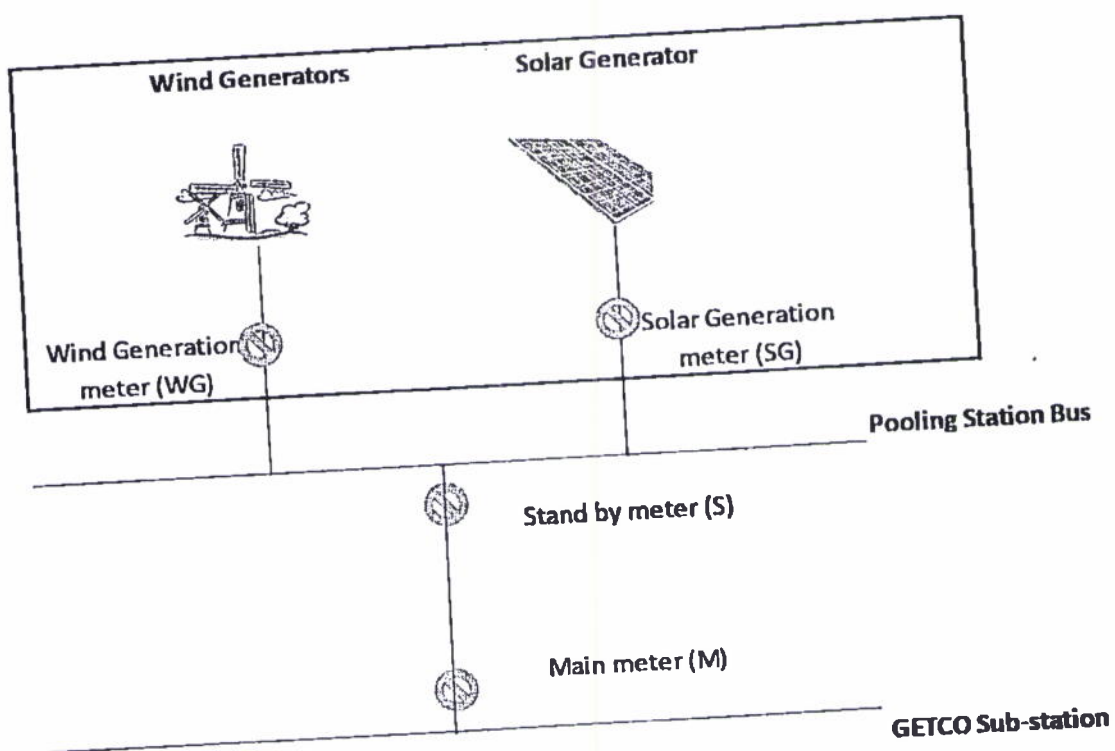
Copy fwcs to:

1. The Managing Director, GETCO, Vadodara.
2. The General Manager (Commerce), GUVNL, Vadodara.





Schematic Diagram

*Amel*



No. 238/78/2017-Wind
Ministry of New & Renewable Energy
(Wind Energy Division)

Block No.14, CGO Complex,
Lodhi Road, New Delhi-110003

Dated: 14 May 2018

National Wind-Solar Hybrid Policy

Ministry of New & Renewable Energy issued draft National Wind-solar Hybrid Policy in June 2016. The Policy has been finalized after having detailed consultation with stakeholders.

2. The National Wind-solar Hybrid Policy is hereby released by the Ministry for information of all stakeholders and general public.

[J. K. Jethani]
Scientist-E

Attnal



NATIONAL WIND-SOLAR HYBRID POLICY

1. INTRODUCTION

1.1 India has set an ambitious target of reaching 175 GW of installed capacity from renewable energy sources by the year 2022, which includes 100 GW of solar and 60 GW of wind power capacity. Various policy initiatives have been taken to achieve this target. At the end of 2017-18 the total renewable power installed capacity in the country was almost 70 GW.

1.2 Solar and wind power being variable in nature pose certain challenges on grid security and stability. Studies revealed that in India solar and wind resources are complementary to each other and hybridization of these two technologies would help in minimizing the variability apart from optimally utilizing the infrastructure including land and transmission system.

1.3 Superimposition of wind and solar resource maps shows that there are large areas where both wind and solar have high to moderate potential.

1.4 The existing wind farms have scope of adding solar PV capacity and similarly there may be wind potential in the vicinity of existing solar PV plant.

1.5 Suitable policy interventions are therefore, required not only for new wind-solar hybrid plants but also for encouraging hybridization of existing wind and solar plants.



1.6 To smoothen the wind solar hybrid power further, appropriate capacity of battery storage may also be added to the project.

2. AIMS AND OBJECTIVE

2.1 The main objective of the Policy is to provide a framework for promotion of large grid connected wind-solar PV hybrid system for optimal and efficient utilization of transmission infrastructure and land, reducing the variability in renewable power generation and achieving better grid stability.

2.2 Policy also aims to encourage new technologies, methods and way-outs involving combined operation of wind and solar PV plants.

3. PERIOD OF ENFORCEMENT

This policy will remain in force unless withdrawn, modified or superseded by the Government. The Government will undertake a review of this Policy as and when required.

4. WIND-SOLAR HYBRID SYSTEMS

4.1 Under the category of wind-solar hybrid power plants, Wind Turbine Generators (WTGs) and Solar PV systems will be configured to operate at the same point of grid connection. There can be different approaches towards integrating wind and solar depending upon the size of each of the source integrated and the technology type.

4.2 In case of fixed speed wind turbines connected to grid using an induction generator, the integration can be on the HT side at the AC output bus. However, in case of variable speed wind turbines deploying inverters



for connecting the generator to the grid, the wind and the Solar PV system can be connected to the intermediate DC bus of the AC-DC-AC converter.

4.3 The second important aspect would be related to the sizing – which would depend on the resource characteristics. In order to achieve the benefits of hybrid plant in terms of optimal and efficient utilization of transmission infrastructure and better grid stability by reducing the variability in renewable power generation, in the locations where the wind power density is quite good, the size of the solar PVs capacity to be added as the solar-hybrid component could be relatively smaller. On the other hand, in case of the sites where the wind power density is relatively lower or moderate, the component of the solar PV capacity could be relatively on a higher side.

However, a wind-solar plant will be recognized as hybrid plant if the rated power capacity of one resource is at least 25% of the rated power capacity of other resource.

5. IMPLEMENTATION STRATEGY

5.1 The implementation of wind solar hybrid system will depend on different configurations and use of technology.

a. Wind-Solar Hybrid- AC integration:

In this configuration the AC output of the both the wind and solar systems is integrated either at LT side or at HT side. In the later case both system uses separate step-up transformer and HT output of both the system is connected to common AC Bus-bar. Suitable control equipment are deployed for controlling the power output of hybrid system.



b. Wind-Solar Hybrid- DC integration:

DC integration is possible in case of variable speed drive wind turbines using convertor-inverter. In this configuration the DC output of the both the wind and solar PV plant is connected to a common DC bus and a common invertors suitable for combined output AC capacity is used to convert this DC power in to AC power.

5.2 New Wind-Solar Hybrid Plants:

New wind-solar hybrid projects shall be encouraged with following provisions:-

- i. The hybrid power generated from the wind-solar hybrid project may be used for (a) captive purpose; (b) sale to third party through open access; (c) sale to the distribution company (ies) either at tariff determined by the respective SERC or at tariff discovered through transparent bidding process; and (d) sale to the distribution company (ies) at APPC under REC mechanism and avail RECs.
- ii. The power procured from the hybrid project may be used for fulfilment of solar RPO and non-solar RPO in the proportion of rated capacity of solar and wind power in the hybrid plant respectively.
- iii. For procurement of hybrid power through transparent bidding process different parameters may be used. Parameters that may be considered for bidding could be capacity delivered at grid interface point, effective CUF and unit price of electricity.
- iv. Government entities may invite bids for new hybrid plants keeping qualifying criteria such as those discussed in iii above, the tariff being the main criteria for selection.



5.3 Hybridisation of existing wind/solar PV plants:

Existing wind or solar power projects, willing to install solar PV plant or WTGs respectively to avail benefit of hybrid project, may be allowed to do so with following Conditions:

- i. No additional connectivity/transmission capacity charges shall be levied by the respective transmission entity for hybridisation at existing wind/solar PV plants if already granted transmission connectivity/ access is being used. Transmission charges may be applicable for the additional transmission capacity/ access granted as per prevailing regulation.
- ii. In case capacity margins are available at the receiving transmission sub-station of respective transmission entity, at which the existing wind/solar projects is connected, additional transmission capacity/access may be allowed subject to its technical feasibility. In such a case, any transmission augmentation required up to the receiving transmission sub-station will be the responsibility of project developer.
- iii. In case of AC integration assessment of solar and wind power injected from the hybrid project in to the grid will be worked out by apportioning the reading of main meter installed at the receiving station on the basis of readings of ABT meters installed on LT or HT side of the wind and solar PV plant as the case may be.
- iv. In case of DC integration assessment of solar and wind power injected from the hybrid project in to the grid will be worked out by apportioning the reading of main meter installed at the receiving station on the basis of readings of DC meters installed at the DC output of the wind and solar PV plant. Till such time the methodology



for DC metering of hybrid systems and standards & regulations are framed for DC meters, only AC integration will be permitted.

