GUJARAT ELECTRICITY REGULATORY COMMISSION

Tariff Order

Truing up for FY 2019-20,

Determination of ARR and Tariff for FY 2021-22

For

Paschim Gujarat Vij Company Limited

(PGVCL)

Case No. 1914 of 2020

31st March, 2021

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GUJARAT ELECTRICITY REGULATORY COMMISSION

(GERC)

GANDHINAGAR

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CONTENTS

LIST OF TABLES

ABBREVIATIONS

A&G	Administration and General Expenses
AB Cable	Aerial Bunched Cable
ABR	Average Billing Rate
AG	Agriculture
APR	Annual Performance Review
APTEL	Appellate Tribunal for Electricity
ARR	Aggregate Revenue Requirement
BST	Bulk Supply Tariff
C&I	Commercial & Industrial
CAGR	Compound Annual Growth Rate
CAPEX	Capital Expenditure
CD	Contract Demand
CERC	Central Electricity Regulatory Commission
Cr	Crore
CSS	Cross Subsidy Surcharge
DGVCL	Dakshin Gujarat Vij Company Limited
DISCOM	Distribution Company
DSM	Deviation and Settlement Mechanism
DSM Expenses	Demand Side Management Expenses
EA	Electricity Act
EHT	Extra High Tension
EHV	Extra High Voltage
FPPPA	Fuel and Power Purchase Price Adjustment
FRP	Financial Restructuring Plan
FY	Financial Year
GEB	Gujarat Electricity Board
GERC	Gujarat Electricity Regulatory Commission
GETCO	Gujarat Energy Transmission Corporation Limited
GFA	Gross Fixed Assets
GLP	General Lighting Purpose
GoG	Government of Gujarat
GSECL	Gujarat State Electricity Corporation Limited
GUVNL	Gujarat Urja Vikas Nigam Limited

HT	High Tension
Ind-AS	Indian Accounting Standards
JGY	Jyoti Gram Yojna
kV	Kilo Volt
kVA	Kilo Volt Ampere
kVAh	Kilo Volt Ampere Hour
kVArh	Reactive Energy
kWh	Kilo Watt Hour
LT	Low Tension
LTMD	Low Tension Maximum Demand
MCLR	Marginal Cost of Funds based Lending Rate
MGVCL	Madhya Gujarat Vij Company Limited
MTR	Mid-Term Review
MUs	Million Units (Million kWh)
MW	Mega Watt
MYT	Multi Year Tariff
MYT Control Period	FY 2016-17 to FY 2020-21
O&M	Operations & Maintenance
OA	Open Access
PF	Power Factor
PFC	Power Finance Corporation
PGCIL	Power Grid Corporation of India Limited
PGVCL	Paschim Gujarat Vij Company Limited
PPA	Power Purchase Agreement
PPPA	Power Purchase Price Adjustment
PWW	Public Water Works
R&M	Repairs and Maintenance
RBI	Reserve Bank of India
RE	Revised Estimate
RE Generators	Renewable Energy Generators
REC	Renewable Energy Certificate
RGP	Residential General Purpose
RIMS	Regulatory Information Management System
RLDC	Regional Load Despatch Centre

ROE	Return on Equity
RPO	Renewable Purchase Obligation
Rs	Rupees
SBAR	State Bank Advance Rate
SBI	State Bank of India
SLDC	State Load Despatch Centre
T&D	Transmission and Distribution
TPL	Torrent Power Limited
UGVCL	Uttar Gujarat Vij Company Limited
WRLDC	Western Regional Load Despatch Centre
XLPE	Cross-linked polyethylene
YoY	Year on Year

GUJARAT ELECTRICITY REGULATORY COMMISSION

GANDHINAGAR

Case No. 1914 of 2020

Date of the Order: 31st March, 2021

CORAM

Shri Anand Kumar, Chairman

Shri M. M. Gandhi, Member

Shri S. R. Pandey, Member

ORDER

1. Background and Brief History

1.1. Paschim Gujarat Vij Company Limited (PGVCL)

The Government of Gujarat unbundled and restructured the Gujarat Electricity Board with effect from 1st April, 2005. The Generation, Transmission and Distribution businesses of the erstwhile Gujarat Electricity Board were transferred to seven successor companies. The seven successor companies are listed below:

1. **Holding Company:** Gujarat Urja Vikas Nigam Limited (GUVNL)
2. **Generation Company**: Gujarat State Electricity Corporation Limited (GSECL)
3. **Transmission Company**: Gujarat Energy Transmission Corporation Limited (GETCO)

Distribution Companies:

4. Dakshin Gujarat Vij Company Limited (DGVCL)
5. Madhya Gujarat Vij Company Limited (MGVCL)
6. Uttar Gujarat Vij Company Limited (UGVCL)
7. Paschim Gujarat Vij Company Limited (PGVCL)

Gujarat Urja Vikas Nigam Limited (GUVNL), a holding company of the above named six subsidiary companies is responsible for bulk purchase of electricity from various sources and supply to Distribution Companies and also, other activities including trading of electricity.

Government of Gujarat, vide Notification dated 3rd October, 2006, notified the final opening balance sheets of the transferee companies as on 1st April, 2005. The value of assets and liabilities, which stand transferred from the erstwhile Gujarat Electricity Board to the transferee companies, include Paschim Gujarat Vij Company Limited (PGVCL). Assets and liabilities (gross block, loans and equity), as on the date mentioned in the notification, have been considered by the Commission in line with the Financial Restructuring Plan (FRP), as approved by Government of Gujarat.

1.2. Background

Paschim Gujarat Vij Company Ltd., (hereinafter referred to as “PGVCL” or the “Petitioner”) has filed a petition under Section 62 of the Electricity Act, 2003, read with Gujarat Electricity Regulatory Commission (Multi-Year Tariff) Regulations, 2016, for the Truing up of FY 2019-20 on 27th November, 2020. The Petition was registered as Case No. 1914/2020 on 9th December, 2020.

Gujarat Electricity Regulatory Commission notified the GERC (Multi-Year Tariff) Regulations, 2016 on 29th March, 2016 which is applicable for determination of tariff in all cases covered under the Regulations from 1st April, 2016 onwards. The Commission vide its Suo-Motu Order dated 22nd December, 2020 in Case No. 07 of 2020 in the matter of "Filing of application for determination of Aggregate Revenue Requirement (ARR) and Tariff for FY 2021-22", has decided to determine ARR for FY 2021-22 based on the principles and methodology as provided in the GERC (Multi-Year Tariff) Regulations, 2016 and defer the next MYT Control Period by one year. Accordingly, the Commission directed all the concerned utilities to file the ARR & Tariff Petition based on principles and methodology as provided in the GERC (Multi-Year Tariff) Regulations, 2016 on or before 8th January, 2021.

The Petitioner filed addendum to the Case No. 1914/2020 on 8th January, 2021 for Determination of ARR and Retail Supply Tariff for FY 2021-22.

The Commission considered the same as part of the registered petition and accordingly, all the licensees and regulated generating companies were directed to publish a notice of submission of their petitions for Truing-Up for FY 2019-20 Determination of ARR and Tariff proposal for FY 2021-22 in accordance with the MYT Regulations, 2016 on or before 13th January, 2021.

Regulation 17.2 (c) of the GERC (Multi-Year Tariff) Regulations, 2016 of GERC provides for submission of detailed application comprising of truing up for FY 2019-20, revenue from the sale of power at existing tariffs and charges for the ensuing year (FY 2021-22 in this case), revenue gap or revenue surplus for the ensuing year and application for determination of tariff for the ensuing year (FY 2021-22) to be carried out under Gujarat Electricity Regulatory Commission (Multi-Year Tariff) Regulations, 2016 and Amendment thereof time to time.

1.3. Commission's Orders Approved under MYT Control Period for FY 2016-17 to FY 2020-21

The Tariff Orders issued by Commission under MYT Control Period of FY 2016-17 to FY 2020-21 are summarised below:

Sr. No.	Case No.	Petition in Matter	Petition Filing Date	Petition Registered Date	Order Issuance Date
1.	1625/2016	Truing up for FY 2015-16, Approval of Final ARR for FY 2016-17, Approval of Multi-Year ARR for FY 2016-17 to FY 2020-21 and Determination of tariff for FY 2017-18	30th November, 2016	3rd December, 2016	31st March, 2017
2.	1702/2018	Truing-up of FY 2016-17 and Determination of Tariff for FY 2018-19	15th January, 2018	17th January, 2018	31st March, 2018
3.	1762/2018	Truing Up of FY 2017-18, Mid-Term Review of ARR for FY 2019-20 and FY 2020-21 and Determination of Tariff for FY 2019-20	30th November, 2018	4th December, 2018	24th April, 2019
4.	1842/2019	Truing Up of FY 2018-19 and Determination of Tariff for FY 2020-21	30th November, 2019	11th December, 2019	31st March, 2020

1.4. Background of the Present petition

The Commission has notified the GERC (MYT) Regulations, 2016 for the control period of FY 2016-17 to FY 2020-21. Regulation 16.2(iii) of the GERC (MYT) Regulations, 2016 provides for the truing up of previous year’s expenses and revenue based on audited accounts vis-à-vis the approved forecast and categorisation of variation in performance as those caused by factors within the control of applicant (controllable factors) and those caused by factors beyond the control of applicant (uncontrollable factors).

Further, Regulation 16.2 (vi) of the GERC (MYT) Regulations, 2016 provides for annual determination of tariff for Generating Company, Transmission Licensee, SLDC, Distribution Wires Business and Retail Supply Business for each financial year, within the control period, based on the approved forecast and results of the truing up exercise.

1.5. Registration of the Petition and Public Hearing Process

The Petitioner submitted the current Petition for Truing–up of FY 2019-20 on 27th November, 2020 and was registered on 9th December, 2020 (Case No. 1914/2020). The addendum to the Petition covering determination of ARR and retail supply tariff for FY 2021-22 was filed on 8th January, 2021. The Petition was registered after technical validation as per provisions under Regulation 29.1 of the GERC (MYT) Regulations, 2016. The Commission has proceeded with this tariff order and directed the Petitioner to publish its application in the abridged form to ensure public participation in accordance with Section 64 of the Electricity Act, 2003.

The Public Notice, inviting objections/ suggestions from the stakeholders on the Truing up and tariff determination petition filed by Petitioner was published on the following newspapers:

Sr. No.	Name of the Newspaper	Language	Date of publication
1	The Indian Express	English	13.01.2021
2	Gujarat Samachar	Gujarati	13.01.2021

The Petitioner also placed the public notice and the petition on its website (www.pgvcl.com) for inviting objections and suggestions on its petition. The interested parties/stakeholders were asked to file their objections / suggestions on the petition on or before 12th February, 2021.

The Commission also sought for data gaps on 28th January, 2021 and 17th February, 2021 from the Petitioner for the purpose of analysis and in response to the Commission’s requirement the Petitioner has submitted the required details on 6th February, 2021 and 20th February, 2021 respectively.

The Commission also placed the petition and additional details received subsequently from the Petitioner on its website (www.gercin.org) for information and study of all the stakeholders. The Commission this time decided to conduct public hearing for all utilities at one place only i.e. GERC office, Gandhinagar via Video Conferencing (MS Teams) on 5th March, 2021 due to COVID-19 Pandemic. The representatives from Utilities and interested stakeholders who have submitted their suggestions / comments / objections were also invited to participate in the proceedings via Video Conferencing. The Interested persons, who wanted to make submission before the Commission during Public Hearing through Video Conferencing (Microsoft Office Teams), were requested to provide their details such as Names, Mobile Numbers and E-mail IDs at efiling@gercin.org on or before 1st March, 2021. The Commission also issued a notice for public hearing to be scheduled for the Petitioner in the following newspapers in order to solicit wider participation by the stakeholders.

Sr. No.	Name of the Newspaper	Language	Date of publication
1	The Indian Express	English	20.02.2021
2	Divya Bhaskar	Gujarati	20.02.2021
3	Sandesh	Gujarati	20.02.2021

The Commission received objections/suggestions from the consumers/ consumer organizations as shown in the Table below. The Commission examined the objections / suggestions received and fixed the date for public hearing for the petition on 5th March, 2021 at the Commission's Office, Gandhinagar. Subsequently, a communication was sent to the objectors to take part in the public hearing process for presenting their views in person before the Commission. The objectors participated in the public hearing and presented its objections.

The status of stakeholders who submitted their written suggestion / objections, those who remained present in public hearing, those who could not attend the public hearings and those who have made oral submissions is given in the Table below:

Sr. No.	Name of Stakeholders	Written Submission	Oral Submission	Present on the day of hearing
1.	Gujarat Krushi Vij Grahak Suraksha Sangh	Yes	Yes	Yes
2.	Federation of Kutch Industrial Association	Yes	Yes	Yes
3.	Shri. K. K. Bajaj	Yes	Yes	Yes
4.	WWF-India and Renewable Energy Demand Enhancement initiative (REDE)	Yes	Yes	Yes
5.	Indian Energy Exchange	Yes	Yes	Yes
6.	Yash Complex Co-operative Housing Service Soc. Ltd., Vadodara	Yes	Yes	Yes
7.	Bhavnagar Induction Furnace Development Association	Yes	Yes	Yes
8.	Shri Jayramrao Marathe	Yes	Yes	Yes

Sr. No.	Name of Stakeholders	Written Submission	Oral Submission	Present on the day of hearing
9.	Gujarat Chamber of Commerce & Industry	Yes	Yes	Yes
10.	Sihor Steel Re-rolling Mills Association	Yes	Yes	Yes
11.	Kaira District Co-Operative Milk Producers' Union Ltd.	Yes	Yes	Yes
12.	Shri H. J. Patel	Yes	No	No
13.	Utilities Users Welfare Association	Yes	Yes	Yes
14.	Shri Vishnubhai Desai	No	Yes	Yes
15.	Shri Vasantbhai Tandel & Iqbal Vahora	No	Yes	Yes
16.	Shri Hemant Rajguru	Yes	No	No
17.	Shri Himanshu Umrajwala, BEE Electric Private Limited	No	No	Yes

A short note on the main issues raised by the objector in the submissions in respect to the Petition, along with the response of Petitioner and the Commission's views on the response, are briefly given in Chapter 3.

1.6. Approach of this Order

The Petitioner has approached the Commission with the present petition for Truing up of FY 2019-20 and determination of ARR and Tariff for FY 2021-22.

The Commission has undertaken Truing up for the FY 2019-20, including computation of gains and losses for FY 2019-20, based on the submissions of the Petitioner and audited Annual Accounts made available by the Petitioner.

While truing up of FY 2019-20, the Commission has been primarily guided by the following principles:

- Controllable parameters have been considered at the level approved as per the MYT Order, unless the Commission considers that there are valid reasons for revision of the same.
- Uncontrollable parameters have been revised, based on the actual performance observed.

The Truing Up for the FY 2019-20 has been considered, based on the GERC (MYT) Regulations, 2016.