- v. The additional solar/wind power generated from the hybrid project may be used for (a) captive purpose; (b) sale to third party through open access; (c) sale to the distribution company (ies) either at tariff determined by the respective SERC or at tariff discovered through transparent bidding process; and (d) sale to the distribution company (ies) at APPC under REC mechanism and avail RECs. For bidding purpose, State or Central entities may bid for hybridization of existing projects connected to InSTS or ISTS as the case may be.
- vi. Government entities may invite bids for hybridisation of existing wind and solar plants with tariff being the main criteria for selection.
- vii. The additional solar/wind power procured from hybrid project shall be used for fulfilment of solar/non-solar RPO as the case may be.

5.4 Battery Storage:

Battery storage may be added to the hybrid project (i) to reduce the variability of output power from wind solar hybrid plant; (ii) providing higher energy output for a given capacity (bid/ sanctioned capacity) at delivery point, by installing additional capacity of wind and solar power in a wind solar hybrid plant; and (iii) ensuring availability of firm power for a particular period.

Bidding factors for wind solar hybrid plants with battery storage may include minimum firm power output throughout the day or for defined hours during the day, extent of variability allowed in output power, unit price of electricity, etc.



6. REGULATORY REQUIREMENTS

The Central Electricity Authority and CERC shall formulate necessary standards and regulations including metering methodology and standards, forecasting and scheduling regulations, REC mechanism, grant of connectivity and sharing of transmission lines, etc. for wind-solar hybrid systems.

7. STANDARD AND QUALITY

For wind turbines, solar modules and balance of systems, the technical guidelines issued by the Ministry from time to time for grid connected systems will be followed.

8. INCENTIVES

The Government will encourage development wind-solar hybrid systems through different schemes and programmes. All fiscal and financial incentives available to wind and solar power projects will also be made available to hybrid projects.

9. RESEARCH AND DEVELOPMENT

Government will support the technology development projects in the field of wind-solar hybrid systems. Besides, support will be provided for development of standards for hybrid systems.

Amal

No. 238/78/2017-Wind

भारत सरकार/Government of India

नवीन एवं नवीकरणीय ऊर्जा मंत्रालय/Ministry of New & Renewable Energy
CGO Complex, Block No.14, Lodhi Road, New Delhi - 110003

13th August, 2018

Office Memorandum

Subject: Amendment in National Wind-Solar Hybrid Policy - Reg.

The undersigned is directed to refer to National Wind-Solar Hybrid Policy issued by this Ministry vide OM dated 14-05-2018 and the issue of 'storage' in said Policy, wherein storage was defined in terms of battery storage only. This restricted usage of other forms of storage such as pumped hydro, compressed air, flywheel, etc., under the Hybrid Policy. To broaden the definition of storage the word 'battery' is removed from relevant clauses (1.6 and 5.4). The clauses 1.6 and 5.4 of the said policy may be read as follows:

Clause 1.6

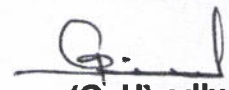
"To smoothen the wind solar hybrid power further, appropriate capacity of storage may also be added to the project."

Clause 5.4

"Storage:

Storage may be added to the hybrid project (i) to reduce the variability of output power from wind solar hybrid plant; (ii) providing higher energy output for a given capacity (bid/ sanctioned capacity) at delivery point, by installing additional capacity of wind and solar power in a wind solar hybrid plant; and (iii) ensuring availability of firm power for a particular period.

Bidding factors for wind solar hybrid plants with storage may include minimum firm power output throughout the day or for defined hours during the day, extent of variability allowed in output power, unit price of electricity, etc."


(G. Upadhyay)
Director

To,
All concerned.



**GUJARAT WIND- SOLAR HYBRID
POWER POLICY- 2018**

Government of Gujarat
Energy and Petrochemicals Department
G.R. No: SLR/11/2017/141/B1
Sachivalaya, Gandhinagar
Date:20/06/2018

PREAMBLE

The State Government envisions a future with reduced dependence on fossil-based energy by promoting renewable energy sources. The Government recognizes that renewable energy can also significantly increase the State's and the Nation's energy security. Above all, it is the vision of the State Government to provide a clean and sustainable environment for its Citizens.

The State of Gujarat is blessed with a long coastline and good wind speeds for harnessing of the wind Energy potential of more than 80,000 MW. Gujarat is also rich in solar energy resource with substantial amounts of barren and uncultivable land, solar radiation in the range of 5.5-6 kilowatt-hour (kWh) per square meter per day, an extensive power network and utilities with one of the best operational efficiencies.

The State has taken several initiatives such as investor friendly solar and wind power policies, large scale solar parks' development, green energy corridor investment for power evacuation and power procurement through PPAs by DISCOMs to promote RE capacity addition, to meet the growing energy demand of the state in environmentally sustainable manner. As a result of this, so far wind capacity installation in excess of 5,500 MW and solar capacity installation around 1,650 MW has been achieved.

Solar and wind energy generations are almost complementary to each other and 'hybridization' of two technologies would help in minimizing the variability apart from optimally utilizing available infrastructure including land and transmission system.

Solar and wind power potential in Gujarat is concentrated mainly in Saurashtra, Kutchh and North Gujarat region. The existing wind farms have scope of adding solar PV capacity and similarly existing solar PV plants have potential to develop Wind capacity. Suitable policy

interventions are required not only for new wind-solar hybrid plants but also for encouraging hybridization of existing wind and solar plants.

Accordingly this Gujarat Wind- Solar Hybrid Power Policy-2018 ("Policy") aims to scale up installation of Wind & Solar Hybrid Power Projects(the "Hybrid Projects") in order to minimize the variability apart from optimally utilizing the required infrastructure including land and transmission system, and thus strengthening the energy security of the country.

OBJECTIVES:-

The main objectives of this Policy are:

1. To provide a framework for promotion of large grid-connected wind-solar PV hybrid systems for optimal and efficient utilization of the transmission infrastructure and land, and reducing the variability in renewable power generation thus achieving better grid-stability.
2. To encourage new technologies, methods and solutions to facilitate the combined operation of wind and solar PV plants and to promote the integration with emerging technologies like energy storage systems.

RESOLUTION

1. TITLE

This Policy shall be known as the "Gujarat Wind-Solar Hybrid Power Policy -2018".

2. OPERATIVE PERIOD

This policy shall come into effect from the date of issuance and shall remain in operation for a period of five (5) years from the date of its issuance.

The Wind Turbine Generator(s) /Solar PV Generation Project(s) developed during Operative Period of this Policy shall become eligible for the benefits and incentives declared under this Policy for a period of twenty five (25) years from the date of commissioning or the life span of such Wind Turbine Generator(s)/Solar Generation Project(s), whichever is earlier.



3. ELIGIBLE UNIT

Any individual, company or body corporate or association or body of individuals, whether incorporated or not, or artificial juridical person, shall be eligible for setting up of new wind-solar Hybrid Projects OR shall be eligible to add wind/solar capacity at their existing solar/wind power projects, respectively, either for the purpose of captive use and/or for selling of electricity, in accordance with the Electricity Act, 2003, as amended from time to time. The wind and solar generation may be metered separately at the pooling/sending end Sub-Station.

Note: The use of electricity for own consumption at his end use location/s by the owner of Hybrid Project shall be considered as Captive use. In case of Group Captive, 100 % of equity amount is to be invested/ held by Captive Users and they are required to consume entire generation in the ratio of their equity amount invested with a variation not exceeding 10 % in consumption on annual basis.

4. STATE GOVERNMENT FACILITATION & NODAL AGENCY

Gujarat Energy Developer Agency (GEDA) shall be the State Government Nodal Agency for facilitation and implementation of the Gujarat Wind-Solar Hybrid Power Policy-2018. The Nodal Agency shall facilitate and assist the Project Developers to undertake the activities in achieving the objectives of this Policy. Energy storage Technology will also be facilitated by the State Government.

5. IMPLEMENTATION STRATEGY:

5.1. For simplicity purpose, wind-solar hybrid power generation plants are divided into two categories:

i. Type-A Projects

This category includes conversion of existing/ under-construction wind or solar power plants into Hybrid Projects. Wind/ Solar capacity under construction shall be considered based on the Registration Certificate issued by GEDA/ evacuation permission granted by GETCO to the Solar/ Wind Project Developers before issuance of this Policy. The installed Wind/ Solar Capacity shall be considered based on Power Purchase Agreement (PPA)/ Wheeling Agreement capacity.

ii. Type-B Projects

This includes new wind-solar hybrid power generation projects which are not registered with GEDA or evacuation permission is not granted by GETCO till the date of issuance of this Policy.

5.2. The installation of wind-solar hybrid power generation system shall be with AC or DC integrated configurations as detailed below:

i. Type-A Projects (Existing Projects)

For Type-A Projects, only AC integration shall be permitted. The AC output of the both the wind and solar systems shall be integrated at the pooling/ sending-end sub-station as the case may be. Both wind and solar PV systems shall use separate set of internal electrical lines and equipment for connecting at pooling/sending-end sub-station of the Hybrid Project and will be mandatorily required to be metered separately in order to cater to separate RPOs. Further, suitable control equipment shall be deployed for controlling the power output of Hybrid Project.

ii. Type-B Projects (New Projects)

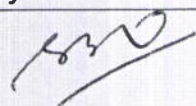
In the absence of a common RPO and tariff;

In this case, only AC integration shall be allowed. Separate electrical lines and meters need to be laid for wind and solar respectively until the pooling / sending-end substation of the hybrid project

In the presence of a common RPO and tariff;

In this case, AC or DC integration shall be allowed. Common electrical lines may be used up to the pooling substation of the hybrid project. DC integration shall be contingent to the availability of DC metering standards, which may be evolved in the due course of time.

Under all circumstances, the Developer shall lay a dedicated line for evacuation of power from the pooling/sending-end sub-station of Hybrid Project to the receiving end sub-station of GETCO as per system study undertaken by GETCO.




Energy injection from Wind & Solar capacity at receiving end of GETCO sub-station shall be worked out separately on basis of meter reading of common meter installed at receiving end sub-station appropriately apportioned as per the respective meter reading of wind and solar meters.

Important: It should be noted that separate metering for wind and solar plants may be required as there may be a tariff-related or renewable energy purchase (RPO) compliance-related implication. As on the date of the notification of this policy, there is no relevant DC metering standards identified. However, it is envisioned that in due course of time, during the Operative Period of this Policy, there would be conducive technical, commercial and regulatory developments that would promote DC integration of wind-solar hybrid plants by overcoming such issues (Refer Clause 9.4).

5.3. Hybridization of Type-A Projects(Existing Projects):

Existing wind power or solar power Projects Developers, willing to install solar PV plant or wind turbine generators, respectively, at the existing location to avail benefits under this Policy, shall be allowed to do so with following conditions:

- i. The total power injection (combined wind and solar) into the grid shall not be more than the transmission capacity/grid connectivity allowed/sanctioned by GETCO for this purpose. In case, addition/augmentation in the existing evacuation system is required as per the system study undertaken by GETCO due to addition of wind/ solar capacity, Developers shall undertake such addition/augmentation in the system up to the receiving end sub-station of GETCO at their own cost. However, the primary focus of this policy is to optimize the utilization of existing transmission infrastructure and technologies, and design approaches towards minimum augmentation is encouraged.
- ii. The solar/wind power generated from the Hybrid Project shall be measured separately at the pooling/sending-end sub-station and energy injection at the receiving end sub-station of GETCO shall be worked out on apportioned basis as per the common meter reading at the receiving end sub-station.

- iii. The additional solar/wind power from the Hybrid Project may be allowed to wheel power for captive use or for sale of power to a third-party or sale to DISCOMs. For transmission and wheeling of power, the applicable charges and losses shall be as specified in this Policy.
- iv. The Developers shall approach GETCO for determining the transmission capacity available to evacuate the additional wind/ solar power or any augmentation that may be required. GETCO shall provide the relevant data with regards to the transmission capacity utilization on its existing network.

5.4. Type-B Project (New Project)

- i. The Developers of Hybrid Projects shall establish the evacuation line at their own cost up to the receiving end sub-station of GETCO.
- ii. The solar/wind power generated from the Hybrid Project shall be measured/ apportioned at the pooling/sending-end sub-station, and energy injection at the receiving end sub-station of GETCO shall be worked out on apportioned basis as per the common meter reading at the receiving end sub-station.
- iii. The Developer has option for wheeling of wind and solar power for their captive use or third-party sale or sale of power to the DISCOMs. For transmission and wheeling of power, the applicable charges and losses shall be as specified in the Policy.
- iv. Hybrid Project Developer shall approach GETCO for evacuation system planning up to the receiving station.

For both Type-A and Type-B Hybrid Projects, the Developer shall ensure for capacity allocation/sanction of transmission capacity at least equal to installed capacity of wind or solar project, whichever is higher. In case, total injection of power from Hybrid Project exceeds such allocated/sanctioned transmission capacity, such power shall be considered as inadvertent flow of power and shall not be considered for commercial settlement.

6. CAPACITY INSTALLATION

- 6.1. Type-A (Existing Projects): To develop additional solar capacity in wind power plant or vice-versa, participation is limited to only existing projects.
- 6.2. Type-B Projects (New Project): The choice of capacity mix between wind and solar shall be at the discretion of the Developer or be as per individual schemes as notified by the State or Central Government from time to time.

7. WIND-SOLAR HYBRID SYSTEM & POWER EVACUATION

Wind-Solar Hybrid Power Generation System, or the Hybrid Project, means the system of combined generation of wind and solar power at existing or new solar/wind power projects (or) co-located where injection of wind or solar power is at the interconnection point of the pooling sub-station of existing wind farms/ sending-end sub-station of existing solar power installations.

Under the scheme of wind-solar hybrid power generation, wind and solar PV systems may be connected at the same inter connection point at pooling/sending-end sub-station. In order to achieve the benefits of hybrid plant in terms of optimal and efficient utilization of transmission infrastructure and better grid stability by reducing the variability in renewable power generation, it is desired that:

- i. At the locations of having good wind power potential, the solar PV capacity to be added as the solar-hybrid component could be relatively smaller.
- ii. Similarly, in case of the sites where the wind power density is relatively lower or moderate, the component of the solar PV capacity could be relatively on a higher side.
- iii. Evacuation capacity for the purpose of connectivity and injection of power shall be worked out as follows:
 - a. For Type-A Projects (Existing Projects) where (a) open access is already granted to the extent of rated capacity of transmission line/ sub-station of GETCO and injection of power from additional wind/ solar capacity to be set up,

is restricted up to rated capacity of transmission line/ sub-station of GETCO. The same shall be allowed without applicability of transmission charges on such additional capacity. However, the transmission losses and wheeling charges/losses shall be made applicable to such capacity as applicable to any other solar or wind project as the case may be. In case total hybrid generation exceeds the transmission capacity limit, it shall be considered as inadvertent injection of power for which no payment or credit shall be given or under any exigency which requires curtailment of generation, the generation from additional/new wind/ solar capacity shall be curtailed first.

- b. In the cases where (b) there is capacity margin in the existing transmission system/ sub-station of GETCO after taking into account open access already granted to the existing wind/solar project or any augmentation and strengthening of transmission system after receiving-end sub-station is undertaken by GETCO for allocation/sanction of transmission capacity for allowing additional wind/ solar capacity, the transmission charges and losses, and wheeling charges and losses shall be applicable on such additional sanctioned/allocated capacity as applicable to any other solar/ wind project as the case may be. However, if any augmentation in the existing transmission system is required due to addition of such solar/wind capacity, up to receiving end sub-station of GETCO, the same shall be undertaken by the Developers at its own cost.
- c. In case of Type-B Projects (New Projects), the Developer of Hybrid Project shall establish a dedicated line at its own cost for evacuation of power up to receiving end sub-station of GETCO as per system study undertaken by GETCO where the Project Developer desires to inject power in the State Grid. From there onwards, GETCO shall ensure transmission system and connectivity. Transmission charges shall be applicable on the basis of sanctioned/ allocated transmission capacity. However, Developer shall ensure that power injection shall never increase beyond sanctioned/allocated transmission

capacity. Transmission charges and losses, and wheeling charges and losses shall be applicable as applicable to any other open access for wind and solar projects.

8. TARIFF FOR SALE TO DISCOMS:

Distribution Licensees may purchase power from Hybrid Project, wind and solar separately as follows for meeting their RPOs:

8.1. In case of Type-A Project (Existing Project)

- i. The purchase of power from existing wind/solar capacity shall be in accordance with the respective PPAs with GUVNL.
- ii. The sale and purchase of power from additional/ new wind/solar capacity shall be at the tariff discovered through competitive bidding (reverse bidding wherever required) undertaken by DISCOMs separately for wind and solar power purchase.