The Petitioner has also approached the Commission through its present petition for the determination of ARR and Tariff for FY 2021-22. ARR is required to be determined for the ensuing year, as the MYT Control Period (FY 2016-17 to FY 2020-21) is over, the process related to framing of MYT Regulations for the next Control Period was delayed and hence deferred due to the special circumstances of Covid-19. In view of the above, the Commission issued suo-moto order dated 22nd December, 2020 to file the ARR and Tariff for the FY 2021-22 and accordingly the Commission has taken up the determination of ARR & Tariff for the FY 2021-22 after hearing the matter.

1.7. Contents of this Order

The order is divided into **Ten chapters**, as under:

1. The **First Chapter** provides a background of the Petitioner, the petition and details of the public hearing process and approach adopted for this order.
2. The **Second Chapter** provides a summary of the Petition.
3. The **Third Chapter** deals with the Public hearing process including the Objections raised by Stakeholders, Petitioner’s response and the Commission’s views on the response.
4. The **Fourth Chapter** deals with the Truing up for FY 2019-20.
5. The **Fifth Chapter** deals with Determination of ARR for FY 2021-22.
6. The **Sixth Chapter** deals with Revenue (Gap)/ Surplus for Determination of Retail Supply Tariff for FY 2021-22.
7. The **Seventh Chapter deals** with the Compliance of the Directives and issue of fresh directives for PGVCL.
8. The **Eighth Chapter** deals with fuel and power purchase price adjustments
9. The **Ninth Chapter** deals with wheeling and cross subsidy surcharges
10. The **Tenth Chapter** deals with tariffs for FY 2021-22.

2. Summary of PGVCL's Petition

2.1. Introduction

This chapter deals with highlights of the Petition as submitted by PGVCL for truing up of FY 2019-20 and determination of ARR & Tariff for FY 2021-22.

2.2. True-Up for FY 2019-20

PGVCL submitted the Petition on 27th November, 2020 seeking approval of truing up of ARR for FY 2019-20. PGVCL has worked out its Aggregate Revenue Requirement (ARR) for FY 2019-20 as a part of the True Up for FY 2019-20. PGVCL has presented the actual cost components based on audited annual accounts for FY 2019-20. A summary of the proposed ARR for Truing-up of FY 2019-20 compared with the ARR approved in the MTR for FY 2019-20 in Order dated 24th April, 2019 is presented in the Table given below:

Table 2-1: ARR proposed by PGVCL for FY 2019-20 True up (Rs. Crore)

Sr. No.	Particulars	2019-20 (Approved)	2019-20 (Actual)	Deviation
1	Cost of Power Purchase	14,573.28	15,447.77	(874.49)
2	Operations & Maintenance Expenses	1,099.71	1,201.03	(101.32)
2.1	*Employee Cost*	*1,004.74*	*1,098.41*	*(93.67)*
2.2	*Repairs & Maintenance*	*165.09*	*176.89*	*(11.80)*
2.3	*Administration & General Expenses*	*177.35*	*182.01*	*(4.66)*
2.4	*Other Debits*	-	-	-
2.5	*Extra-ordinary Item*	-	-	-
2.6	*Net Prior Period Expenses/(Income)*	-	-	-
2.7	*Other Expenses Capitalised*	*(247.47)*	*(256.28)*	*8.81*
3	Depreciation	712.43	848.34	(135.91)
4	Interest & Finance Charges	444.62	442.34	2.28
5	Interest on Working Capital	-	-	-
6	Provision for Bad Debts	2.15	74.22	(72.07)
7	**Sub-Total [1 to 6]**	**16,832.19**	**18,013.71**	**(1,181.52)**
8	Return on Equity	577.65	588.11	(10.46)
9	Provision for Tax/Tax Paid	28.71	5.32	23.39
10	**Total Expenditure [7 to 9]**	**17,438.55**	**18,607.14**	**(1,168.59)**
11	Less: Non-Tariff Income	258.58	323.75	(65.17)
12	Add: DSM Expenses*	2.50	**-**	**-**

Sr. No.	Particulars	2019-20 (Approved)	2019-20 (Actual)	Deviation
13	**Aggregate Revenue Requirement [10-11]**	**17,182.47**	**18,283.39**	**(1,100.92)**

The Petitioner has not shown the amount of DSM Expenses as approved in MTR Order for FY 2019-20 in its Petition

2.3. Revenue gap for FY 2019-20

As shown in the Table below, PGVCL has claimed a revenue gap of Rs. 395.58 Crore in the Truing up after considering the gain/(loss) due to controllable/ uncontrollable factors:

Table 2-2: Revenue Surplus/ (Gap) as claimed by PGVCL for FY 2019-20 (Rs. Crore)

Sr. No.	Particulars	Amount
1	Aggregate Revenue Requirement originally approved for 2019-20	17,182.47
2	Gap/(Surplus) of FY 2017-18*	(295.40)
3	Gain / (Loss) on account of Uncontrollable factors to be passed on to consumer	(901.31)
4	Gain / (Loss) on account of Controllable factors to be passed on to consumer (1/3rd of Total Gain /Loss)	(67.37)
5	**Revised ARR for FY 2019-20 (1+2-3-4)**	**17,855.75**
6	Revenue from Sale of Power	16,780.00
7	Other Income (Consumer related)	248.66
8	**Total Revenue excluding subsidy (6+7)**	**17,028.66**
9	Agriculture subsidy	395.42
10	GUVNL Profit / (Loss) allocation	36.09
11	**Total Revenue including Subsidy (8+9+10)**	**17,460.17**
12	**Revised (Gap) after treating gain/(loss) due to Controllable/ Uncontrollable factors (11-5)**	**(395.58)**

The Petitioner has inadvertently considered the Gap of FY 2017-18 as Surplus

2.4. Aggregate Revenue Requirement for FY 2021-22

PGVCL submitted the addendum petition on 8th January, 2021 seeking approval of determination of ARR and Tariff for FY 2021-22. PGVCL has worked out its Aggregate Revenue Requirement (ARR) for FY 2021-22 as a part of the ARR for FY 2021-22. PGVCL has presented the projected cost components for FY 2021-22. A summary of the proposed ARR for FY 2021-22 is presented in the Table given below:

Table 2-3: ARR proposed by PGVCL for FY 2021-22 ARR (Rs. Crore)

Sr. No.	Particulars	FY 2021-22
		Projected in ARR
1	Power Purchase Cost	15,021.69
2	Operations & Maintenance Expenses	1,285.71
2.1	*Employee Cost*	*1,171.01*
2.2	*Repairs & Maintenance Expenses*	*197.71*
2.3	*Administration & General Expenses*	*203.43*
2.4	*Other Debits*	-
2.5	*Extraordinary items*	-
2.6	*Net Prior Period Expenses/ (Income)*	-
2.7	*Other Expenses Capitalized*	*(286.44)*
3	Depreciation	976.88
4	Interest & Finance Charges	420.85
5	Interest on Working Capital	-
6	Provision for Bad Debts	74.22
7	**Sub-Total (1 to 6)**	**17,779.35**
8	Return on Equity	675.94
9	Provision for Tax/ Tax Paid	5.32
10	**Total Expenditure (7 to 9)**	**18,460.61**
11	Less: Non-Tariff Income	323.75
12	Add: DSM Expenses	
13	**Aggregate Revenue Requirement (10-11)**	**18,136.86**
14	Revenue from sale of power	17,560.27
15	Other income Consumer related	248.60
16	**Total Revenue before Subsidy**	**17,808.87**
17	Agriculture Subsidy	418.35
18	**Total Revenue after Subsidy**	**18,227.22**

2.5. Summary of projected Revenue Surplus/(Gap) for FY 2021-22

The Aggregate Revenue Requirement is projected in the addendum Petition for FY 2021-22 dated 8th January, 2021.

The total revenue with the existing tariff and the proposed gap for FY 2021-22 is depicted below:

Table 2-4: Estimated Revenue Surplus/(Gap) for FY 2021-22 (Rs. Crore)

Sr. No.	Particulars	FY 2021-22
1	Aggregate Revenue Requirement	18,136.86
2	Revenue (Gap)/Surplus from True up of FY 2019-20	(395.58)
3	**Total Aggregate Revenue Requirement (1-3)**	**18,532.44**
4	Revenue with Existing Tariff	12,247.35
5	FPPPA Charges	5,312.92
6	Other Income (Consumer related)	248.60
7	Agriculture Subsidy	418.35
8	**Total Revenue including Subsidy (4 to 7)**	**18,227.22**
9	**(Gap)/Surplus (8-3)**	**(305.22)**

2.6. Request of PGVCL

1. To admit this Petition seeking True up of FY 2019-20.
2. To admit this Petition seeking Determination of ARR & Tariff for FY 2021-22 as an addendum to True-up Petition for FY 2019-20 filed to the Commission.
3. To approve the True up for FY 2019-20 and allow sharing of gain/loss with the Consumers as per sharing mechanism prescribed in the GERC (MYT) Regulations, 2016.
4. To consider approved True up parameters & ARR of GSECL, GETCO and SLDC while finalizing Tariff of the Petitioner.
5. To allow recovery of revenue (gap)/ surplus of FY 2019-20 as part of Tariff determination for FY 2021-22.
6. To approve the terms and conditions of Tariff for FY 2021-22 and various other matters as proposed in this petition and proposed changes therein.
7. Pass suitable orders for implementation of Tariff Proposal for FY 2021-22 for making it applicable from 1st April, 2021 onwards.
8. To grant any other relief as the Commission may consider appropriate.
9. The Petitioner craves leave of the Commission to allow further submissions, addition and alteration to this Petition as may be necessary from time to time.
10. Pass any other Order as the Commission may deem fit and appropriate under the circumstances of the case and in the interest of justice.

3. Brief Outline of objections raised, response from PGVCL and Commission's view

3.1. Public Response to the Petition

In response to the Public Notice inviting objections/ suggestions on the Petitions filed by DISCOMs for Truing up of FY 2019-20 and determination of ARR & tariff for FY 2021-22 from the stakeholders, a number of stakeholders filed their objections/suggestions in writing and also participated in the public hearing. Further, some of the objections are general in nature and some are specific to the proposals submitted by the Petitioner. It is also noted that many of the objections/ suggestions are common to all the four DISCOMs and some are specific to the concerned DISCOM. The objections/suggestions connected with the current Petition are segregated into two groups, viz., common to all DISCOMs and specific to the concerned DISCOM. The Commission, has addressed the objections/ suggestions issue-wise rather than objector-wise.

These objections/suggestions, the response from the Petitioner and the views of the Commission are dealt with hereunder:

3.2. Suggestions/ Objections pertaining to all DISCOMs

Issue No. 1: Scrutiny and Admittance of the Petition and its transparency

The objector has submitted that the Petition filed by the Petitioner is not in compliance of the GERC (MYT) Regulations, 2016 and the Electricity Act, 2003 and hence, should not be admitted.

It was submitted that the Petition lacks crucial information relevant for tariff determination and the Petitioners have failed to comply with the Commission's earlier directives for providing this information. In the absence of such crucial information, it is very difficult to offer objections/ comments/ suggestions in a comprehensive manner. Further, information submitted subsequently by the Petitioner is not made available to the stakeholders.

Response of the Petitioners

The Petitioner has refuted the allegations of the objector and has submitted that the Petition is filed following principles, methodology and norms of Electricity Act, 2003 and

MYT Regulations, 2016. The Information as required under the MYT Regulations is duly provided along with the Petition.

Commission's View

The Petition for true-up of FY 2019-20 and ARR and determination of tariff for FY 2021-22 is filed by the Petitioner in accordance with the Suo-Motu order of the Commission in this regard dated 22nd December, 2020. The Commission has ensured that the Petitions have been filed as per the principles laid down by the Commission in the applicable GERC (MYT) Regulations, 2016. Further, information submitted subsequently by the Petitioner is also made available to the stakeholders on the website of the DISCOMs.

Issue No. 2: Legal Status of GUVNL, PPA allocation and Bulk Supply Tariff

The objector has submitted that the status of GUVNL is deemed trading licensee and is required to business of trading in compliance with the GERC trading license regulations. There are no provisions of the scheme in the Electricity Act, 2003 to entrust the task of procurement of power to the trading licensee by the distribution licensee. GUVNL is only entitled to get its trading margin.

The objector has submitted that bulk supply tariff to Discoms should not be allow and approve by the Commission. Discoms should procure their power.

Response of the Petitioners

The Petitioner has refuted the allegations of the objector and has submitted following arguments in its reply and on the status of GUVNL.

(i) GUVNL is functioning as an intermediatory and a trading licensee for purchase of power on behalf of distribution licensees and resale on the bulk supply tariff mechanism in order to avail the economy of scale. Further, the uniform bulk supply tariff to four Discom licensees is adopted due to the difference in consumer mix and socio-economic situation of the Discoms such as agriculture, industrial, residential and commercial and it's worked out such that the uniform retail tariff is maintained.

(ii) As far as legal status is concerned GUVNL and its subsidiaries are evolved on the unbundling of Gujarat Electricity Board which was constituted under the Electricity Supply Act, 1948. Once the Electricity Act, 2003 was applicable the entities/Electricity Boards which were re-organised as the companies have been entrusted the same functions which were under the earlier IE, Act 1910 and Electricity Supply Act 1948 and are considered as deemed licensees of the respective business, i.e. Trading, Transmission and Distribution.

Commission's View

The Government of Gujarat has approved the Re-organisation and unbundling of GEB i.e. Gujarat Electricity Board vide Notification dated 3rd October, 2006 with effect from 1st April, 2005. The Generation, Transmission and Distribution business of erstwhile Gujarat Electricity Board transfer to seven successor companies. These companies have been entrusted with the respective functions as deemed licensees and therefore, have the legal backing of law and it is also in accordance with the IE Act, 2003.

Issue No. 3: Power Purchase Cost, Energy and Related Issues

(i) The objector has submitted that power for FY 2019-20 purchase quantum has reduced to 3051.96 MUs, however power purchase cost has increased than approved cost. Approved power purchase cost per Unit (PPC/KWh) has to be reduced by Rs. 2855.14 Crore, but it has increased by Rs. 2455.42 Crore than approved power purchase cost. Hence, the Commission is requested to get justification for more expense Rs. 5310.56 Crore for purchase of power.

Further, it is submitted that, there is huge power surplus from short term, there are no justifications for recovering additional surcharge from open access consumers. Hence, it was requested to the Commission to take serious note of this status and restrain DISCOMs from recovering additional surcharge. For FY 2021-22, the per unit cost of power purchase estimated to be Rs. 4.46/kWh from Rs. 4.86/kWh in FY 2019-20. Justifications for such variations in power purchase rate for FY 2021-22 & FY 2019-20 to be asked and approve only prudent and justified cost of power purchase.

(ii) FCA Charges calculations to be made public and through Public Hearing

It has stated that fuel surcharge is having considerable impact in total tariff. Fuel prices reduced drastically in last few months but fuel surcharge is not reduced accordingly. Therefore, it is requested to make fuel surcharge calculation public. It will also bring transparency. Response of DISCOMs FPPPA/PPPA is 'adjustment' related to power purchase cost i.e. passing on the increase or decrease, compared with the base power purchase cost approved by the Commission as the case may be. The PPPA charge is being levied on the consumer categories on account of the change in the cost of power purchase in comparison with the approved power purchase cost, which comprises almost 80 to 90% of the Distribution Licensee's ARR. Any expense pertaining to the regulated business of the Distribution Licensee has to be recovered from all consumers in some manner; therefore, the PPPA charges are recovered in the form of an incremental energy charge (Rs/kWh) as per formula approved by the Commission. It is apt to mention that calculation of "FPPPA" for the relevant quarter is available on the GUVNL website.

Response of the Petitioners

(i) The Petitioner has submitted that there is overall increase in power purchase cost due to un-controllable factors. Otherwise, there is gain (reduction) in power purchase cost to the tune of Rs. 1302.17 Crore due to efficiency improvement by DISCOMs in terms of reduction Distribution Losses as compared to approved losses. The power purchase cost for FY 2019-20 was approved by the Commission in the MTR order dated 24th April, 2019 which was based on actual power purchase cost of FY 2016-17. The increase in power purchase cost during FY 2019-20 was on account of uncontrollable factors such as increase in fuel cost/ power purchase rate etc. and due to increase in sales quantum etc.

Further, there is additional payment liability in the Books of Accounts towards power purchase cost due to various judgment of competent Court.

PPC for FY 2021-22 is estimated considering principle of merit order dispatch from available power sources. The power stations mentioned in petition having higher merit order amongst available sources due to higher variable cost. Thus, the utilisation from this station is comparatively lower due to higher merit order whereas fixed cost is considered based on higher availability as per past. Therefore, PPC from these stations on per unit basis appears on higher side.

It is further mentioned that the mismatch between power purchase cost figures mentioned in petition and that of in form-2 of true up petition is an inadvertent mistake and through additional affidavit the same is corrected.

Additional surcharge is levied u/s 42(4) of the EA, 2003 is for compensating DISCOMs towards stranded power purchase cost due to purchase of power by consumers from other sources. Whereas the purchase of power from short term market is to economize overall power purchase cost specifically when power is available from market at competitive rates.

Therefore, the action of DISCOMs for purchase of power from short term market to economize the overall power purchase cost cannot be construed as shortage of power or non-existence of stranded power purchase cost.

Further, it was stated that PPC incurred by GUVNL for FY 2019-20 is allocated to individual DISCOM as per BST mechanism approved by the Commission.

It is clarified that the actual power purchase cost of Rs. 4.86 per unit for FY 2019-20 includes additional payment liability in the Books of Accounts towards power purchase cost due to various judgement of competent court. Whereas no such additional liabilities are considered for estimating power purchase cost for FY 2021-22.

Petitioner response in data gaps for variance in Power purchase cost:

(i) As regard to quantum of power purchase as per FPPPA submission and as per Form-2 of True up Petition, there is difference of 10 Mus. It is to state that the difference of 10 Mus in power purchase quantum is on account of revision in SEA by SLDC / correction of errors subsequent to submission of quarterly claims of FPPPA of respective quarter. The power purchase quantum mention in Form 2 is as per audited annual accounts which incorporate subsequent SEA revisions/ correction of error.

(ii) As regard to the difference of Rs. 2494 Crore in the FPPPA submissions and as per Revised Form-2 of True up petitions, it is to state that the said difference is on account of different accounting treatment to be followed for claiming FPPPA and preparation of Annual Accounts.

As per the directive of the Commission, FPPPA is claimed based on actual payment made during respective quarter which do not include undischarged liability / provisions etc. Whereas Annual Accounts are prepared following the Indian Accounting Standards (IND-AS) which includes undischarged liabilities / provisions on account of matters pending in various courts and estimated as per the orders of competent courts / best assessment basis.

Thus, the difference in power purchase cost as submissions of FPPPA and as Form 2 of True up Petition (Annual Accounts of GUVNL) for FY 2019-20 is on accounts of following:

i. The GUVNL cost @ Rs. 0.04/kWh considered in FPPPA submission as per methodology approved by the Commission but the said amount is not part of power cost in the Books of GUVNL Accounts (i.e. Form No 2).

ii. SLDC Charges is considered in the FPPPA submission. However, it is not part of power cost in the Books of GUVNL Accounts (i.e. Form No 2) as the SLDC charges is directly paid by DISCOMs and thus it is booked in DISCOMs Books of Accounts under power purchase expenses.

iii. The actual payment made in FY 2019-20 towards previous years' provisions is considered in the FPPPA submissions whereas the same is not part of Form 2.

iv. There is Additional Liability of Rs. 3644 Crore in the Books of GUVNL's Accounts for FY 2019-20 towards various judgments of court and GSECL Sikka Unabsorbed Depreciation. This amount is not considered in the FPPPA submissions of FY 2019-20 since no payment is made in FY 2019-20.

(ii) It is suggestion to the Commission.

Commission's View

(i) The response of the petitioner is noted. The details and the reasons have been provided as mentioned above. The Commission takes necessary care during the true-up in line with the MYT Regulations, 2016.

(ii) FPPPA charges are approved based on approved formula through an order in this regard.

Issue No. 4: FPPPA for Discoms

The objected has submitted that indirectly merging of FPPPA of 39 paise/unit in ARR during last five years which amounts to increase in tariff by 12.8% on lowest residential tariff slab of Rs. 3.05/ kWh.

Financial Year	Base Price – PPC (Rs. /Unit)	Base Price – FPPPA (Rs. /Unit)	Actual FPPPA (Rs. /Unit)
2016-17	3.76	1.20	1.63
2017-18	4.17	1.43	1.71
2018-19	4.22	1.43	2.22
2019-20	4.32	1.61	1.90
2020-21	4.30	1.59	2.02
Increase	0.54	0.39	0.39

It was requested to merge FPPPA amount of Rs. 1.00/ kWh in basic slabs of all consumers & to put a seal on FPPPA charges limiting it to Rs. 1.50/ kWh. Any amount above this should be carried forward and approved when FPPPA Charges are below Rs. 1.50/ kWh.

It was further requested that while passing order the base FPPPA is included in the Average Billing Rate (ABR) or component 'T' for all consumers while computing CSS, but the same is not considered in the Power Purchase Cost 'C'. Consideration of base FPPPA in the ABR and its non-inclusion in power purchase cost is causing disproportionate level of CSS for the consumers. Thus, it is requested to exclude FPPPA from ABR are also while determining the cross-subsidy surcharge.

It was further requested to allow consumer participation in case there is need for significant increase in FPPPA charges when FPPPA charges worked out more than Rs. 0.10/ kWh.

Response of the Petitioners

The Petitioner has submitted that the basic nature of FPPPA/PPPA is 'adjustment' related to power purchase cost i.e. pass through of increase or decrease, as the case may be, in the power purchase cost over the base power purchase cost. The PPPA charge is being levied on the consumer categories on account of the change in the cost of power purchase, which comprises almost 85 to 93% of the Distribution Licensee's Aggregate Revenue Requirement. Any expense pertaining to the regulated business of the Distribution Licensee has to be recovered from all consumers in some manner; therefore, the PPPA charges are recovered in the form of an incremental energy charge (Rs/kwh) recovered as per formulae approved by the Commission and as per directive of the Commission.

It is further clarified that while computing Cross Subsidy Surcharge the Commission has been considering base Power Purchase Cost 'C' of respective year. The Power Purchase Cost 'C' considered in the CSS formula by the Commission is inclusive of base FPPPA and thus need not to be considered separately.

Commission's View

The power purchase cost for FY 2019-20 was approved by the Commission in the MTR Order. The Commission has approved the FPPPA formula vide its Order dated 29th October, 2013. The FPPPA framework is intended to allow 'adjustment' related to power purchase cost, i.e., pass through of any increase/ decrease in the power purchase cost over the base power purchase cost considered for the respective year in the MYT Order. Further, the FPPPA mechanism is in accordance with the EA 2003, GERC (MYT) Regulations, 2016 and Hon'ble APTEL Order in OP No. 1 of 2011 dated 1st November, 2011.

The Commission is of the view that FY 2021-22 being the extended year in the MYT control period, the necessary changes in the tariff structure should be dealt with after proper study. The Commission will deal with these issues in the upcoming MYT Regulations. The details of the FPPPA approved by the Commission for FY 2021-21 are dealt in Chapter 8.

Issue No. 5: Suggestions for Tariff Structure and separate Tariff for each Discoms

The Respondents/Objectors have submitted that there should be separate tariff for four distribution companies to generate competition as per Electricity Act, 2003. In case of Torrent Power Limited (TPL), the Commission has determined separate tariff for all 3 distribution companies at Ahmedabad, Surat and Dahej of TPL. PGVCL has higher distribution losses as compared to others. Consumers of other 3 DISCOMs should get benefit of good performance rather than cross subsidizing PGVCL who will never improve its performances unless penalised for good performance.

Response of the Petitioners

The Petitioners submitted that Uniform retail supply tariff for all four DISCOMs (Unbundled entities of erstwhile GEB) has been envisaged so that consumer in the similar categories in the State could have similar tariff and there may not be any discrimination in the consumers, merely because such consumers are placed at different geographical locations and having different socio-economic conditions, which is also the objective of EA 2003.

The four Distribution Companies are incorporated on the basis of zonal configuration. It is submitted that since the 80% - 90% of the total cost incurred by DISCOMs is for Power Purchase, the same plays a major role in determining the Annual Revenue Requirement as well as Gap / (Surplus) for the DISCOM for a particular year. Since, the consumer profile and consumption profiles are different in the four Distribution Companies; the revenue earning capabilities of each of the DISCOMs differs resulting in different Annual Revenue Requirement. Therefore, it is necessary to build a mechanism in the projections to bring them to a level playing field. This is proposed to be achieved by differential Bulk Supply tariff (BST) to each of the DISCOMs which is approved by the Commission in the MYT Order. In this way, it becomes possible to ensure uniform retail consumer tariffs in the four DISCOMs.

Moreover, performance of all the Distribution Companies is monitored by the Commission and accordingly Distributions Loss is approved by the Commission and any variation in the losses is dealt in accordance with principles of MYT Regulations.

Commission's View

The Commission is of the opinion that the consumers of the State will be benefitted if there is optimisation of Power Purchase cost when purchase for all Discoms in bulk. The Commission has noted the response of the Petitioner.

Issue No. 6: Introduction of New slab in Residential Category for Urban by all DISCOMs

The Respondents/Objectors have suggested that as per National Tariff Policy tariff should be based on paying capacity of consumers. Accordingly, consumers with monthly power consumption of less than 200 units should pay less and those with monthly consumption between 200-350 units should pay moderate tariff and consumers above 400 units should pay higher tariff.

Existing Slabs			Proposed Slabs		
Slab	**Units**	**Rate – Rs/ Unit**	**Slab**	**Units**	**Rate Rs/Unit**
1	0-50	3.05	**1**	0-50	3.05
2	50-100	3.50	**2**	50-200	3.65*
3	100-250	4.15	**3**	200-350	4.25*
4	Above 250	5.20	**4**	350 & Above	5.00*

Note- Difference in tariff between two slabs should range between 60-80 paise per unit.

Response of the Petitioners

The Petitioners have submitted that DISCOMs have not proposed any Tariff revision or change in existing Tariff structure for FY 2021-22. Tariff structure is designed keeping in mind the different social, economic, technical, demographic and other relevant parameters. In our state, the Commission has been time to time reviewing the Tariff structure and rationalizing the tariff. However, any change in the tariff structure may be revenue neutral.

Commission's View

The Commission is of the view that FY 2021-22 being the extended year in the MYT control period, the necessary changes in the tariff structure should be dealt with proper study and inputs based on the proposal to be submitted by Consumer (s) and evaluated by the Petitioner. The Petitioner is also advised to act on such proposals/ suggestions from consumers and thereafter may put up the same in next petition for the Commission's approval. The Commission has also dealt with the Tariff rationalisation issued in Compliance to Directives chapter 7.

Issue No. 7: Estimation of energy sales growth for HT consumers

The objector has requested to consider growth in energy sales for HT consumers as per 5 years CAGR instead of 5% growth proposed by the Petitioner

Response of the Petitioner

The Petitioner has submitted that 3-year CAGR is better approach for projecting sales. Due to covid 19 pandemic, the growth rate in FY 2019-20 and FY 2020-21 is on lower side. Therefore, it is not appropriate to consider lower growth which due to COVID-19 or higher growth rate. Therefore, moderate growth rate of 5% is estimated for FY 2021-22.

Commission's View

The Commission has noted the submissions of the Petitioner and dealt with the issue in relevant section of Chapter 5.

Issue No. 8: Suggestions of Tariff Schedule for FY 2021-22

The objectors/Respondents have submitted suggestions on Tariff Schedule for FY 2021-22.

- **Introduction of special incentive/rebate for maintaining better load factor for HT/demand-based consumers (for efficient utilisation of demand):**
    - It is suggested to introduce incentives/rebate for maintaining better load factor by HT consumers and demand-based LT consumers. In excess of 50% load factor may be provided incentive/rebate of say Rs. 0.40/unit. This will give signal to consumers to improve their load factor and helpful to reduce their fixed cost liability of DISCOMs due to better utilisation of generation capacity and transactions network.
- **EHV Rebate:**
    - In order to incentivize the consumer availing supply at higher voltage level and thereby reduce line losses, Commission should approve the

EHV rebate at least 7% or Rs. 0.5/unit for availing power supply at 66 KV or above voltage level as the existing rate of rebate is not in any manner incentivizing the consumer.

- **Peak Hours Charges and Night Rebate Charges:**
  - The Commission should abolish peak hour period of 7.00 hrs to 11.00 hrs in absence of cogent data and reasons.,
  - The peak hour is the hours of day during which, demand is maximum and companies are to pay higher power purchase cost. Further, no such maximum demand is observed in the state during 7.00 hrs to 10.00 hrs in any season and there is no extra cost for purchase of power during these hours which would justify the peak hour charges.
  - In large scale basis solar generation is available during 7.00 hrs to 11.00 hrs at cheaper rate. Therefore, there is no requirement to impose peak hours charges during 7.00 hrs – 11.00 hrs.
- **Discrimination between peak hours charges and night rebate concession:**
  - The Commission should reduce peak hour charges equal to night consumption rebate or increase night consumption rebate equal to peak hour charges.
  - HTP-IV tariff category, the energy charges for consumption during night hours of 10:00 hrs to 6:00 hrs is Rs. 2.25/unit whereas consumption by HTP-I consumers during the same time period, the applicable tariff is Rs. 3.87/unit. Thus, there is higher charges of Rs. 1.62/unit for utilisation of power during same time period. This discrimination in charges has been encouraging the load variability and discourages the consumers who are utilising the power all the time.
- **Power Factor Adjustment Charges:**
  - The Commission is requested to fix demand charges for HT consumers on KW basis instead of KVA basis to avoid double penalty for Power Factor. There must be incentive for power factor between 90%-95% for helping the grid.

    - There should not be discrimination in the rate of incentive and penalties, but it should be equal rate and that too on energy charges including fuel surcharge.