8.2. In case of Type-B Project (New Project)

The purchase of wind/solar power shall be at the tariff discovered through competitive bidding (reverse bidding whenever required) undertaken by DISCOMs separately for wind and solar power purchase until a common tariff mechanism and RPO for the hybrid project is evolved. Once the common hybrid tariff has been evolved, the DISCOM shall conduct reverse bidding on a single common hybrid tariff.

9. METERING

9.1. Energy generation from wind/ solar capacity shall be measured separately at the pooling/sending-end sub-station on 15-minute time block by installing ABT compliant meters by the Project Developers. Further, ABT compliant meter shall be installed on each wind turbine/ solar project as per GERC regulations.

9.2. For the purpose of commercial settlement and energy accounting, the metering point shall be at the receiving end sub-station of GETCO. The injection of energy from wind/

solar capacity shall be worked out separately at the receiving end sub-station of GETCO on the basis of meter reading of common meter installed at receiving end sub-station appropriately apportioned as per the respective meter reading of wind and solar meters. .

- 9.3. In case of Type-A projects (Existing Projects) that have a PPA with GUVNL, the metering/injection point shall be at the receiving end sub-station of GETCO.
- 9.4. In case of Type-B Projects (New Projects) that are AC or DC integrated, the metering point shall be at the receiving end of the GETCO substation. Separate meters will be required to be installed for both wind and solar PV systems in view of the different tariffs and RPO. In the event that a common hybrid tariff and a common RPO is present, then a common meter for both wind and solar shall suffice. GETCO will be responsible for sealing and installing the meters.
- 9.5. For Type-A Projects (Existing Projects), both wind and solar PV systems shall use separate set of internal electrical lines and equipment, and connect to the pooling/sending-end sub-station of the Hybrid Project. The projects shall be mandatorily metered separately.
- 9.6. Internal connectivity between solar and wind capacity prior to pooling/sending-end sub-station shall be allowed for Type B Projects (New Projects) once a common RPO and hybrid tariff are present.

10. WHEELING OF ELECTRICITY

Wheeling of electricity generated from Hybrid Project to the desired location(s) within the State shall be allowed on payment of transmission charges and losses, and wheeling charges and losses as under:

- 10.1. The payment of transmission charges shall be applicable on sanctioned/allocated transmission capacity at the rate as applicable to any normal Open Access Consumer. The Developer shall be required to seek sanction and allocation of transmission capacity at least for installed capacity of the wind or solar capacity, whichever is higher. Transmission losses shall be applicable on energy feed-basis as applicable to any other wind or solar project.

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10.2. For captive use: In case of injection at 66 KV and drawl at 11 KV voltage level, wheeling of electricity generated from the Hybrid Project to desired location(s) within the State shall be allowed on payment of transmission charges and transmission losses as stated above and 50% of wheeling charges and 50% of distribution losses of the energy fed to the grid at the receiving end sub-station of GETCO, as applicable to normal Open Access Consumers, and as amended by GERC from time to time.

10.3. For third-party sale: Wheeling of power for third-party sale from Hybrid Project shall be allowed on payment of transmission charges and losses as stated above. Wheeling charges and losses of energy fed to the grid as measured at receiving-end sub-station of GETCO shall be as applicable to normal Open Access Consumers. Set-off of wheeled energy at recipients' end shall be carried out in the same 15-minute time block. Further, concession of 50% of cross Subsidy Surcharge and Additional Surcharge, as applicable to normal Open Access Consumers, shall be given and the same shall be as amended by GERC from time to time.

10.4. Hybrid Project Developers, who desire to wheel electricity to more than one location for captive use/third-party sale, shall pay 5 paise per unit on energy fed in the grid as measured at receiving end sub-station of GETCO, to the concerned DISCOM in whose area power is consumed in addition to above mentioned transmission charges and losses, as applicable.

10.5. In case, total injection of power from the Hybrid Project exceeds such allocated/sanctioned transmission capacity, such power shall be considered as inadvertent flow of power and shall not be considered for any commercial settlement.

11. ENERGY ACCOUNTING

Energy accounting shall be as follows:

11.1. Case 1: If the Consumer does not claim the renewable attribute of wind/solar energy for meeting its Solar and Non-Solar RPO, energy injection worked out at the receiving end sub-station of GETCO shall be set-off against the consumption during the Consumer's billing cycle.

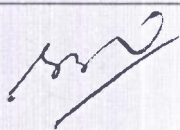
- i. For net import of power, DISCOM shall charge applicable tariff of respective category to the Consumer including fixed/ demand charge, energy charges, peak charge, other charges/ penalty etc. as applicable to other Consumers.
- ii. Surplus power, after giving set-off, shall be purchased by DISCOM at Average Pooled Power Purchase Cost (APPC) of the year of commissioning of project. Fixed/ demand charge, peak charge, other charges/ penalty, etc. shall be as applicable to other Consumers.
- iii. The entire generation shall be considered for fulfilling Solar and Non-solar RPO of the DISCOM.

11.2. Case 2 (a): If the Consumer claims the renewable attributes of solar/wind energy consumed for meeting its solar/non-solar RPO, then energy accounting shall be based on 15-minute time block-basis.

- i. For net import of power, the DISCOM shall charge applicable tariff of respective category to the Consumer including fixed/ demand charge, energy charges, peak charge, other charges / penalty, etc. as applicable to other Consumers.
- ii. Surplus power, after giving set off, shall be purchased by DISCOM at Average Pooled Power Purchase Cost (APPC) of the year of commissioning of the project. Fixed/ demand charge, peak charge, other charges / penalty, etc. shall be applicable to as applicable to other Consumers.
- iii. The surplus energy purchased shall be considered for fulfilling solar/non-solar RPO of the DISCOM.

11.3. Case 2 (b): If registered under REC mechanism and supply power within the State: Energy accounting shall be based on a 15-minute time block-basis.

- i. For net import of power, the DISCOM shall charge applicable tariff of respective category to the Consumer including fixed/ demand charge, energy charges, peak charge, other charges/ penalty, etc. as applicable to other Consumers.




- ii. Surplus power, after giving set off, shall be purchased by the DISCOM at 85% of Average Pooled Power Purchase Cost (APPC) of the year of commissioning of the project. Fixed/ demand charge, peak charge, other charges/ penalty, etc. shall be applicable to as applicable to other Consumers.

Provided that in case of Type-A Projects (Existing Projects), the energy accounting for consumption of power for captive consumption/third-party sale from existing wind/solar capacity shall be governed as per the respective policy/order of GERC as amended from time to time/wheeling agreement and if these provisions are different, the above provisions shall be applicable only for the wheeling of power from additional/new wind/solar capacity.

12. CONCESSIONAL BENEFITS & EXEMPTIONS

- 12.1. Electricity generated and consumed for self-consumption/ sale to third-party within the State shall be exempted from payment of electricity duty in accordance with the provisions of the Gujarat Electricity Duty Act, 1958 and its amendments from time to time.
- 12.2. Exemption from demand cut to the extent of 50% of installed capacity of Hybrid Wind-Solar Power Project in case of captive consumption and third-party sale within the State.

13. PROJECTS UNDER REC MECHANISM

Hybrid Projects availing open access for captive use/ third-party sale under REC mechanism shall be governed as per CERC REC Regulations.

Such projects shall be allowed to wheel the electricity on payment of applicable transmission charges/ losses, wheeling charges/ losses and other charges as applicable to other normal Open Access Consumers. Further. Cross Subsidy Surcharge and Additional Surcharge shall be applicable as applicable to normal Open Access Consumers.

14. RENEWABLE POWER PURCHASE OBLIGATION (RPO)

Obligated Entities have to abide by the GERC Regulations and Orders from time to time and GERC has been deciding the overall RPO and sub-category-wise procurement of renewable energy

from each renewable energy source. Obligated Entities may fulfill their RPO by purchasing wind/solar power at the tariff determined by GERC or tariff discovered through competitive bidding process/reverse competitive bidding process as the case may be undertaken separately for wind and solar keeping in view the interest of Consumers .

15. FORECASTING SCHEDULING

Hybrid Projects shall give their forecast and energy shall be scheduled for day-to-day operations, which shall be governed by regulations as passed and amended by GERC.

16. REACTIVE POWER

The drawl of reactive power shall be charged as per the GERC Orders, as amended from time to time.

17. OPERATION & MAINTENANCE

The operation and maintenance of dedicated evacuation line shall be carried out at the cost of the Developers of Hybrid Projects as per applicable technical standards and best practices.

18. RESTRICTIONS

18.1. Secondhand WTGs/ solar modules or other equipment shall not be eligible for installation under this Policy.

18.2. Only such WTGs that are approved either by Ministry of New and Renewable Energy (MNRE), Government of India shall be eligible.