- **Demand Charges for HT Consumers:**
    - The Commission should look into revision in the demand charges applicable for HT consumers with contracted demand more than 1000 KVA and bring down it to a reasonable level.

- **Wrong bill demand for seasonal consumers:**
    - From March 2019, DISCOMs have changed the methodology for levy of demand charges from the consumers during the seasonal period. DISCOMs are levying demand charges during seasonal month considering actual demand or 85% of contract demand, whichever is higher.
    - The Commission is requested to intervene in the matter and direct DISCOMs accordingly.

- **Introduction of Power Factor Rebate / Incentive for LT category:**
    - In case of LT category (LTMD) only PF penalty provision (Rs. 0.10/KVArh) is there without any provision for PF incentive for maintaining between power factor. Therefore, it was requested to consider no penalty charges for LTMD for power factor between 90% to 95% and to provide rebate for Power factor more than 95% in line with the HT category.
    - It was suggested that in line with HT category, a mechanism may be introduced to provide PF incentive/rebate to LTMD category.

- **Night Rebate for LT category:**
    - LTMD consumers, being small scale industries, are having lower paying capacity and therefore benefit of night rebate may also be given to LTMD consumers without putting burden of peak hours charges.

- **Cross Subsidy Surcharge and loss level applicable to Open Access consumers:**
    - There should not be determination and levy of cross subsidy charge from open access users before fixing the following issues:

- There must be road map in first place clearly specifying the reduction in CSS and subsidy charge thereof.
- Determination of tariff and cross subsidy level should be on the basis of voltage wise cost of supply.
- CSS should be decided on the basis of weighted average cost of power purchase of top 5% at the margin and not on the basis of simply weighted average cost of power purchase.
- While deciding the cross-subsidy charge, the payment of demand charge and additional surcharge is to be deducted from the applicable tariff so that open access consumers should not unfairly be double charged. (i.e. fixed cost recovery from Demand Charge and Additional surcharge as well as from Cross subsidy surcharge).

- **Loss Applicable to Open Access consumers:**
  - Distribution losses for LT system will be much higher as compared to HT system. Therefore, among this combined distribution loss of 10%, the loss level for wheeling of power at 11 KV level cannot be more than 1% and the balance 9% need to be allocated for LT level. Therefore, the Commission is prayed to take realistic approach and consider losses applicable to OA users for 11 KV voltage level at 1% and do justice.
- **Proposed changes in the Condition for HTP IV tariff:**
  - The objector has suggested changes in condition No. 7 of the tariff:

    “The option can be exercised to switchover from HTP-I tariff to HTP-IV tariff of from HTP IV tariff to HTP I tariff four times in a calendar year by giving not less than 15 days’ advance notice in writing before commencement of billing period.”

  It is suggested that work 15 days should be replaced by 2 days.
- **Penalty Charges for Increase in Contract Demand.**
  - The objector has suggested for change in Penalty charges for increase in contract demand by PGVCL is as under:

Sr. No.	Details	For demand < CD in Rs.	Penalty for demand > CD in Rs.	Penalty in %
1	Up to 500 KVA	150	555	270%

Sr. No.	Details	For demand < CD in Rs.	Penalty for demand > CD in Rs.	Penalty in %
2	500 to 1000 KVA	260	555	113%
3	> 1000 KVA	475	555	17%

- Demand charges of excess demand should be in terms of percentage increase of the regular demand charges. 20% should be a reasonable figure. 20% penalty should be charged for excess demand when the billing demand is more than the contract demand.

- **Time of Use charges & Power Factor Rebate**
  - The morning peak hour is obsolete and should be cancelled while evening peak hours should be rationalised.
  - Regarding the time of use charges, the Commission is requested to direct Discoms and GUVNL to complete the penalty @ 1% of energy bill is levied if PF value is 0.85 to 0.90, and at the rate of 2% if the PF is less than 0.85.

- **Power factor Rebate**

The objector has suggested to give a rebate of 0.25% for every increase of 1% average power factor over 0.9 to 0.95, in order to encourage HT consumers for improving power factor.

Response of the Petitioner

- **Introduction of special incentive/rebate for maintaining better load factor for HT/demand-based consumers (for efficient utilisation of demand):**
  - It is submitted that in case consumer maintains better load factor, in that case, the overall tariff on per unit basis will get reduced due to higher utilization for a given contract demand. By this way, the consumer is already getting benefit for maintaining better load factor. Any modification to be made by the Commission should be revenue neutral to the Company.

- **EHV Rebate:**
  - As per Tariff Policy, tariff determination is based on overall Average Cost to Serve. Since, the EHV rebate is given historically to the consumers consuming power supply at Extra High Voltage level and have been

revised by the Commission while deciding tariff for FY 2020-21, at least there is no need to further increase the rebate of consumption.

- **Peak Hours Charges and Night Rebate Charges:**
  - Cost of supplying power at peak hours is significantly higher and network requirement for peak hour supply is also high. Objective of giving night benefit to the consumer is to shift their demand from Peak Hours to off peak hours and thereby to help the grid as well as to flatten the demand curve of the utility. Therefore, present "Load Curve" reflects the present consumption pattern and behaviour of the consumer.
  - Thus, tariff structure is devised recognizing this fact and allow recovery at higher rates for peak hour use and Concession for use of electricity during night hours.
- **Demand Charges for HT Consumers:**
  - Regarding demand charges recovered from HT Category consumers it is to submit that, it is the basic commercial principle for any organization to recover its fixed costs through recovery of fixed charges. However, with the present tariff structure, part of fixed cost is recovered through energy charges. Even with the existing rate of Demand Charges, the fixed cost recovery from HTP-I consumers works out to 43.69% of the fixed cost attributable to HT consumers and remaining 56.31% is still being recovered through energy charges. In case of consumers who are not procuring power from Distribution Licensee in correspondence to its contract demand, the unrecovered 56.31% of fixed cost otherwise payable by such consumers is burden to general body of consumers.
- **Introduction of Power Factor Rebate / Incentive for LT category:**
  - Under the "ABT" regime, Discoms are required to maintain "kvarh" drawl or injection depending upon the voltage level. System is highly dynamic and therefore, dynamic compensation mechanism is also required. Since, LT consumers are very large in numbers and therefore, it would be very much difficult to manage "Rkvah" consumption of all such consumers particularly when rebate or incentive is provided for better power factor to such consumers.

- Since, LT consumers are very large in numbers and therefore, it would be very much difficult to bill the “kVArh” consumption of all such consumers on the basis of power factor particularly when rebate or incentive is provided for better power factor to such consumers.
- The mechanism of providing PF Rebate may also work as counter-productive as in order to get maximum benefit, consumers may tempt to provide excessive compensation which besides making grid operation difficult may create a serious safety related issue. Therefore, in order to have simplicity in the tariff for LT consumers, levy of kVArh Charge is provided on per kVArh basis.
- Further, it is not desirable to provide rebate/ incentive to LT category consumers which are large in numbers which will make it difficult reactive power management and safety related issues. Further, giving rebate or discount for one component of tariff to any category of consumers would require to recover higher amount through other components from other categories of consumers.

- **Night Rebate for LT category:**
  - Sheer objective of giving night benefit to the consumer is to shift their demand to off peak hours and thereby to help the grid as well as to flatten the demand curve of the utility. LT category consumers are small and generally operate their industry in one shift or so, therefore, it is very difficult for them to shift their load from Peak to off Peak hours or night hours. Further, the Commission has decided a special tariff for NRGP and LTMD consumers for exclusive consumption during night hours, however, practically there is no consumer have chosen this option.
- **Proposed changes in the Condition for HTP IV tariff:**
  - The Petitioner has submitted that 11 KV onwards systems are designed and planned accordingly to actual load established on the existing system. Switching over from HTP-I to HTP-IV necessitates to analyse “Technical Parameters” of the Distribution System and Power Supply Management. Therefore, it is not advisable to reduce the time limit for switching over from HTP-I to HTP-IV.
- **Penalty Charges for Increase in Contract Demand.**

  - It is not logical as any consumer using load excess to its contract demand causes the same effect on the distribution system irrespective of its contract demand, therefore excess demand charges should not be linked with the normal demand charges.

- **Time of Use charges & Power Factor Rebate**
  - The rebate offered through tariff schedule is for maintaining power factor within prescribed limit and incentivizing the prospective consumers for installation of capacitor banks.
  - As regards to the representation for rebate @ 1%, it is to submit that the penalty should always be higher than the rebate.
  - Further, the loss to the distribution system due to the power factor lower than specified limit of 0.9, is higher than the gain due to the power factor being more than 0.95 and therefore the penalty and rebate are appropriate reflected.

- **Power factor Rebate**
  - The Petitioner has submitted that the power factor rebate of 0.5% for maintaining monthly average power factor of 0.95 is fixed by the Commission after a lot of discussion and deliberation. PF rebate is being given to incentivize the consumers to install and maintain the capacitor banks for maintaining power factor. This is provided to encourage the consumers to maintaining power factor within prescribed limit and incentivizing the prospective consumers' installation of capacitor banks. Further, it is to be noted that the loss due to power factor being lower than specified limit of 0.90 is substantially higher than the gain due to the power factor being more than 0.95. Therefore, penalty and rebate determined by the Commission is appropriately reflected.

Commission's View

The Commission has noted the reply, and any suggestions with regards to tariff shall be taken up during the next MYT control period. The Commission is of the view that FY 2021-22 being the extended year in the MYT control period, the necessary changes in the tariff structure should be dealt with proper study and inputs based on the proposal to be submitted by Consumer(s) and evaluated by the Petitioner. The Petitioner is also advised to act on such proposals/ suggestions from consumers and thereafter may put up the same in next petition for the Commission's approval.

The Petitioner is also advised to submit the proposal with comparison of applicability clause and other terms and conditions of the other neighbouring/ leading States.

Issue No. 9: Consideration of Tariff for Animal Husbandry

The objector has sought some suggestions/clarifications on Penalties for Operation of Machine-like Chaffcutter and Milking Machine on Single Phase Connection. As animal husbandry is a supplementary occupation to agriculture, and hence it is considered in agriculture. Therefore, it was requested to consider the matter of determining the appropriate tariff rate for animal husbandry.

Response of the Petitioner

The Petitioner has submitted that the electricity consumer with any connection should use the connection himself as per the purpose / power load requested and the resources shown in the connection. The 'agricultural' electricity tariff is limited to agriculture and cannot be used for any other purpose.

Existing electricity rates at various levels have become much easier today than they have been simplified over time. But the customer's load factor, power factor, voltage, the total consumption of electricity during the specified period or at the time when the supply is needed, may vary according to the geographical location of any area, the type of supply and for which the supply is required.

The objector to define small herdsmen and large herdsmen and to clarify the matter of regarding commercial electricity tariff. In this regard, it is to be noted that according to the prevailing electricity rates, the electricity rates are mainly for residential purposes and non-residential purposes, while other electricity rates such as waterworks, GLP, agriculture etc. are for certain types of consumers.

Commission's View

The Commission has noted the reply, and any suggestions with regards to tariff shall be taken up during the next MYT control period.

Issue No. 10: Consideration for subsidizing power to aqua fish farming industry

The Respondent has requested to provide electricity at subsidized rate to aqua fish farming consumers.

Response of the Petitioner

It is a suggestion to the Commission.

Commission's View

The Commission submits that subsidy related matter needs to be dealt by State Government as per the provisions of Section 65 of the Electricity Act 2003. Hence the Consumer is advised to approach State Government for the same.

Issue No. 11: Distribution Losses during 2019-20

The Objector/Respondent have requested not to approve any parameter which is above the limit of the approved parameters.

DISCOM	Revenue Gap Rs. In Crores (Loss)	Distribution Losses	
		Approved	Actual
UGVCL	600.94	9.70%	6.74%
DGVCL	208.67	9.90%	3.04%
MGVCL	31.69	11.60%	9.15%
PGVCL	395.58	17.00%	17.85%

Also, during the Mid-Term Review the gap was Rs. 12 Crore which can be met through efficiency improvement. In truing up FY 2019-20, consolidated revenue gap of Rs. 1327 Crore. It was requested to verify and confirm the gap figure of Rs. 1327 Crore is before or after receipt of subsidy of Rs. 1665 Crore. Further, it was requested to the Commission not to approve any gap claimed which has already been forgone.

It was requested to direct the petitioner to incorporate study reports undertaken by GUVNL for Cost to serve, Voltage Level wise, category wise Cost to serve, Loss calculations and others if any related to consumers tariff, and such report should be made available prior to petition or along with the petition else such incomplete petition is to be rejected by the Commission.

The energy Sold and Requirement for FY 2019-20 shown in energy account doesn't tally with the energy sent by SLDC/GETCO as per their monthly energy Accounts for the entire FY 2019-20. Hence, it is proved DISCOMs are manipulating the energy requirement.

Further, for DGVCL actual losses are lower than theoretical losses in FY 2019-20. Even in case of UGVCL 9% losses for EHT consumers are not feasible when the network has actual transmission loss at 3.72%. Hence, it was suggested to derive new correct empirical formula along with use of real time data of static meters for correct evolution of theoretical losses as empirical formula is no more valid in present scenario.

It was stated that reported % distribution losses are much less than the actual losses worked out based on the Energy Sales and Energy Sent out figures (RIMS figure) for the year FY 2018-19 & FY 2019-20. Therefore, it was requested to direct the DISCOMs to explain the discrepancies and report correct Distribution losses.

Further, the objector has requested to the PGVCL to take concrete steps to reduce the commercial losses and technical losses in time bound manner. As the T&D loss of another Discoms of Gujarat is reduced to less than 4%, the traditionally 10% distribution loss considered for open access user is become fractious and required to reduce to actual level.

Response of the Petitioners

The Petitioner has submitted that DISCOMs take various steps, narrated as under, for reduction of Distribution Loss. DISCOMs make all efforts for reduction of Distribution losses endeavours to achieve the Loss reduction trajectory as approved by the Commission.

➢ **Technical Loss reduction Activities are planned as under:**

- Proper maintenance & replacement of conductor & cables with proper size.
- Providing amorphous transformers & balancing load on each phase along with bringing transformer in load centre.
- Bifurcating all required feeders
- Minimize all joints in lines etc. by proper maintenance.
- Releasing of most of the new AG connections with HVDS to reduce LT line losses.

➢ **Commercial Loss reduction Activities are planned as under:**

- Vigilance activities and regular checking drives to curb the power theft.

- Providing Arial bunch conductor/insulated conductor/XLPE cable & armoured services to eliminate power theft by direct hooking.
- Replacing services having joints, provide meters outside the entrance of premises.
- Replacing electromechanical meters by static meters.
- Replacing all faulty/burnt meters & making all installation pilferage proof.