18.3. For captive and third party models, the power contracted from the hybrid project shall be 50% of the sanctioned load of consumer for each solar and wind respectively. However, Consumers may set up Hybrid Project to extent of meeting RPO without limit of Contracted Demand/Sanctioned Load.

19. SHARING OF CLEAN DEVELOPMENT MECHANISM (CDM) BENEFIT

The Clean Development Mechanism (CDM) benefits shall be shared on net proceeds, starting from 100% to Developer in the first year after commissioning, and thereafter reducing by 10%

every year till the sharing becomes equal (50:50) between the Developer and the Power Procurer, in the sixth year. Thereafter, the sharing of CDM benefits shall remain equal till the time that benefit accrues.

Hybrid power projects availing CDM benefit shall share the net CDM proceeds annually as per above, by 31 March of every year with affidavit stating the annual energy generation (date of commissioning as starting point of the first year), CER/VER generated, gross receipts, and net receipts.

At the end of every financial year i.e. on 31st March, the Hybrid Project Developer shall share the net CDM proceeds, as per above provisions, annually and submit an affidavit to GUVNL/ DISCOM, stating the annual energy generation (date of commissioning as starting point of the first year), CER generated, gross receipts, and net receipts.

20. SECURITY DEPOSIT

The Hybrid Power Developer setting up new project (Type-B) shall be required to provide Bank Guarantee @ Rs. 3 lacs per MW to GETCO based on allotment of transmission capacity and in case the Developer fails to commission the Hybrid capacity within the time period mentioned hereunder, GETCO shall encash the Bank Guarantee.

Hybrid Capacity	Period of Commissioning of the entire allotted Capacity
1 MW to 100 MW	: 1.5 years from date of allotment of transmission capacity
101 MW to 200 MW	: 2 years from date of allotment of transmission capacity
201 MW to 400 MW	: 2.5 years from date of allotment of transmission capacity
401 MW to 600 MW	: 3.5 years from date of allotment of transmission capacity

Provided further that the Developer shall commission new Hybrid capacity at least 10% of the allotted capacity within one month of charging of evacuation line, failing which, the Developer shall be

liable to pay long term transmission charges for 10% of allotted capacity till such 10% of allotted capacity is commissioned.

21. REGULATION

The Hon'ble Gujarat Electricity Regulatory Commission shall be guided by this Policy while framing its rules, regulations and orders.

22. MID TERM REVIEW

The State Government may undertake a mid-term review of this policy as and when the need arises in view of any technological change or to remove any difficulties or inconsistencies with the Electricity Act 2003, as amended from time to time.

23. POWER TO REMOVE DIFFICULTIES

If any difficulty arises in giving effect to this policy, the State Government may issue clarification/ interpretation to remove such difficulties either on its own motion or based on representations from stakeholders.

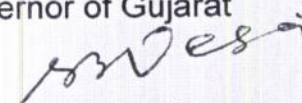
24. POWER TO INTERPRET

If there is any confusion or dispute about the meaning, intent or purpose of any provision of this Policy, the interpretations given by Energy & Petrochemicals Department, Government of Gujarat shall be final and binding to all concerned.

Notwithstanding anything contained in this resolution, the provisions of the Electricity Act- 2003 and GERC Order(s) as issued from time to time, shall prevail, for the purpose of the implementation of this policy.

This issues with the concurrence of the Finance Department dated 16-10-2017 & 21-4-2018 on the Department's file of even number.

By order and in the name of Governor of Gujarat


(Shobhana Desai)

Additional Secretary to The Government of Gujarat
Energy & Petrochemicals Department

Copy To :-

- *The Principal Secretary to H.E. The Governor of Gujarat, Raj Bhavan, Gandhinagar.
- The Principal Secretary to. Hon. Chief Minister, Sachivalaya, Gandhinagar.



- The P.S. to Hon. Dy. Chief Minister, Sachivalaya, Gandhinagar.
- The P.S. to Hon. Minister (Energy), Sachivalaya, Gandhinagar.
- The P.S. to Hon. MoS (Energy), Sachivalaya, Gandhinagar.
- The Secretary, Ministry of Power, Govt. of India, Shram Shakti Bhavan, New Delhi.
- The Secretary, Ministry of New & Renewable Energy, CGO Complex, New Delhi.
- The Secretary, Central Electricity Regulatory Commission, New Delhi.
- The Chairman, Central Electricity Authority, New Delhi
- The Deputy Secretary to Chief Secretary, Sachivalaya, Gandhinagar.
- *The Secretary, GERC, Gift City, Gandhinagar.
- *The Registrar, Gujarat High Court, Ahmedabad.
- *The Secretary, Vigilance Commission, Gandhinagar.
- The Additional Chief Secretary, Finance Department, Sachivalaya, Gandhinagar.
- The Principal Secretary, Climate Change Department, Sachivalaya, Gandhinagar.
- *The Secretary, Gujarat Legislature Secretariat, Sachivalaya, Gandhinagar.
- The Resident Commissioner, Gujarat State, New Delhi
- The Account General, Ahmedabad/ Rajkot.
- All Departments of Secretariat, Sachivalaya, Gandhinagar.
- All Branches of Energy & Petrochemicals Department.
- The Chairman, Power Finance Corpo. Ltd, New Delhi
- The Chairman & Managing Director, Gujarat Power Corpo. Ltd, Gandhinagar.
- The Managing Director, Gujarat Urja Vikas Nigam Ltd, Vadodara.
- The Managing Director, Gujarat State Electricity Corpo. Ltd, Vadodara.
- The Managing Director, Gujarat Electricity Transmission Corpo. Ltd, Vadodara.
- The Managing Director, Uttar Gujarat Vij Company Ltd, Mehsana.
- The Managing Director, Madhya Gujarat Vij Company Ltd, Vadodara.
- The Managing Director, Daxin Gujarat Vij Company Ltd, Surat.
- The Managing Director, Paschim Gujarat Vij Company Ltd, Rajkot.
- The Director, Gujarat Energy Development Agency, Gandhinagar.
- The Chief Electrical Inspector & Collector of Electricity Duty, Gandhinagar.
- The Chief Executive Officer, Torrent Power Ltd, Lal Darwaja, Ahmedabad
- The Managing Director, Gujarat Paguthan Energy Corporation Pvt. Ltd., Ashram Road, Ahmedabad
- The National Thermal Power Corpo. Ltd, Zapor, Gandhar, Dist. Bharuch
- The National Thermal Power Corpo. Ltd, Kawas, Hazira, Gandhar, Dist. Surat
- *By Letter.



ANNEXURE - E



EECRE)
Pl. Disauss.
3112
Date: 01-12-2021

Ref. No: MAL/AMD/SLDC/2021/0112

To,
The Chief Engineer,
State Load Dispatch Center - GETCO,
132kV Gotri Sub Station Compound,
Near T.B. Hospital, Gotri Road,
Vadodara -390021, Gujarat.

Sub : Clarification on registration procedure of Forecasting & Scheduling (F&S) and Deviation Settlement Mechanism (DSM) regulation to be followed for upcoming Solar-Wind Hybrid Power Project in Gujarat

Dear Sir,

We would like to bring to your kind notice that Hon'ble Gujarat Electricity Regulatory Commission (GERC) has published Tariff framework for Procurement of Power through Solar-Wind (SW) Hybrid Energy Projects vide Order No. 04 of 2021 on dated 03.04.2021. In clause no. 3.2.5 of the order, it has been mentioned that the SW Hybrid Projects shall be required to forecast and schedule their generation in accordance with the GERC (Forecasting, Scheduling, Deviation Settlement and Related Matters of Solar and Wind Generation Sources) Regulations, 2019 notified dated 19th January, 2019.

Further, this is with reference to the cited subject with respect to upcoming SW Hybrid power projects in Gujarat.

In this regard, it is to inform you that we have been approached by some of the SW Hybrid Power project developers for engagement as a Qualified Coordinating Agency (QCA) to provide F&S services for their upcoming SW Hybrid power projects. They are already in advance stage of commissioning of their projects and few are expecting to start the supply of power from 1st January 2022 onwards. Accordingly, we as certified QCA seek below mentioned clarifications from your side that will applicable for all SW Hybrid Power Projects in Gujarat:

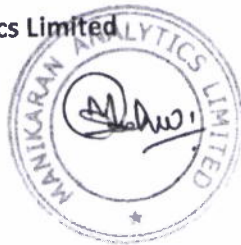
- As per GERC regulations, permitted exemption band is $\pm 12\%$ and $\pm 7\%$ for Wind and solar generators respectively, for SW Hybrid projects what shall be the permitted exemption band for DSM calculation?
- How many intra-day revisions shall be allowed for such projects?
- What should be considered as the declared Available Capacity (AvC) for a such projects (whether Variable AvC i.e. sum of total installed and available capacity behind the point of injection during the day hours when solar generation is available and only Wind available capacity for the rest of the hours OR Fixed AvC i.e. limited to sanctioned capacity at the point of injection)?