Category wise Distribution Loss Reduction for last three years are as under

Category	FY 2015 – 16	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20
H.T. Ind.	1.34	1.83	2.17	1.71	0.69
LT IND	2.46	2.66	2.58	1.75	1.09
Urban	14.74	13.88	13.56	12.85	11.61
AG DOM	36.10	31.16	30.19	34.87	25.49
JGY	35.9	32.68	31.21	30.41	29.18
G.I.D.C.	2.68	2.69	3.07	2.30	-0.13
Overall Losses	24.73	20.89	18.84	20.50%	17.85%

DISCOMs has achieved a significant reduction in distribution losses, during recent years. These efforts shall continue and will be enhanced. However, loss reduction is a slow process and becomes increasingly difficult as the loss levels goes down. It can be visualized from the table above that there is overall reduction in Distribution Loss of all category of feeders. Distribution Loss of Agriculture category is highly influenced by the amount and spells of rainfall etc. particularly during monsoon season. However, with the continuous efforts and expeditious release of new connections, the loss of Agriculture category has also reduced. Under the MYT regulations, Distribution loss is a controllable factor and treatment for the deviation is given accordingly while computing the revenue gap for FY 2019-20.

As regards the theoretical loss calculation it is submitted that the exercise is being done as provided by REC. Any method for calculation of theoretical loss are always having certain set of assumptions.

The losses reported in the RIMS report and losses considered in the True up petition based on Books of Accounts, is for different purpose and cannot be compared. The Book of Accounts of Company, depicts the figures of the “Distribution Loss” considering the purchase and sale of Power for its retail business only i.e. Excluding wheeled energy. Accordingly, in the Tariff Petition loss is considered based on quantum of energy purchased and sold at retail tariff. Therefore, the submission based on comparing of sent out and sold-out units from two different sets of reporting is not correct.

Commission's View

All the four Distribution Companies are catering to different mix of consumers having different characteristics of geographical area. Comparing losses of one DISCOM with another is not appropriate. Instead, comparison of current year's performance in loss reduction activities with that of previous years is more appropriate.

The Commission have noted the efforts made by the Petitioner. However, loss reduction activity being continuous, sustained, and concerted efforts should be made to reduce the losses in coming years also. The Commission is allowing the distribution losses as approved in the MTR order.

Issue No. 12: Open Access and related issues

The Objectors have submitted that the Commission has approved distribution loss of 10% for the open access consumers in its MYT Tariff order dated 31st March, 2017 for all the DISCOMs. However, actual distribution losses are lower than approved distribution losses which is evident from Tariff Order for FY 2019-20 dated 24th April, 2019, Tariff Order for FY 2020-21 dated 31st March, 2020 and the instant ARR Petition for FY 2021-22.

The Commission in its Tariff Order dated 31st March, 2020 for FY 2020-21 has agreed with the reason provided from the DISCOMs, ignoring the fact that wheeling losses for open access consumers currently being approved are way more than the HT distribution losses claimed by the DISCOMs in the current petitions and also more than the distribution losses claimed by DISCOMs for FY 2019-20.

The arbitrary consideration of high loss level at 10% despite the actual losses being lower, is resulting in higher input requirements for the open access consumers and making open access unviable for them. There for, it is requested to rectify the aforesaid error and consider the actual losses to avoid undue burden on the industrial consumers.

The objector has requested to reduce distribution losses for open access consumer to 4%

It was requested to check the applicability of recommendations given in the Ministry of Power Consultation Paper of 2017 on 'Issues Pertaining to Open Access'.

Response of the Petitioners

The Petitioner has submitted that the Commission had directed vide order dated 31st March, 2016 to DISCOMs to conduct fresh evaluation study to work out the exact loss in HT and LT side. The report is submitted to the Commission on 26th April, 2017. Considering the finding of study report, the Commission has not considered to change the wheeling loss applicable for wheeling of energy at 11 KV (HT) level and 440 KV (LT) level.

Therefore, there is no requirement to review the wheeling loss level determined by the Commission specifically when the same is supported by scientific study undertaken by expert agency.

Open Access is consented to all the eligible applications in accordance with the provisions of open access regulations and orders issued by the Commission from time to time.

Commission's View

The Commission is of the view that FY 2021-22 being the extended year in the MYT control period, the necessary changes in the tariff structure should be dealt with proper study.

Issue No. 13: Issues related to Agriculture Tariff and Structure

(i) Agriculture Tariff and Subsidy

The Objector has submitted that the slab-wise sales and revenue projections is not given for each tariff category for FY 2019-20. Further, for FY 2019-20 only revenue realized from Fixed charge/Demand charges and Energy charges are given with total of revenue classified category. It does not show the revenue earned on account of FPPPA, theft/malpractice bill etc. The cross subsidization is also not shown for FY 2019-20 with comparing with previous years to verify that it is in reducing trend or not s per section 37 to 42 of EA 2003.

It was observed that the revenue as per tariff to be charged and realized as reported in RIMS are having very huge difference. Hence, it was requested to clarify that how much revenue is availed through approved tariff and by way of subsidy, and amount against FPPPA etc.

Since 2000, agriculture subsidy of Rs. 1100 Crore has not changed despite rise in average power purchase cost to 376 paise/unit and basic FPPPA to 171 paise/unit. Therefore, lower subsidy has increased the burden on other category of consumers. Also, delayed receipt of subsidy from government has indirect negative effect on industrial consumers. Thus, it was requested to show subsidy specifically against fixed charge, FPPPA or for Metered category or Tatkal category, or for any other subsidized category such as water works etc. and further recommended to the Government to raise the same at appropriate level to survive the small and big industries and Commercial activities in Gujarat. It was requested to direct the DISCOMs to correctly report the subsidy receivable and the subsidy received in their books of accounts.

It was stated that from the data of Energy Sent out and reported to be sold to Agriculture consumers over the last Five years, it has been clear that Average units sent out per HP per Annum are less than the 1700 Units per HP per Annum shown as sold for Un-metered Agriculture consumers in the tariff petition as per the normative principle. Hence, it was requested to the Commission should disallow normative consumption @ 1700 units per HP per Annum for UAG consumers forthwith as it tantamount to allowing losses as sales of UAG consumers.

It was further requested to work out losses of AGDOM feeders having only Metered Agriculture (MAG) consumers based on sent out on such feeders and energy billed to Metered consumers.

It was further requested to direct the DISCOMs to have feeder wise Energy Audit and Revenue Audit of all feeders including Agriculture feeders. A feeder wise Energy account and audit for Agriculture consumers may be prescribed and report to the Commission under RIMS.

(ii) Agriculture connection rate and Residential Tariff

It is requested to simplify tariff structure and also improvement and decentralization in arrangements of customers. It is also requested to introduce one tariff and one irrigation rate.

(iii) Minimum 8 Hours Power Supply and Power Supply during Day Time:

To ensure within and along with the tariff order minimum hours per day electricity supply to the farmers and Electricity supply hours during the day time also required to ensured.

(iv) Different tariff for Agriculture category consumers

If farmers want change category from HP to Mtr tariff or Mtr to HP tariff then should be consider his request.

Response of the Petitioners

(i) The Petitioner has submitted that the average realization from almost all category for FY 2019-20 is almost within the ± 20% to the average cost of supply. The FPPPA charges payable by Agriculture consumers is not recovered from the consumers but it is being compensated by State Government as a subsidy support to agriculture consumers.

Revenue received from Agriculture consumers is mentioned at notes of the Annual Accounts for FY 2019-20 which is inclusive of amount towards FPPPA subsidy from Government and towards subsidy for tariff compensation for FY 2019-20.

It may be noted that FPPPA subsidy received from State Government and subsidy for the Water Works connections have been duly considered in the Revenue from Sale of Power for respective category of consumers both in Annual Accounts of DISCOMs and in the True up proposal.

State Government provides subsidy, tariff compensation, FPPPA subsidy to the Agriculture consumers. Information in the Regulatory Information Management System in-regards to revenue from Agriculture consumer is provided to the extent of bills raised to them whereas subsidy and tariff related information is provided separately.

The Commission sought the details of head-wise Subsidy and same has been submitted as under:

(Rs. Crore)

Particulars	Claimed	Received
GERC Tariff Subsidy	1,182	1,182
FPPPA Subsidy	3,802	3,802
HP Based Subsidy	1,100	1,008
Total of AG Subsidy	6,085	5,993

It is stated that the consumption of metered and unmetered category differs because in case of the metered consumers, there is instances of theft/ malpractice as consumer has to pay bill as per consumption recorded in meters. Further, in case of un-metered category, there is no incentive for energy conservation as bill are based on normative consumption. Therefore, it is not appropriate to compare consumption of metered and category.

Under RIMS reporting the overall distribution loss of distribution system are reported and considered. Whereas in books of accounts of company, depicts the distribution loss figures which relates to purchase and sale of power under retail business only.

(ii) The Discoms has submitted that equality has also been introduced by the government in the amount reimbursed by customers without meters.

The amount fixed by the Commission of Rs. 2400/HP/year in which the customers up to 7.5 HP Rs. 665/HP/year is collected and Rs. 807.50 is collected for more than 7.5 HP. The Government has not treated both on equal footage and considered Rs. 665/HP/Year for customer without meters and differential amount is paid by Government.

(iii) As per the policy frame by GUVNL, Discoms has provided minimum average eight hour plus three phase power supply has been provided to Agriculture Sector. In case power supply provided to Ag sector less than 8 hrs during the day due to technical constraints the same is compensated during the subsequent period. Day time power supply is rotated every week for the supply during day and night hours. Company has initiated to implement “Kisan Suryoday Yojna for power supply to Agriculture Consumers during day time.

(iv) Electricity Act, 2003 mandates for releasing of connection with meter only, therefore, switching from “Metered” category to “Un Metered” Category is not possible.

Commission’s View

(i) The response of the Petitioners is noted. The Commission has given necessary directions towards submission of the proper information in the petition for analysis by the stakeholders. The Commission observes that the subsidy amount was computed based on the scenario at the time of unbundling and there may be need to revise the same considering present losses and tariff. Hence the Commission advises the Petitioner to approach State Government for review of the subsidy amount being allocated considering the present scenario.

(ii) The response of the Discoms is noted. The tariff fixed for Ag. consumers by the Commission Rs. 2400/HP/year for all the Ag. connections irrespective of their load. The Government subsidy use to be different till 2018 which is now also made same i.e. Rs. 665/HP/Year for all the unmetered Ag. Connections.

(iii) The reply of the Petitioners is noted and as far as providing power to Ag. Consumers in day time Discoms are advised to suitably take it up with the Government and provide it as and when feasible.

(iv) The response of the Petitioners is noted.

Issue No. 14: Revenue Gap of four DISCOMs for 2021-22

The objector has submitted that DISCOMs have projected and actual details of income for 2021-22 with a deficit of nearly Rs. 853 Crores. As per Section 65 of the Act, subsidy has to be paid in advance. However, Government of Gujarat has not paid subsidy of 2018-19 till filing of these petitions. It was requested to direct Government of Gujarat to pay subsidy well in advance.

Further, from the details of revenue gap of FY 2019-20, it proves that DISCOMs were not working on efficient and economical principles otherwise deficit of Rs. 853 Crores would not have been carried forward.

Response of the Petitioners

The Petitioner has submitted that the Government provide the subsidy of Rs. 1100 Cr for the Agriculture purpose and other subsidies for waterworks etc. The details have been provided in additional submissions.

Commission's View

The response of the Petitioner is noted and the Petitioner is advised to take up the matter before State Government if there is any issue.

Issue No. 15: Financial Statement and related issues

It was requested to rationalise fixed charges and specify separate higher fixed charges for consumers setting up solar rooftop.

Response of the Petitioners

It is a suggestion to the Commission.

Commission's View

The study report is pending for submission by Petitioner. The Commission will decide on the matter post analysing the report.

Issue No. 16: Observations on Financial Statement

The objector has submitted that DISCOMs are merely carried out auditing as formality, but basic purpose of regularizing the short come is not followed and deliberately ignored. The auditing has resulted in overstatement of retained earnings and understatement of balances of Deferred Government Grants, Subsidies and Consumer Contribution towards Capital assets by Rs. 356.20 Crore as of March, 2017. Despite being pointed in the year 2016-17, 2017-18 and 2018-19, no corrective action has been taken by the Company. Precise clarification may be made in respect of DPC PF Penalty and KVARH charges, constituents of consumption for ED (Electricity Duty) purpose. Also, DPC is charged on billed arrears, but it is learnt that the ED being the part of bill, is charged at higher than DPC rate. This should also be precisely clarified in the schedule of tariff. Hence, it was requested to non-compliance to Audit Para to be taken seriously before passing of tariff order.

Response of the Petitioner

The Petitioner has submitted that Interest on long term loan and return on equity for the assets created from grant/consumer contribution is not claimed as part of ARR determination process. PGVCL is claiming depreciation on the assets created from grant/consumer contribution and against the deferred income on grant/consumer contribution is offered as non-tariff income as part of ARR determination process. Depreciation claimed on straight line method. There is no additional burden on the consumers due to change in methodology of calculation of deferred income on grant/consumer contribution.

Prior to 1st April, 2016, there was mismatch in the depreciation claim for the assets created from Grant/ Consumer contribution and deferred income on Grant/ Consumer contribution offered as non-tariff income. Depreciation was claimed on straight line method and majority of asset has depreciation rate of 5.28% whereas deferred income was calculated on Written down method at rate of 10%. To equate the impact of depreciation for the assets created from Grant/ Consumer Contribution matching deferred income should be passed on. To remove this anomaly, PGVCL has changed the methodology. It is important to note that there is no additional burden on the consumers due to change in methodology of calculation of deferred income on Grant/ Consumer contribution.

In case of LTMD consumers, kVArh charges are also considered for the purpose of levy of Electricity Duty.

Commission's View

The Commission has noted the response of the Petitioner. The Commission has processed the application based on the MYT Regulations 2016. Further the matter related to Electricity Duty is concerned with State Government.

Issue No. 17: True-up for GUVNL Expenses

The objector has submitted to undertake true-up and scrutiny of GUVNL's expenses of past years for ensuring that only reasonable and prudent cost is allowed to be passed through and give appropriate treatment of disallowed amount of past years along with carrying cost.

Response of the Petitioner

The Petitioner has submitted that, GUVNL is entitled to claim trading margin of Rs. 0.04/unit as per the regulations. GUVNL has allocated less power purchase cost to the tune of Rs. 314 Crore to DISCOMs for FY 2019-20. In addition to this, GUVNL's profit of Rs. 106 Crore is also allocated to DISCOMs.

Commission's View

The response of petitioner is noted. GUVNL has shared the profit with the DISCOMs and which is in the interest of the consumers.

Issue No. 18: Category wise Cost to Serve Report

The objector has submitted that the Petitioners have failed to submit the Report on category-wise Cost to Serve for several years despite giving directives to DISCOMs every year.

Response of the Petitioners

The Petitioner has submitted that the DISCOMs have prepared the Report on Cost to Serve for FY 2019-20 through independent consultant and the same has been submitted to the Commission.

Commission's View

The DISCOMs have submitted the Report on Cost to Serve for FY 2019-20 to the Commission. However, it is directed to the Petitioner to submit the Cost to Serve Report along with the tariff petition.

Issue No. 19: Capital Expenditure and Consumer Contribution in Capital (Non-Tariff Income)

The objector has submitted that the DISCOMs have incurred higher amount capital expenditure of Rs. 335 Crore as capered to amount approved in MTR Order without approval of the Commission, which is almost 11% higher. Many projects under capital expenditure are incurred without approval in MYT ARR order or expenditure is much higher side as compared to approved one.

Therefore, it was requested to the Commission to direct the Petitioner to furnish detailed justification and explanations for abnormal variation in the capital cost incurred by DISCOMs. In case of increase in capital cost the appropriate treatment in the depreciation, interest and finance charges and RoE be given.

DISCOMs have made the huge capital investment. But they have not provided any cost benefit analysis as to how such an investment going to benefit the consumers. The capitalization is subject to prudence check, The Commission is requested to ask for the cost benefit analysis and made available in public domain.

The objector has submitted to look into the part Non-Tariff income which is being contributed by the consumers and its prudent check is to be got exercised as same is earned by serving estimate beyond scope of regulations. (pro-rata charges).

Response of the Petitioners

The Petitioner has submitted that expenditure is incurred through own resources, through financial assistance from the Central or State Government through different schemes or through consumer contribution etc. Also, scheme-wise deviation and justification for the same is already discussed in the petition.

The Petitioner has submitted that Tariff Petition is prepared based on principles laid down in GERC (MYT) Regulations, 2016. Consumer contribution and capital grants are prudently written back every year a certain percentage of total amount outstanding and is considered as non-tariff income in the tariff petition. Thus, treatment for consumer contribution and capital grant is appropriately done in the petition year on year basis. So, the treatment done by PGVCL is in line with prevailing regulations.

Pro rata charges are recovered by GETCO towards development of required upfront network for catering power requirement.

Commission's View

The Commission has noted the response of the Petitioner. The Commission has approved the Capital Expenditure and Capitalisation in the truing up for FY 2019-20 after due prudence check and in accordance with relevant provisions of the GERC (MYT) Regulations 2016, as detailed in Chapter 4 of this order.

Issue No. 20: Sharing of Gain and Losses

The objector has submitted that according to section 24.2 of MYT Regulation 2016 Dated 29th March, 2016, the one third of the Losses is to be transferred to additional charge in tariff. The excess amount paid by GUVNL which is an entity, and his loss or profit cannot be transferred ultimately to consumers on account of resultant ARR Gap. Thus, the allocated fund is not properly used in time and not monitored resulting into higher losses cannot be attributed to the consumers.

Response of the Petitioners

The Petitioner has submitted that based on methodology prescribed in MYT Regulations 2016, Company has classified various heads of expenses as Controllable & Uncontrollable and accordingly are dealt with. As regard to allocation of loss / profit of GUVNL to DISCOMs in ARR, it is to state that GUVNL profit of Rs. 106 Crore is allocated to DISCOMs which is in benefit of consumers as overall gap of FY 2019-20 is reduced to that extent.

Commission's View

The response of the petitioner is noted.

Issue No. 21: Accounting for Dumped Energy

The objector has submitted that inadvertent flow of energy is inevitable phenomena on account of the open access consumers and other energy suppliers who are deviating from the schedule of use of consumption. Such dumped energy on account of inadvertent flow is also one of the sources of power supply at No Cost. Such energy is to be also accounted and cannot be considered for showing the efficiency in reduction of loss.

Response of the Petitioners

The Petitioner has submitted that the "Overall Distribution loss" are worked out based on input energy recorded in the "Energy Meters" provided at "Feeder Level" (i.e. energy input in the system) and energy recorded in the "Consumers Meter" which includes all types of energy transaction due to wheeling of power under Open Access. Further, energy accounting for wheeled energy under open access and treatment for surplus energy is carried out in accordance with applicable orders / regulations of the Commission.

Commission's View

The Commission has noted the response of the Petitioner. Difference of energy scheduled and drawn by the Open Access consumers is an inadvertent flow into the infinite grid.

Issue No. 22: High Cost and Estimation of Operations and Maintenance Expenses

The objector has submitted that DISCOMs have taken different approach which is contrary to the provisions of binding regulations. Therefore, Commission should not allow extra O&M cost of Rs. 335 Crore as uncontrollable but to be taken as controllable and not allow pass through for true-up of FY 2019-20.

It was further stated that for FY 2021-22 the correct approach is to estimate O&M expenses by applying escalation factor of 5.72% on the approved O&M expenses of FY 2020-21, approved in MYT Order dated 31st March, 2017. Without following norms, DISCOMs have claimed higher O&M expenses. It is requested to disallow the higher claim of Rs. 141.3 Crore while approving ARR of Petitioners for FY 2021-22.

Response of the Petitioner

The Petitioner has submitted that DISCOMs take various steps, for efficient and reliable electricity distribution to its consumers and for reduction to distribution loss. DISCOMs make all efforts for reduction of Distribution Losses endeavours to achieve the loss reduction trajectory as approved by the Commission which besides others increases the R&M expenses.

The Petitioner has estimated the O&M Expenses for FY 2021-22 as per GERC (MYT) Regulations, 2016.

Commission's View

O&M expenses are approved in the truing up for FY 2019-20 and for FY 2021-22 after prudence check, in accordance with relevant provisions of the GERC (MYT) Regulations, 2016, as detailed in Chapter 4 and 5 of this Order, respectively.

Issue No. 23: High Cost of Depreciation

The objector has submitted to direct DISCOMs to provide statement of assets transferred under Transfer Scheme, 2004 and give depreciation treatment for these assets in terms of Regulation 39.2 (b). In absence of adequate details and justifications, the Commission is requested to disallow the claim of increase in depreciation amount of Rs. 223 Crore in comparison to depreciation amount approved by the Commission for FY 2019-20.

Response of the Petitioner

The Petitioner has submitted that Depreciation claimed is as per GERC (MYT) Regulations, 2016.

Commission's View

Depreciation is approved in the truing up for FY 2019-20 after prudence check, in accordance with relevant provisions of the GERC (MYT) Regulations, 2016, as detailed in Chapter 4 of this Order.

Issue No. 24: Revenue from Sale of Power for FY 2019-20 and Actual Level of Cross-subsidization

The objector has submitted to reduce for industrial/ commercial consumers by bringing down cross subsidization at 110% level from current level of 121%, in case it is not possible to eliminate the cross subsidization in tariff structure.

Response of the Petitioner

The Petitioner has submitted that the tariff for almost all category is within the ± 20% to the average cost of supply. Further, the company has not proposed tariff change for any category of consumers.

Commission's View

The cost of service based on the ARR for FY 2021-22 and the average billing rate for the most of the category is within ± 20% range.

Issue No. 25: Other Income

The objector has submitted that there is a significant variation in the Other Income stated in the Petitions and the Other Income approved in the MYT Order.

Response of the Petitioners

The Petitioner has submitted that Other Income comprises Service Line Charges, Wheeling Charges, CSS, Additional Surcharge, Recovery from theft of power, Delayed Payment Charges, etc. The Commission has abolished the Meter Rent, which has reduced the income under this head. Therefore, there is reduction in Other Income.

Commission's View

The Other Income has been considered in the truing up for FY 2019-20 after prudence check, in accordance with relevant provisions of the GERC (MYT) Regulations, 2016, as detailed in Chapter 4 of this Order.

Issue No. 26: De-commissioning of aged power plants

The Objector has submitted that the over aged Power stations must be discarded, and its equity should not be allowed. All R&M and establishment expense should be reduced by GSECL/ GUVNL so as to reduce power purchase cost, as they are running at very low PLF and average cost of Unit is very high as can be seen from data for FY 2019-20. For FY 2021-22 also, power purchase from over aged power is costlier than open market or power exchange in the projected power purchase. It is therefore suggested to the Commission may issue immediate directive to concerned utility to restrict the costlier power purchase.

Response of Petitioner:

The Petitioner has submitted that the utilisation from gas-based stations were lower on account of higher gas price/non-availability of gas at cheaper rate. Whereas the payment towards fixed cost was made as per higher availability of power plant. This has resulted into higher power cost on per unit basis. In case of NTPC Gadarwara Station, the utilisation was on lower side due to higher merit order whereas payment of fixed cost was based on higher availability of plant. Therefore, overall PPC on per unit basis appears higher.

Commission's View

The Commission has noted the response of the Petitioner. The Commission has already directed to GSECL in this regard and GSECL is de-commissioning the old plant in phased manner.

Issue No. 27: Power Purchase from Market / Short Term:

The Respondent has submitted that Green Team Ahead Market (GTAM) was introduced during FY2020-21 at IEX platform w.e.f. 21st August, 2020 wherein solar and Non-Solar renewable energy is being transacted in four contracts namely intra-day, Day Ahead Contingency, Daily and Weekly. The buyers of this market can fulfil their respective RPOs. It is a market-based mechanism where RE surplus and RE deficit states trade RE power and balance their RPO targets. The market has witnessed an encouraging response since launch and has registered trade of around 650 MUs since launch. The key participants included distribution utilities of Haryana, Maharashtra, Karnataka, Telangana, Bihar, Daman & Diu, Dadra & Nagar Haveli, DVC, CESC & generators like Amplus Green Power Pvt. Ltd., open access consumers like Jindal Stainless ltd., Dalmia Cement, etc.

Hence, it is requested to consider these developments related to RE market while allowing the power purchase of Discom.

Response of the Petitioners

It is suggestion to the Commission.

Commission's View

The suggestions are welcome and the Commission is of the view that GUVNL/ Petitioner may take necessary steps to take advantage of new facilities/ services/ products available in the power market to optimise its power purchase cost.

Issue No. 28: Estimated purchase of 5097 MUs through short-term purchase without long term arrangement

Total short term power purchase is shown as 5097 MUs which is around 5% of total energy requirement. When the Petitioner is not having enough capacity tied under long term power purchase agreement, the claim of stranded generating capacity and thus the consequent claim of levy Additional Surcharge from consumers procuring power through Open Access do not survive.

Response of the Petitioners:

Estimation of purchase of power through short term arrangement for FY 2021-22 is based on present market condition with an objective to economize overall power purchase cost. These actions cannot be construed as shortage power position or otherwise.

Commission's view:

The response of the Petitioners is noted.

Issue No. 29: Green Tariff

The object has suggested to introduce Green Tariff for C&I consumers where they can procure renewable power directly from DISCOMs, who, in turn contract it from RE generators. It is a win–win situation proposition for both:

i) DISCOMS can retain their high-paying C&I customers

ii) Consumers can have easy access to RE power without the complications associated the open access process.

Further, it was provided the details about India Experience of Green Energy Tariff in different states.

i) The Andhra Pradesh Electricity Regulatory Commission (APERC) had introduced green tariffs (INR 6.70/ kWh) in FY 2009. But the cost - 56- 86 per cent higher than normal grid tariffs for industrial consumers, made it unacceptable in the market.

ii) The Karnataka Electricity Regulatory Commission (KERC) had also introduced a green tariff INR 1.00/ kWh premium over applicable grid tariff for HT consumers in FY 2012. The premium was reduced to INR 0.50/ kWh in FY 2014. However, uptake has been negligible and feedback from consumers suggests that a premium over grid tariffs is not commercially acceptable to them.

Based on the India experience so far, following recommendations have been provided for implementation of Green Tariff:

i) Introduce "Green Tariff" category as part of the tariff order, as has been done in Karnataka and Andhra Pradesh, at a premium. Consultations with interested C&I

consumers must be held prior to finalising the implementation route to ensure uptake.

ii) Green certificates can be linked to existing subsidies or green tariffs can be included as incentives for eligible industries under state level industrial policies.

iii) Karnataka offers a tariff rebate of INR 1.00/ kWh to EHT/HT consumers for consumption above average base consumption during 10:00 hrs to 18:00 hrs and rebate of INR 2.00/ kWh during 22:00 hrs to 06:00 hrs. A similar model can be explored where the rebate is linked with green certificates from DISCOM. Alternatively, returning OA consumers can be offered existing grid tariffs plus RECs/ green certificates at no additional costs.

iv) The option to purchase green tariff must be open to all LT C&I consumer categories as well. This will help small and medium firms with voluntary targets and smaller units/ showrooms of large corporate consumers that do not have HT connections gain access to green power.

v) The option to purchase green tariffs can also be offered to residential consumers who are interested in contributing to the cause of sustainability. For this category, a premium can be charged as they already enjoy cross-subsidy benefits.

Response of the Petitioners

The Petitioner has submitted that as regard to promotion of generation and consumption of renewable power, it is to state that in accordance with Section 86 (1) (e) of Electricity Act, 2003, the Commission has already notified Regulations on Renewable Purchase Obligations (RPO) prescribing year wise targets for consumption of renewable energy as certain percentage of total consumption. In order to meet the RPO targets, DISCOMs have been tying up power from various RE sources.

In regard to the suggestions made by the Respondent to introduce the “Green Tariff” category, it is to state that it may be considered to introduce ‘Optional Green Tariff Component’ which shall be in addition to the normal “Tariff” applicable to respective category of consumers.

Others are suggestion to the Commission. The Commission may consider the same while deciding the petition, however, any change in the tariff structure may be revenue neutral.

Commission's View

The response of the DISCOMs is noted. The Commission has also dealt with the issue in Compliance to Directive chapter 7.

3.3. Suggestions/ Objections pertaining to PGVCL

Issue No. 1: Capital Expenditure under SI scheme and HDVS

It is submitted that system improvement (SI Scheme) is carried out an amount of Rs. 166.75 Cr. against approved cost of Rs. 100 Cr, i.e. excess of Rs. 66.75 Cr. HVDS is for Agriculture filed which has highest losses. The Commission approved Rs. 100 Cr is underutilised to Rs. 59.59 Cr. Commission is requested to look into the allocation of funds and monitored to avert higher losses being passed on to the consumers.

Response of the Petitioners:

Under the head System Improvement, PGVCL carried out renovation/replacement of old Distribution line, bifurcation of feeder, installation/augmentation of Distribution Transformer etc. System Improvement is carried out on requirement basis with the objective to improve reliability of power supply and also to reduce distribution loss. Company incurred Rs. 166.75 Crore during FY 2019-20.

Company is having large nos. of Low-Tension category consumers. To eliminate low voltage distribution and to have better voltage profile as well as for reduction in Technical loss and associated commercial loss company has proposed to shift over on High Voltage Distribution System by erecting small capacity Transformer matching with the connected load of individual consumer or very small group of consumers in phased manner. During the year company has incurred Rs. 59.59 Crore as against approved Rs. 100 Crore. The Commission is requested to approve the same.

Commission's view:

The Commission observed that most of the capital investment schemes by the Discoms are of continuous and ongoing nature. These are based on yearly targets set for meeting the supply obligation, providing quality and reliable power to consumers, reduction in losses, release of agriculture connections, etc., which are taken up during the year for expansion of distribution network and release of new connections.

Issue No. 2: Issues related to electricity meter application of farmers & tariff for Agricultural Consumers

The objector has submitted that around 29,000 applications are pending with PGVCL for electricity connections. Hence, it was requested to the Commission to direct PGVCL to speed up the process of giving electricity connections to agricultural farmers. Further, it was requested to consider the way to provide renewable energy power to Agricultural Consumers.