We request clarifications for the above points at the earliest to help us in assisting the SW Hybrid Power Project developers for registration of their projects for F&S services.

Regards,

For Manikaran Analytics Limited

Mrutunjaya Sahoo
Deputy Manager - BD



MANIKARAN ANALYTICS LIMITED

Corp. Office: 3rd Floor, D21, Corporate Park, Sector - 21, Dwarka, New Delhi - 110075.
CIN - U45208JH2005PLC011713 | E: gujarat@manikaranpowerltd.in | www.manikaranpowerltd.in

ANNEXURE-F

Various relaxations under Solar Policy 2015 for Solarization project of Modhera Sun Temple and Town

Government of Gujarat
Energy and Petrochemicals Department
G. R. No. SLR-11/2017/692(P2)/B1
Sachivalaya, Gandhinagar
08th June 2020

PREAMBLE:

Government of Gujarat has planned to develop Modhera Sun Temple and Town as "A World-class Tourist Destination". The focus of the project will be on showcasing relevant and next generation solar technologies at Modhera town and also to demonstrate supporting technologies intended to be deployed in the near future for a sustainable energy ecosystem such as smart metering, grid scale energy storage and mini-micro grid balancing etc. Subsequently, it is planned for "Solarisation of Modhera Sun Temple and Town as a demonstration project. As an implementing agency of this project, Gujarat Power Corporation Limited (GPCL) requested the State Government for various relaxations under Solar Power Policy 2015 to implement 6 MW Solar Project with 15 MWh Battery Energy Storage System (BESS) at Modhera Sun Temple and Town.

RESOLUTION: -

Accordingly after due consideration that this project is first of its kind Demonstration project and supported by State as well as Central Government, the State Government is pleased to resolve following relaxations:

- (1) As per prevailing GERC Open Access Regulation and Supply code, connectivity at 11 kV may be granted upto 4 MW. However, since the project is to be commissioned in a very short time, in the interest of time & cost, the proposed configuration 2 x 3 MW (Solar Project) x 7.5

Assured

- MWh (BESS) with 11 kV level connectivity is granted. Accordingly, connectivity is to be provided by UGVCL.
- (2). Modhera Sun Temple will be supplied free Solar Power from this project as a Third Party consumption and GPCL being an implementing agency will absorb energy supply to Sun Temple and distribution losses thereof. Whereas Modhera Sun Temple has to pay open access charges, cross-subsidy charges and additional charges as per prevailing GERC orders.
 - (3) Since this is a demonstration project, Out of total energy generated less energy supplied to modhera sun temple, would be considered as Surplus energy and UGVCL shall purchase surplus power generated from this project @ Rs. 1.75/ unit similar to MSME Solar policy. Since this surplus energy is accounted at consumption side, the purchase of surplus energy shall be after application of wheeling charges and losses. Whereas UGVCL shall purchase excess solar energy from individual solar rooftop project @Rs. 2.25 in line with SURYA -Gujarat.
 - (4) Since this is first of its kind Demonstration project, capacity restriction of 50% of connected load is relaxed and 6 MW capacity of Solar Project with suitable BESS against the Temple's contracted load of 51.5 kW is allowed.

By order and in the name of the Governor of Gujarat.

(Vijaysinh Vaghela)

Additional Secretary to the Government of
Gujarat

Energy & Petrochemicals Department

Copy to:

- *The Principal Secretary to H.E. The Governor of Gujarat, Raj Bhavan, Gandhinagar.
- The Secretary, Ministry of Power, GoI, Shram Shakti Bhavan, New Delhi

Original

- The Secretary, Ministry of New & Renewable Energy, CGO Complex, New Delhi
- The P.S. to the Hon'ble Chief Minister, Sachivalaya, Gandhinagar
- The P.S. to Hon. Dy. Chief Minister, Sachivalaya, Gandhinagar
- The P.S. to Hon. Minister (Energy), Sachivalaya, Gandhinagar.
- The P.S. to Hon. MoS (Energy), Sachivalaya, Gandhinagar
- *The Secretary, CERC, New Delhi
- The Chairman, Central Electricity Authority, New Delhi
- The Joint Secretary to the Chief Secretary, Sachivalaya, Gandhinagar
- *The Secretary, GERC, Gift City, Gandhinagar
- *The Registrar, Gujarat High Court, Ahmedabad
- *The Secretary, Vigilance Commission, Gandhinagar
- The Additional Chief Secretary, Finance Department, Sachivalaya, Gandhinagar
- The Account General, Ahmedabad/Rajkot.
- The Managing Director, Gujarat Urja Vikas Nigam Limited, Vadodara
- The Collector & District Magistrate, Collector Office, Mehsana.
- The Managing Director, Gujarat Energy Transmission Corporation Ltd., Vadodara
- The Managing Director, Uttar Gujarat Vij Company Limited, Mehsana
- ✓ The Managing Director, GPCL, Block-8, 6th Floor; Udhog Bhavan, Gandhinagar
- The Director, Gujarat Energy Development Agency, Gandhinagar
- The Chief Electrical Inspector & Collector of Electricity Duty, Gandhinagar
- *By Letter.



18671/c-tappa/11/2022

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RECONNECT
ENERGY

REConnect Energy Solutions Ltd.
(formerly known as REConnect Energy Pvt. Ltd.)
CIN : U72100MP2010PLC024384
info@reconnectenergy.com

Registered Office
15, Krishik Sarvodaya Foundation, Golf,
Avenue Road, Kodihalli, Bangalore-560008
www.reconnectenergy.com

To,

The Secretary,

Gujarat Electricity Regulatory Commission,
Gujarat International Finance Tech-City,
Gujarat 382355

Date: 8th November, 2022

For kind perusal please
- Hon'ble Chairman Sir
- Hon'ble Member Sir (MMG)
- Hon'ble Member Sir (SRP)
- Hon'ble Secretary Sir
Vijay
11/11/2022

Sub: Submission of Comments on petition No. 2061 Of 2022.

Ref: Petition No. 2061 of 2022 for amendment of the Notification No.1 of 2019- GERC (Forecasting, Scheduling, Deviation Settlement and related matters for Solar and Wind Generation Sources) Regulations, 2019 and Procedure on Forecasting, Scheduling Deviation Settlement and Related Matters of Solar and Wind Generation Sources Regulations 2019.

Respected Sir/Madam,

We would like to convey our sincere gratitude to your good office for providing an opportunity for submitting comments on petition no. 2061 of 2022 on Amendments to GERC (Forecasting, Scheduling, Deviation Settlement and related matters for Wind and Solar Generation Sources) Regulations, 2019 and its procedures thereof.

REConnect Energy Solutions Ltd, since the inception of Forecasting and Scheduling regulations in Gujarat, has been contributing to the best of its abilities as one of the largest Qualified Coordinating Agency (QCA) in Gujarat with more than 3 GW capacity of wind and solar under its portfolio serving 440 renewable generators.

We hereby submit our detailed comments in Annexure-A on the petition. We are hopeful that as a State Entity, our inputs shall be considered while finalising the regulation.

With Regards,

Vibhav Nuwal
Director



Advised
Transferred as
matter dealt
by Tech-I
by Secy
PKH
09/11/2022

Legal
Dept.

Forward No - 5954

Date :- 9 NOV 2022



GRIDConnect

Headquarter :
15, Krishik Sarvodaya Foundation
Golf Avenue Road, Off Old Airport Road
Kodihalli, Bangalore - 560008, Karnataka, INDIA

Other Locations :
Gurgaon, Mumbai, Chennai, London



RECONNECT
ENERGY

REConnect Energy Solutions Ltd.
(formerly known as, REConnect Energy Pvt. Ltd.)
CIN : U72100MP2010PLC024384
☎ : info@reconnectenergy.com

📍 Registered Office
15, Krishik Sarvodaya Foundation, Golf,
Avenue Road, Kodihalli, Bangalore-560008
🌐 : www.reconnectenergy.com

Annexure - A

Sr. No	Description	Details
1	Point No. 17 (a)	Seeking Incorporation of following Provisions for the Wind Solar Hybrid Generator
	SLDC Recommendation	The total revisions allowed the Wind Solar Hybrid Generator to be 16 times during the day. The revision of schedule of wind generators or solar generators or both at a time shall be considered as a revision.
	Comments	As the treatment of a hybrid substation for schedule submission and computation of DSM charges is proposed to be considered for wind and solar separately, the number of revisions allowed should also be as per the allotted revisions i.e. 16 for wind and 9 for solar respectively. This will allow better forecasting and hence lower DSM charges for the RE generators
2	Point No. 28 (g)	Amendment in the Regulation 5.15
	SLDC Recommendation	<u>The derived payment security amount will be fixed for next three (3) years. All registered QCA/Self RE Generator /Lead RE Generators shall need to submit Bank Guarantee /Revolving LC accordingly for three years and needs to be renewed at every three years.</u>
	Comments	We welcome this step which is in line with the timeframe allowed by other states like Rajasthan and Madhya Pradesh. Annual renewal increases logistical challenges and unnecessary delays due to involvement of multiple stakeholders involved in the process including the Banks.
3	Point No. 29 (b)	Amendment and addition in Clause 4
	SLDC Recommendation	<u>In case the wind or solar generator defaults in any payment or otherwise in any regulatory compliance, then QCA shall inform SLDC about the defaulting generator for needful action as per regulatory provision. QCA shall submit</u>



GRIDConnect

📍 Headquarter :
15, Krishik Sarvodaya Foundation
Golf Avenue Road, Off Old Airport Road
Kodihalli, Bangalore – 560008, Karnataka, INDIA

📍 Other Locations :
Guigaon, Mumbai, Chennai, London



RECONNECT
ENERGY

REConnect Energy Solutions Ltd.
(formerly known as, REConnect Energy Pvt, Ltd.)
CIN : U72100MP2010PLC024384
info@reconnectenergy.com

Registered Office
15, Krishik Sarvodaya Foundation, Golf
Avenue Road, Kodihalli, Bangalore-560008
www.reconnectenergy.com

	<u>the detailed list of defaulting generators, alongwith reason, to SLDC for necessary action. QCA is responsible for intimation of each defaulting generator status by 10th day of each month. Provided that, QCA shall needs to submit complete payment security and DSM payments time to time on behalf of defaulting generator. Furthermore, QCA shall bear the charges on behalf of defaulting generator up to disconnection from the grid.</u> <u>Further, SLDC shall take the direct action, if any required, against defaulting generator, which are registered as a Self/ Self-lead RE Generator.</u> <u>In case any generator does not comply with the any of regulatory provisions within six months from the date of blocking of energy, SLDC may inform GEDA for disconnection of such defaulting generator from the grid. GEDA in co-ordination with Discom/ STU QCA, shall disconnect such defaulting generator from grid. The generator may re-connect with the grid only after settlement of all required compliances or otherwise it shall remain permanently disconnected. The generator shall apply for the re-connection order to GEDA with all applicable 'No dues' certificate. The GEDA shall issue re-connection order in co-ordination with Discom/ STU/ QCA after work completed in all respects. The generator shall be exclusively responsible for any loss in this regard.</u> <u>GEDA shall have the power for decommissioning of such a defaulting generator after one year from the disconnection of said defaulting generator. GEDA shall intimate details of such decommissioning generators accordingly to all concerned.</u>
Comment	We request that the commission also add that In case the wind or solar generator <u>delays in issuing consent letter to eligible/appointed QCA (with more than 50% consent) for more than a month</u> or in any regulatory compliance, then SLDC on the request of the QCA shall take appropriate action on the defaulting generator(s). This has been an impending challenge at some of the pooling stations where we have seen one or few generators unnecessarily creating disputes by appointing an alternate QCA which is neither appointed by majority of generators nor qualifies to serve in the capacity of QCA.



GRIDConnect

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15, Krishik Sarvodaya Foundation
Golf Avenue Road, Off Old Airport Road
Kodihalli, Bangalore – 560006, Karnataka, INDIA

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We would also state on record about the efforts made by Gujarat SLDC to successfully implement the GERC Regulations, 2019. REConnect Energy as a QCA for ~3GW has cleared complete DSM charges upto March-22 excluding for the defaulting Generators, the list of which has also been provided to SLDC on a timely basis. DSM Obligation status is as mentioned below:

FY	DSM % of total DSM Cleared	DSM % of total Obligation for defaulting Generator
19-20	97.32%	2.68%
20-21	96.42%	3.58%
21-22	95.58%	4.42%

We totally support that as a QCA, we take responsibility for timely DSM payments to SLDC for generators that adhere to the regulation and pay their DSM charges on time. However, as a QCA we are only a service provider and the DSM charges are only a pass through for us wherein we pay the DSM charges only and upto the extent we get the same from the RE generators served by us. We can not pay the DSM charges for defaulting generators as this will immensely impact our liquidity.

We rather propose that appropriate correspondence to all the defaulting generators on DSM payment(s) should be made by SLDC within 30 days of delay in paying the charges, failing which the QCA should be allowed to either exclude the capacity of the defaulting generator(s) or allowed to depool the resultant DSM charges by bifurcating the schedules at a pooling station into compliant and defaulting generators and assuming zero schedules for defaulting generators.

Alternatively, the defaulting generators can be unmapped from EASS portal and asked to register afresh within a stipulated time frame of 7 days failing



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		which action(s) such as disconnection can be initiated. Also, it is proposed that the 6-month timeline should be reduced and aligned in line with the time frame being proposed to QCAs to clear their DSM charges. As for self registered Generators, SLDC will take the action directly but for substations registered with QCA timely DSM submission is asked upto a period of a month. We request that the same terms are provided to QCA. QCA will clear the DSM dues timely for all the Generators and provide a list of defaulting Generators on 10th of each month to SLDC.
4	Point 29 (e)	Amendment in Clause 6.3
	SLDC Recommendation	The QCA applicant needs to renew the registration as per prevailing criteria at every 3 (three) year (from the date of registration approved) by accompanying of Nonrefundable fees of Rs. 25,000/ (Twenty five Thousand Rupees Only) plus applicable Taxes, if any, OR otherwise the registration of QCA shall be treated as cancelled. Provided that the application for renew of <u>QCA</u> registration shall be made at least three months prior to expiry of registration. <u>The QCA needs to renew the registration for each respective pooling station separately as per prevailing criteria at every 3 (three) year (from the date of registration of Pooling Station) by accompanying of Non-refundable fees of Rs. 10,000/- (Ten Thousand Rupees Only) plus applicable Taxes, if any OR otherwise the registration of QCA for the pooling station shall be treated as cancelled.</u> <u>Provided that the application for renew of Pooling Station registration by QCA shall be made at least two months prior to expiry of registration.</u>
	Comment	While it is understood that an initial one-time registration fee may be levied,



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		the QCA and pooling station registration fee of INR 25,000/- and Rs 10,000/- plus GST respectively every 3 years is not justified as registration is only required to be completed and mapped once for each pooling station, unless change of QCA is required. Also, we have many states like Rajasthan and Madhya Pradesh which do not charge any fee for registering either the QCA or the pooling stations. Hence, the registration fee should not be introduced and even if it is initially, then there should not be any renewal fee for the same.
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GETCO
GUJARAT ENERGY TRANSMISSION CORPORATION LIMITED

STATE LOAD DESPATCH CENTRE, GOTRI, VADODARA

(CIN) U40100GJ1999SGC036018

Tel: (0265) 2352103, 2322206 Fax: (0265) 2352019, 2356469 Website: www.sldeguj.com,
E-mail: acesldc.getco@gebmil.com, seopsldc.getco@gebmil.com, sldecremc@gebmil.com

No: SLDC/Petition/Hybrid/2061/1475

Date: 07.07.2023

To,
Gujarat Urja Vikas Nigam Limited,
Saradar Patel Vidyut Bhavan,
Race Course,
Vadodara - 390007, Gujarat

Subject: Petition No. 2061 of 2022

In the matter of:

Petition under Section 181 read with Sections 32 (3), 86 (1) (h) of the Electricity Act, 2003 and Regulation 19 of Notification No. 1 of 2019 for amendment of the Notification No. 1 of 2019 - GERC (Forecasting, Scheduling, Deviation Settlement and Related Matters of Solar and Wind Generation Sources) Regulations, 2019 and Procedure on Forecasting, Scheduling, Deviation Settlement and Related Matters of Solar and Wind Generation Sources Regulations 2019

Ref: Daily Order on Petition No. 2061 of 2022 Dated. 19.06.2023

Sir,

This is in reference Daily order on Petition No. 2061 of 2022 Dated. 19.06.2023.

On request of the Petitioner for impleadment of Gujarat Urja Vikas Nigam Limited as Respondent in the Petition. Hon'ble commission directed implead Gujarat Urja Vikas Nigam Limited.

Accordingly, State Load Despatch Centre is hereby serving the copy of above petition to enable to fill submission, if any, by Gujarat Urja Vikas Nigam Limited, in the matter.