Response of the Petitioner

PGVCL has provided Circle-wise / Scheme-wise & Year-wise Agriculture Pending Applications as on February, 2021. The petitioner in the response to the data gaps has provided that around 30000 connections are released till December, 2020. The details of the same are given as under:

Sr. No.	Month	Numbers of Connections Released
1	April 20	7264
2	May 20	894
3	June 20	3878
4	July 20	3614
5	August 20	786
6	September 20	1785
7	October 20	3924
8	November 20	3524
9	December 20	4254
10	Total	29923

Commission's View

The response of the Petitioner is noted. The Petitioner is also advised to put up the action plan for pending release of AG connections on its website with copy to the Commission.

Issue No. 3: Other issues of Industrial Consumers:

The objector has suggested following changes with respect to industrial consumers:

- **Simplified Procedure for Start-up Power Tariff:**

Direction’s need be given to utilities stating that all power import recorded in the ABT meter of the generators be considered as start-up power and billed accordingly.

- **Simplified procedure for stakeholders “Power Requirement during Shutdown of Generators/GCP/CPP (GERC OA Regulations, 2011):**

  All power import recorded in the ABT meter of generators/GCP/CPP be considered beyond contract demand of stakeholders/consumers be considered as stand-by power and billed accordingly.

- **Uniform and simplified format for open access bill revisions:**

  Uniform and simplified format for OA bill revisions on account of open access, wind, solar and captive power credit to HT consumers is required to avoid confusions, errors, repetitions of bill revision and avoidable correspondences.

Response of the Petitioner

The Petitioner has submitted following arguments with respect to above suggestions:

- **Simplified Procedure for Start-up Power Tariff:**

  This is a suggestion to the Commission for necessary implementation.

- **Simplified Procedure for Start Up Power and during Shutdown of Generators/GCP/CCP:**

  The Commission has by order dated 29th April, 2014 in the matter of determination of tariff for FY 2014-15 addressed the issue of “Start-up Power” by the generators and modified the provisions of HTP – III tariff category. Company has continued with the same provision in the present petition too. Generator has to follow laid down procedure for availing power supply under temporary arrangement.

- **Uniform and Simplified format for Open Access Bill Revision:**

  Commercial settlement and energy accounting of Open Access customers at the recipient unit, is carried out in accordance with the Open Access Regulations and as per the provisions of applicable orders/regulations of the GERC.

Commission's View

The Commission is of the view that FY 2021-22 being the extended year in the MYT control period, the necessary changes in the tariff structure should be dealt with proper study.

4. Truing up of FY 2019-20

This Chapter deals with the truing up of FY 2019-20.

PGVCL, in its submission for True-up of FY 2019-20, has furnished details of the actual energy sales, expenditure and revenue based on the audited Annual Accounts for FY 2019-20. The Petitioner has stated that the truing up for FY 2019-20 is based on the comparison of the actual performance of FY 2019-20 with the ARR approved for FY 2019-20 in the MTR Order dated 24th April, 2019 to arrive at the Gains/(Losses), as per the GERC (MYT) Regulations, 2016.

The Commission has analysed the components of the actual energy sales, expenses, revenue and computed Gains/ (Losses) in the process of truing up for FY 2019-20.

4.1. Energy Sales

Petitioner's Submission

The Petitioner has submitted the category-wise actual energy sales for FY 2019-20 as given in the Table below:

Table 4-1: Category-wise sales for FY 2019-20 (MU)

Sr. No.	Particulars	Approved in the MTR Order	Actual Claimed in Truing-Up
A	**LT Consumers**		
1	RGP	3,996	3,791
2	GLP	136	123
3	Non-RGP & LTMD	3,744	3,672
4	Public Water Works	876	625
5	Agriculture - Metered	3,601	2,695
6	Agriculture - Unmetered	4,570	4,678
7	Public Lighting	81	73
	LT Total (A)	**17,003**	**15,657**
B	**HT Consumers**		
8	Industrial HT	12,666	11,965
9	Licensee/ Railway Traction		
	HT Total (B)	**12,666**	**11,965**
	Grand Total (A + B)	**29,668**	**27,622**

Commission's Analysis

The Commission, in the MTR Order, dated 24th April, 2019, had approved the energy sales of 29668 MU for FY 2019-20 against which, PGVCL has submitted the actual sales of 27622 MU.

As can be observed from the Table above, the actual energy sales to LT categories are significantly lower than that approved by the Commission for FY 2019-20 in the MTR Order dated 24th April, 2019 mainly due to reduction in Agriculture metered, PWW and RGP Sales. On the other hand, the actual energy sales to HT categories are slightly lower than that approved by the Commission for FY 2019-20 in the MTR Order dated 24th April, 2019.

Overall, the actual energy sales of PGVCL are lower as compared to that approved in the MTR Order dated 24th April, 2019. As energy sales are largely uncontrollable in nature, the Commission approves the actual energy sales as detailed in the Table below:

Table 4-2: Energy sales approved in truing up for FY 2019-20 (MU)

Sr. No.	Particulars	Approved in the MTR Order	Actual Claimed in Truing-Up	Approved after Truing-Up
A	**LT Consumers**			
1	RGP	3,996	3,791	3,791.39
2	GLP	136	123	122.69
3	Non-RGP & LTMD	3,744	3,672	3,672.00
4	Public Water Works	876	625	624.52
5	Agriculture - Metered	3,601	2,695	2,695.07
6	Agriculture - Unmetered	4,570	4,678	4,677.80
7	Public Lighting	81	73	73.36
	LT Total (A)	**17,003**	**15,657**	**15,656.83**
B	**HT Consumers**			
8	Industrial HT	12,666	11,965	11,965.48
9	Licensee/ Railway Traction			
	HT Total (A)	**12,666**	**11,965**	**11,965.48**
	Grand Total (A + B)	**29,668**	**27,622**	**27,622.31**

4.2. Distribution Losses

Petitioner's Submission

The Petitioner has submitted that the actual distribution losses for FY 2019-20 are 17.85%, as against the losses of 17.00% approved in the MTR Order dated 24th April, 2019, as given in the Table below:

Table 4-3: Distribution Losses for FY 2019-20 as submitted by PGVCL (%)

Particulars	Approved in the MTR Order	Actual Claimed
Distribution Losses (%)	17.00%	17.85%

The Petitioner submitted that distribution loss in recent year has marginally increased by 0.85% as compared to that approved for FY 2019-20. The Petitioner has made its continuous efforts to lower distribution losses.

The Petitioner submitted that as per the GERC (MYT) Regulations, 2016, the Distribution Losses need to be treated as controllable and any gain or loss has to be dealt with in accordance with the provisions of the GERC (MYT) Regulations, 2016.

Commission's Analysis

The Petitioner has contended that actual distribution losses are 17.85% against 17.00% as approved in MTR Order dated 24th April, 2019. The Commission considers Distribution Losses as controllable as per the GERC (MYT) Regulations, 2016. Accordingly, the Commission has considered the Distribution Losses of 17.00% as shown in the Table below for computation of Gain/ (Loss) due to variance in Distribution Losses:

Table 4-4: Distribution Losses approved for truing up for FY 2019-20 (%)

Particulars	Approved in the MTR Order	Actual Claimed	Approved in True-Up
Distribution Losses (%)	17.00%	17.85%	17.00%

Further, the Commission in its data gaps had raised a query to PGVCL for claiming Intra-State Transmission loss of 3.72% whereas GETCO in its Petition has claimed actual Transmission loss as 3.68% for FY 2019-20. PGVCL in its reply has stated that as per the Commission's Intra-State ABT Order, the transmission losses are to be published by SLDC for energy accounting and UI accounting. The transmission loss of 3.72% is worked out based on transmission losses published by SLDC on monthly/ weekly basis. Initially the PGVCL in its True-Up Petition has submitted the transmission loss of 3.7235% for FY 2019-20 later on which was revised to 3.7245%. The Commission has considered the intra-State Transmission Losses as 3.7245%, as per revised submission made by PGVCL in its data gaps which is also matching with data available on SLDC website.

4.3. Energy requirement

Petitioner's Submission

PGVCL has submitted the energy requirement for FY 2019-20 based on the actual energy sales and the actual distribution losses, as given in the Table below:

Table 4-5: Energy Requirement and Energy Balance submitted by PGVCL for FY 2019-20 (MU)

Sr. No.	Particulars	Unit	FY 2019-20 (Approved)	FY 2019-20 (Actual)
1	Energy Sales	MUs	29,668	27,622
2	Distribution Losses	MUs	6,077	6,003
		%	17.00%	17.85%
3	Energy Requirement	MUs	35,745	33,626
4	Less: Local Power Purchase by Discom (Net of sale to KPT)	MUs	-	166
5	Power Purchase at T<>D periphery from GUVNL	MUs	35,745	33,460
6	Transmission Losses	MUs	1,431	1,294
		%	3.85%	3.7235%
7	Total Energy to be input to Transmission System	MUs	37,176	34,754
8	Pooled Losses in PGCIL System	MUs	581	412
9	Add: Local Power Purchase by Discom	MUs	-	166
10	**Total Energy Requirement**	**MUs**	**37,757**	**35,332**

Commission's Analysis

PGVCL has computed the energy requirement based on the actual Distribution Losses of 17.85%, actual energy sales of 27622 MU and Transmission Losses of 3.7235%.

The Commission had approved the distribution losses of 17.00% and the transmission losses of 3.85% in the MTR Order dated 24th April, 2019. Since the actual energy has been purchased, the Commission has computed the energy requirement of 35333 MU in truing up of FY 2019-20 considering the actual Distribution Loss of 17.85%, Transmission Loss of 3.7245% and pooled losses in PGCIL system for the purpose of gains/ losses, as shown in the Table below:

Table 4-6: Energy Requirement approved by the Commission in truing up for FY 2019-20 (MU)

Sr. No.	Particulars	Unit	Approved in MTR Order	Actual Claimed in Truing-Up	Approved in Truing - Up
1	Energy Sales	MUs	29,668	27,622	27,622
2	Distribution Losses	MUs	6,077	6,003	6,003
		%	17.00%	17.85%	17.85%
3	Energy Requirement	MUs	35,745	33,626	33,626
4	Less: Local Power Purchase by Discom (Net of sale to KPT)	MUs	-	166	166
5	Power Purchase at T<>D periphery from GUVNL	MUs	35,745	33,460	33,460
6	Transmission Losses	MUs	1,431	1,294	1,294
		%	3.85%	3.72%	3.7245%
7	Total Energy to be input to Transmission System	MUs	37,176	34,754	34,755
8	Pooled Losses in PGCIL System	MUs	581	412	412
9	Add: Local Power Purchase by Discom	MUs	-	166	166
10	**Total Energy Requirement**	**MUs**	**37,757**	**35,332**	**35,333**

4.4. Power Purchase Cost

Petitioner's Submission

The Petitioner has submitted that it has been allocated share of generation capacities as per the scheme worked out by GUVNL. In order to minimise power purchase cost, GUVNL adopts the Merit Order Despatch (MOD) principles for despatching power from the generating stations based on the demand and accordingly power gets allocated to PGVCL.

The actual power purchase from GUVNL is different from the allocation because the demand from PGVCL is not constant and varies from time to time. The total power purchase cost of PGVCL for FY 2019-20 consists of the basic power purchase cost, Transmission Charges payable to GETCO and PGCIL, and SLDC charges.

Based on above computation, actual cost of power purchase vis-a-vis the approved power purchase cost for FY 2019-20 is submitted in the Table below:

Table 4-7: Power Purchase Cost submitted by PGVCL for FY 2019-20 (Rs. Crore)

Sr. No.	Particulars	Approved in the MTR Order	Actual Claimed
A	**Cost**		
1	Power Purchased from GUVNL		15,472.43
2	Power purchase from Windfarm		31.15
3	Power Purchased from Solar		26.33
4	Unscheduled Interchange/ DSM Charges		-
5	SLDC Charges		4.70
	Total Cost		**15,534.61**
B	**Income**		
1	Sale of Power to GUVNL		**38.32**
2	DSM charges income		**48.52**
	Net Power Purchase Cost	**14,573.28**	**15,447.77**

The quantum of power purchase depends upon sales during the year as well as the losses in the system. The actual sales are lower than that of the approved by the Commission. The actual Distribution Losses in PGVCL distribution network have been slightly higher than the approved by the Commission. Hence, the actual quantum of power purchase was higher than the approved quantum and cost of power purchase.

As per the GERC (MYT) Regulations, 2016, the Commission has categorised the variation in the price of fuel and/or price of power purchase according to the FPPPA formula approved by the Commission as an uncontrollable factor. Further, the Commission has also identified the quantity of electricity sold to consumers as an uncontrollable factor. Accordingly, any gain or loss on this account is to be entirely passed on to the consumers as per the methodology approved by the Commission.

The variation in power purchase quantum and cost due to variation in Distribution Loss is a controllable factor, which would result in gain/loss under the GERC (MYT) Regulations, 2016.

PGVCL has claimed that there is loss of Rs. 151.22 Crore in the power purchase cost due to higher actual Distribution Losses as compared to Distribution Losses approved in the MTR Order dated 24th April, 2019. The loss is considered as controllable variation. The calculation of loss on account of Distribution Losses as submitted by PGVCL is shown in the Table below:

Table 4-8: Gain/ (Loss) on account of Distribution Losses for FY 2019-20 as submitted by PGVCL (Rs. Crore)

Sr. No.	Particulars	Unit	With Approved Distribution Losses	With Actual Distribution Losses
1	Energy Sales	MU	27,622.31	27,622.31
2	Distribution Losses	MU	5,657.58	6,003.46
		%	17.00%	17.85%
3	Energy Requirement	MU	33,279.89	33,625.77
4	Gain/ (Loss) due to Distribution Losses	MU		(345.87)
5	Average Power Purchase Cost	Rs./kWh		4.37
6	**Gain/ (Loss) due to Distribution Losses**	**Rs. Crore**		**(151.22)**

The summary of the gain/(loss) on account of controllable and uncontrollable factors of power purchase, as submitted by PGVCL, is shown in the Table below:

Table 4-9: Gain/(Loss) on account of truing up of Power Purchase Expenses for FY 2019-20 (Rs. Crore)

Particulars	Approved in the MTR Order	Actual	Gain/ (Loss) due to Controllable Factors	Gain/ (Loss) due to Uncontrollable Factors
Total Power Purchase Cost	14,573.28	15,447.77	(151.22)	(723.27)

Commission's Analysis

The Commission has examined the power purchase cost during FY 2019-20, based on the audited Annual Accounts of PGVCL. The total power purchase cost of PGVCL for FY 2019-20 consists of the basic power purchase cost, Transmission Charges payable to GETCO and PGCIL, SLDC charges.