Thanking you,

Yours faithfully,

For State Load Dispatch Centre-Gujarat,

(Signature)
(A B Rathod)

Additional Chief Engineer (SLDC)

Cfws to:

✓ The Secretary, Gujarat Electricity Regulatory Commission, 6th Floor, GIFT One Road 5C, Zone 5, GIFT CITY, Gandhinagar - 382355, Gujarat

Enclosure: As above

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(Signature)

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Date: _____

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10/12/27



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GETCO
GUJARAT ENERGY TRANSMISSION CORPORATION LIMITED

STATE LOAD DESPATCH CENTRE, GOTRI, VADODARA

(CIN): U40100GJ1999SGC036018

Tel: (0265) 2352103, 2322206 Fax: (0265) 2352019, 2356469 Website: www.sldeguj.com,
Email: acesldc.getco@gebmail.com, seopslde.getco@gebmail.com, slcremc@gebmail.com

No: SLDC/Petition/Hybrid/2061/ 2698

Date: 15.12.2023

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To

The Gujarat Electricity Regulatory Commission

6th Floor GIFT ONE

Road 5-C Zone 5, GIFT CITY

Gandhinagar 382 355

Gujarat

Sub: **Petition No. 2061 of 2022 - State Load Despatch Centre v. Unilink Engineering Corporation Pvt. Ltd.**

Dear Sir

The Hon'ble Commission had vide Daily Order dated 19.06.2023 allowed impleadment of Gujarat Urja Vikas Nigam Limited. Accordingly, a copy of the Petition had been served on GUVNL which has been acknowledged by GUVNL during hearing on 30.11.2023. However an amended memo of parties was inadvertently not filed. During the hearing on 30.11.2023, it was submitted by the Counsel for the SLDC that amended memo of parties would be filed.

In the Daily Order for the same, it has been recorded that an amended petition with amended cause title alongwith necessary affidavit would be filed. It is respectfully submitted that there is no amended petition to be filed as there is only impleadment of GUVNL as respondent and accordingly only amended memo of parties is required to be filed.

Copies of the amended Memo of Parties is being filed herewith.

Yours faithfully,

For State Load Dispatch Centre-Gujarat,

(K J. Bhuvra)

Chief Engineer (SLDC)

Vadodara, Gujarat



CLDC
Inward No - 6018
Date : 22 DEC 2023

BEFORE THE HONORABLE GUJARAT ELECTRICITY REGULATORY COMMISSION
AT GANDHINAGAR
PETITION NO. 2061 OF 2022

AMENDED MEMO OF PARTIES

IN THE MATTER OF:

Petition under Section 181 read with 32(3), 86(1)(h) of the Electricity Act, 2003 and Regulation 19 of Notification No. 1 of 2019 for amendment of the Notification No. 1 of 2019, namely, the Gujarat Electricity Regulatory Commission (Forecasting, Scheduling, Deviation Settlement and Related Matters of Solar and Wind Generation Sources) Regulations, 2019 and Procedure on Forecasting, Scheduling, DSM & related matters Solar and Wind generation sources Regulation 2019.

AND IN THE MATTER OF:

State Load Despatch Centre
Gujarat Energy Transmission Corporation Ltd.,
132kV Sub station Compound,
Gotri Road, Gotri
Vadodara - 390021, Gujarat

PETITIONER

Qualified Co-ordinating Agency or QCA

1. Unilink Engineering Corporation Pvt. Ltd.
A -401, Siddhivinayak Towers,
Near Kataria Arcade, B/H DCP Office,
S. G. Highway, Makarba,
Ahmedabad - 380051, Gujarat
2. REConnect Energy Solution Pvt. Ltd.
173, A Sector, Scheme No.54,
Indore - 452010, Madhya Pradesh
3. Manikaran Analytics Limited
3/A, Aastha, 460, E. M. Bypass
Kolkata - 700707, West Bengal
4. Kreate Technologies LLP
1003, 10th Floor, Antriksh Bhawan,
22KG Marg, Connaught Place,
New Delhi - 110001
5. Energymeteo Control Solution Private Limited
809, Parshwanath Business Park,
Nr. Auda Garden, Prahladnagar,
Ahmedabad - 380015, Gujarat
6. Tata Power Trading Company Limited
Corporate Center,



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A Block, 34, Sant Tukaram Road,
Carnac Bunder,
Mumbai - 400009, Maharashtra

State Transmission Utility

7. Gujarat Energy Transmission Corporation Limited (GETCO)
Sardar Patel Vidyut Bhavan,
Race Course,
Vadodara - 390007, Gujarat

Distribution Company

8. Uttar Gujarat Vij Company Limited
Visnagar Road,
Mehsana - 384001, Gujarat
9. Madhya Gujarat Vij Company Limited
Sardar Patel Vidyut Bhavan,
Race Course,
Vadodara - 390 007, Gujarat
10. Dakshin Gujarat Vij Company Limited
"Urja Sadan"
Nana Varachha Road,
Kapodara,
Surat - 395 006, Gujarat
11. Paschim Gujarat Vij Company Limited
"Paschim Gujarat Vij Seva Sadan"
Off. Nana Mava Main Road, Laxminagar,
Rajkot - 360004, Gujarat

Nodal Agency

12. Gujarat Energy Development Agency
4th floor, Block No. 11 & 12
Udyog Bhavan, Sector -11
Gandhinagar - 382 017, Gujarat

Holding company, of four State Owned Distribution Licensees

13. Gujarat Urja Vikas Nigam Limited
Sardar Patel Vidyut Bhavan,
Race Course,
Vadodara - 390007, Gujarat

RESPONDENTS

Date: 15.12.2023

Place: Vadodara



BEFORE THE GUJARAT ELECTRICITY REGULATORY COMMISSION AT
GANDHINAGAR
PETITION NO. 2061 OF 2022

IN THE MATTER OF:

State Load Despatch Centre

..Petitioner

Versus

Unilink Engineering Corporation Pvt Ltd and Others

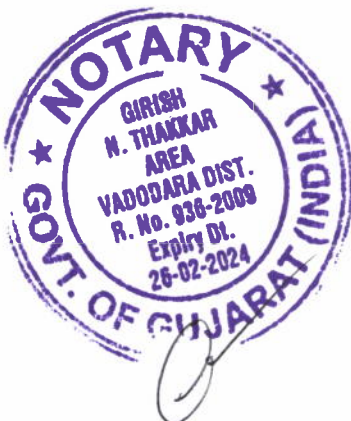
..Respondent

Reg. No. 13182
Date: 20/12/2023

AFFIDAVIT OF SERVICE

I, Kanti Bhuvra son of Jadavbhai aged about 56 years, resident of Vadodara, do hereby solemnly affirm and state as under:

1. I say that I am the Chief Engineer in the petitioner, State Load Despatch Centre, Gujarat Energy Transmission Corporation Limited and I am competent to swear the present affidavit.
2. I say that pursuant to Daily Order 12.12.2023 by this Hon'ble Commission, SLDC has caused publication of public notice in two daily Gujarat Newspaper (i.e. Sandesh & Divya Bhaskar) and one English Newspaper (i.e. The Indian Express). The copies of the relevant extracts of the newspapers with the said notices are attached hereto and marked as Annexure A (Colly).
3. I say that the Petition has been uploaded along with all documents on the website of the Petitioner.
4. I say that the above is in compliance with the directions of the Hon'ble Commission.



CL.R.C.
Inward No. 6019
Date 22 DEC 2023



[Signature]

DEPONENT

Chief Engineer (SLDC)
GETCO, VADODARA.

[Signature]
Solemnly Affirmed/Declared
Sworn Before me by.

GIRISH N. THAKKAR
NOTARY (Govt. of Gujarat)

20/12/2023

My Commission Expires
on 26-Feb.-2024
GIRISH N. THAKKAR
NOTARY (Govt. of Gujarat) INDIA



આવશ્યક સર્વ સાબિતીઓ સાથે
સ્વચ્છતા અને સ્વચ્છતા સાથે

જિલ્લા કમિશનર
વડોદરા
ગુજરાત સરકાર

ગુજરાત સરકાર
વડોદરા કલેક્ટર

VERIFICATION:

I, the deponent above named do hereby verify that the contents of my above affidavit are based on the records maintained by the Petitioner in normal course, no part of it is false and nothing material has been concealed therefrom.

Verified at Vadodara on this 20th day of December, 2023.

[Signature]
DEPONENT

Chief Engineer (SLDC)
GETCO, VADODARA.



Kemhi Gh...
Solamly Affirmed/Declared
Swon Before me by

[Signature]
GIRISH N. THAKKAR
NOTARY (Govt. of Gujarat)

20/12/2023



Subscribed and sworn to before me this 1st day of March 1900

Notary Public for the State of New York