The Commission through its data gaps has asked PGVCL to submit the reasons for increase in power purchase cost as compared to that approved even though the actual power purchase quantum is lower than the approved quantum. PGVCL in its reply has stated that the approved power purchase cost by the Commission for FY 2019-20 in the MTR order dated 24th April, 2019 is based on actual power purchase cost of FY 2017-18. Moreover, in case of power stations of central sector and GSECL, the power purchase is as per respective order of the Hon'ble CERC/ GERC. Therefore, increase/ decrease in power purchase cost in respect of these stations is due to change in approved parameters and increase/ decrease in landed cost of fuel. Further, rate for purchase of power from RE based projects is as per the tariff determined by the Commission / adopted by the Commission. PGVCL in its reply has also, stated that there is additional liability in the books of accounts towards power purchase cost under the head "Power Purchase Cost Others" as under:

Table 4-10: Additional Payment Liability claimed by GUVNL (Rs. Crore)

Particulars	Amount (Rs. Crore)
Payment liability towards various judgements of Court	3,595.33
GSECL Sikka Unabsorbed Depreciation	49.08
Total	**3,644.41**

Further, the Commission through its another data gaps had sought the detailed break-up regarding judgement wise payment made to various parties in FY 2019-20 along with necessary details and ongoing litigations at various forums for which there is likelihood of arrears/ liability payment in next/ subsequent years mentioning additional liability of Rs. 3,595.33 Crore in the books of accounts. PGVCL in its reply has clarified that no payment is made in FY 2018-19 and FY 2019-20 towards additional payment liability booked in the accounts for FY 2019-20. PGVCL has also submitted the details of ongoing litigations at various forums for which there is likelihood of arrears/ liability payment in next/ subsequent years; however, no amount has been estimated.

From the aforesaid submission of the PGVCL in the data gaps, it is submitted that the liabilities for the payment towards the power purchase cost to the generating companies under various PPAs are due as per the judgements of the various courts in various litigations and the payment may arise subsequently. The Commission may consider the additional payment liability to be allowed once it gets materialised and paid to the beneficiaries in subsequent years based on the prudence check and verification from audited accounts. Therefore, the Commission is reducing the provision made towards such additional liability of Rs. 3595.33 Crore in the ratio of power purchase cost of Discom.

The Commission vide its Order dated 26th March, 2020 in Case No. 1836 of 2019 in the matter of Truing-Up for FY 2018-19 and determination of tariff for FY 2020-21 of

Gujarat State Electricity Corporation Limited (GSECL) has approved the unabsorbed depreciation of Rs. 49.08 Crore towards Sikka TPS Unit 1 & 2 which is to be recovered from four DISCOMs through GUVNL in Twelve (12) equal monthly instalments. Hence, the Commission has allowed the amount of Rs. 49.08 Crore as claimed by PGVCL/ GUVNL towards unabsorbed depreciation.

The net Power Purchase Cost after truing up for PGVCL for FY 2019-20 works out to Rs. 14228.37 Crore, as shown in the Table below:

Table 4-11: Power Purchase Cost approved in truing up for FY 2019-20 (Rs. Crore)

Sr. No.	Particulars	Approved in the MTR Order	Actual Claimed in Truing-Up	Approved in Truing-up
A	**Cost**			
1	Power Purchased from GUVNL		15,472.43	14,253.03
2	Power purchase from Windfarm		31.15	31.15
3	Power Purchased from Solar		26.33	26.33
4	Unscheduled Interchange/ DSM Charges Penalty *****		-	-
5	SLDC Charges		**4.70**	**4.70**
	Total Cost		**15,534.61**	**14,315.21**
B	**Income**			
1	Sale of Power to GUVNL		**38.32**	**38.32**
2	DSM charges income		**48.52**	**48.52**
	Net Power Purchase Cost	**14,573.28**	**15,447.77**	**14,228.37**

(* GERC MYT Regulations for control period FY 2016-17 to FY 2020-21 were issued in 2016 whereas the amendment to Deviation & Settlement Mechanism (DSM) Regulation was issued by CERC in 2019 introducing the Sign deviation and additional DSM charges. Hence, necessary treatment has been provided by GUVNL in their power purchase cost as per MYT Regulations. The Commission is not considering any effect of Additional DSM charges or Sign Deviation at this moment due to above reason and since this is an additional year in the MYT control period, due treatment will be taken up in the regulations for the next MYT control period.)

The Commission has approved Distribution Losses at 17.00% for FY 2019-20 in the MTR Order dated 24th April, 2019, against which PGVCL has achieved Distribution Losses of 17.8537%. As stated earlier, the actual Distribution Losses in PGVCL distribution network have been slightly higher than the approved level. Accordingly, as mentioned in previous sections, the Commission is approving the Distribution Losses at 17.00% for FY 2019-20. The variation in power purchase quantum and cost due to variation in Distribution Loss is a controllable factor, which would result in gain/(loss) under the GERC (MYT) Regulations, 2016.

The calculation of the gain/(loss) on account of the controllable factor of Distribution Losses, as approved by the Commission in the Truing up for FY 2019-20, is shown in the Table below:

Table 4-12: Approved Gain/ (Loss) on account of Distribution Losses for FY 2019-20 (Rs. Crore)

Sr. No.	Particulars	Unit	With Approved Distribution Losses	Actual Claimed in Truing-Up	Approved for Truing-Up
1	Energy Sales	MU	27,622.31	27,622.31	27,622.31
2	Distribution Losses	MU	5,657.58	6,003.46	6,003.46
		%	17.00%	17.85%	17.85%
3	Energy Requirement	MU	33,279.89	33,625.77	33,625.77
4	Gain/(Loss) due to Distribution Losses	MU		(345.87)	(345.87)
5	Average Power Purchase Cost	Rs./kWh		4.37	4.03
6	**Gain/(Loss) due to Distribution Losses**	**Rs. Crore**		**(151.22)**	**(139.28)**

While computing the Gain/ (Loss) due to change in Distribution Losses, the Commission has considered the Distribution Losses at 17.00% of actual energy sales to arrive at change in energy requirement at the distribution periphery and has not considered the Transmission Losses to factor the efficiency of distribution activities only.

The Commission has considered change in power purchase cost attributable to the variation in cost and quantum of power due to variation in sales and transmission losses as uncontrollable.

Accordingly, the total Gain/(Loss) computed on account of power purchase is shown in the Table below:

Table 4-13: Approved gain / (loss) – power purchase expenses for truing up for FY 2019-20 (Rs. Crore)

Particulars	Approved in the MTR Order	Approved in Truing-Up	Deviation (+) (-)	Gain/ (Loss) due to Controllable Factors	Gain/ (Loss) due to Uncontrollable Factors
Total Power Purchase Cost	14,573.28	14,228.37	344.91	(139.28)	484.20

4.5. Renewable Purchase Obligation (RPO) for FY 2019-20

4.5.1 RPO compliance for FY 2019-20

The Petitioner has submitted the following details in respect of RPO compliance for FY 2019-20.

Table 4-14: RPO Compliance for FY 2019-20 (All Discom)

Particulars	Solar	Wind	Others	Total
Total Requirement (MUs)				92,705
Less: Hydro Power Purchase (MUs)				1,849
Actual Consumption excl. Hydro (MUs)				90,856
RPO fulfilled (%)	3.60%	9.16%	0.38%	13.14%
RPO Obligation fulfilled (MUs)	3,270	8,325	343	11,938
RPO Target %	5.50%	8.05%	0.75%	14.30%
RPO Target (MUs)	4,997	7,314	681	12,992
Unmet Target (MU)	**1,727**	**(1,011)**	**338**	**1,054**

RPO compliance is submitted by the Petitioner to the Commission on yearly basis and the Petitioner files separate Petition for any shortfall/ surplus quantum approval. Accordingly, the Commission will consider appropriate view on the same separately.

4.6. Fixed Cost

4.6.1 Operations and Maintenance (O&M) Expenses for FY 2019-20

PGVCL has claimed O&M Expenses of Rs. 1,201.03 Crore, which is inclusive of Employee Cost of Rs. 1,098.41 Crore, Repairs & Maintenance Expenses of Rs. 176.89 Crore, and Administration & General Expenses of 182.01 Crore and Other Expenses Capitalized of Rs. 256.28 Crore against the approved O&M Expense of Rs. 1099.71 Crore as per the details given in the Table below:

Table 4-15: O&M Expenses claimed in the truing up for FY 2019-20 (Rs. Crore)

Sr. No.	Particulars	Approved in MTR Order	Actual Claimed in Truing-Up	Deviation (+)/ (-)
1	Employee Cost	1,004.74	1,098.41	(93.67)
2	Repairs & Maintenance (R&M) Expenses	165.09	176.89	(11.80)
3	Administration & General Expenses (A&G)	177.35	182.01	(4.66)
4	Other Debits	-	-	-
5	Extraordinary Items	-	-	-
6	Net Prior Period Expenses/ (Income)	-	-	-
7	Other Expenses Capitalised	(247.47)	(256.28)	8.81
8	**Operations & Maintenance Expenses**	**1,099.71**	**1,201.03**	**(101.32)**

Petitioner's Submission

PGVCL has compared the O&M expenses actually incurred during FY 2019-20 with the expenses approved by the Commission in the MTR Order dated 24th April, 2019, and arrived at gain/(loss), as shown in the Table below:

Table 4-16: O&M Expenses and Gain/(Loss) claimed in the truing up for FY 2019-20 (Rs. Crore)

Sr. No.	Particulars	Approved in MTR Order	Actual Claimed in Truing-Up	Gain/ (Loss) due to Controllable Factors	Gain/ (Loss) due to Uncontrollable Factors
1	Employee Expenses	1,004.74	1,098.41	25.84	(119.51)
2	R&M Expenses	165.09	176.89		(11.80)
3	A&G Expenses	177.35	182.01	(4.66)	
4	Other Debits	-	-		
5	Extraordinary Items	-	-		
6	Net Prior Period Expenses/ (Income)	-	-		
7	Other Expenses Capitalised	(247.47)	(256.28)		8.81
8	**Operations & Maintenance Expenses**	**1,099.71**	**1,201.03**	**21.18**	**(122.50)**

The component-wise O&M expenses are discussed in the following paragraphs.

4.6.1.1 Employee Cost

PGVCL has claimed employee cost of Rs. 1,098.41 Crore in the truing up for FY 2019-20. The employee cost approved for FY 2019-20 in the MTR Order dated 24th April, 2019 and claimed by PGVCL in the truing up are given in the Table below:

Table 4-17: Employee Cost claimed by PGVCL in the truing up for FY 2019-20 (Rs. Crore)

Sr. No.	Particulars	Approved in MTR Order	Actual Claimed in Truing - Up	Gain/ (Loss) due to Controllable Factors	Gain/ (Loss) due to Uncontrollable Factors
1	Employee Cost	1,004.74	1,098.41	25.84	(119.51)

Petitioner's Submission

PGVCL submitted that Employee Expenses comprise salaries, dearness allowance, bonus, terminal benefits in the form of pension and gratuity, leave encashment, and staff welfare expenses. PGVCL submitted that the actual employee cost for FY 2019-20 was Rs. 978.90 Crore, which excludes the provision made towards 7th Pay Commission of Rs. 68.82 Crore, but includes Rs. 90.97 Crore of Re-measurement of defined benefit plans. In line with the approach adopted by the Commission in previous Orders, PGVCL has considered loss of Rs. 119.51 Crore of actual payment towards 7th Pay Commission as uncontrollable, and the balance loss of Rs. 25.84 Crore has been considered as controllable.

The Petitioner further submitted additional details on arrears of 7th Pay Commission which is mentioned as below:

> *"The Hon'ble Commission in its Order for Truing up for FY 2016-17 and Determination of Tariff for FY 2018-19 (In DGVCL Case No. 1700 of 2018 dated 31st March 2018) has decided not to allow the provision amount towards 7th Pay Commission in the truing up stating that as and when the actual expenses are incurred, the Commission would consider such claims, which would be accounted for during the true up of annual account of the respective year as uncontrollable factor. The relevant part of the same is reproduced here below:*
>
> ***"4.6.1 Operations and Maintenance (O&M) Expenses for FY 2016-17***
>
> *….*
>
> *4.6.2 Employee Cost*

….

Commission's Analysis

….

In response to the Commission's query, the Petitioner informed that employee expenses include provision of Rs. 59.24 Crores towards 7thPay Commission. As payment on this account is yet to be made, the Commission disallows this provision for employee expenses, to the extent of Rs.59.24 Crore for the purpose of true up of 2016-17. However, as and when the actual expenses are incurred, the Commission would consider such claims, which would be accounted for during the true up of annual account of the respective year as uncontrollable factor.

…"

- *Similar decision was also made in Tariff Order of MGVCL, PGVCL and UGVCL.*
- *Accordingly, Discoms (DGVCL, MGVCL, PGVCL and UGVCL) are eligible for two types of claim towards 7th Pay Commission impact in the employee expenses as uncontrollable, which are as under:*
  - ***a) Impact in Employee cost as a increase in regular payment in Current Year*** *due to revision of pay i.e. from 6th Pay to 7th Pay which is reflected in respective years P&L account under the head Employee Cost.*
  - ***b) Actual payment of past period Arrears of 7th Pay Commission*** *out of the provisions made by Discom in respective year's employee cost (reducing respective year's liability side of P&L account). It is to highlight that Discom used to make provisions for 7th Pay Commission in its books of the respective years by debiting employee cost and creating the liability side in the Balance Sheet. Hence, when payment of arrears of Basic Salary was made to employees, it has no impact on P&L account but has impact (reduction) on the liability shown in the Balance Sheet as the payment was made against the liability so created in the Balance Sheet.*

- *In FY 2017-18, Discom has started paying Basic salary to its employees (other than technical employees) as per 7th Pay Commission from 1st August 2017.*

Accordingly, in FY 2017-18, Discom has claimed uncontrollable expense on account of payment of basic salary as per 7th Pay Commission. Further, In FY 2018-19, Discom has paid Basic salary to its employees as per 7th Pay Commission which was booked in P&L account. Over and above, Discom has also paid arrears of Basic Salary for past period starting from 1st January, 2016.

- *It is to submit that during FY 2017-18 and FY 2018-19, Discom have claimed salary expenses as booked in P&L account only and out of which, the higher salary payment due to implementation of 7th Pay Commission was claimed as an uncontrollable expense. Thus, up till now, based on DISCOMs claim, Hon'ble Commission has only allowed 7th Pay impact towards increase in regular payment in respective Year and not towards any arrears payment.*
- *Discom have paid arrears payment to its employees from Liabilities created in Balance Sheet, which was never claimed by Discom in past Truing-up as it was part of Balance Sheet Liability. Discom is first time claiming its arrears payment made to its employees in present Petition.*
- *The reconciliation of the various provisions disallowed by the Hon'ble Commission, Arrears payment made by Discom to its employee, Arrears payment claimed from the Hon'ble Commission and Balance Provisions yet to be claimed (as and when paid by Discom) is as under:*

(Rs in Crores)

Sr. No.	***Particulars***	***DGVCL***	***MGVCL***	***PGVCL***	***UGVCL***	***Total***	***Remarks***
(A)	***7th Pay Provision made by Discom***						
1	*FY 2015-16*	*13.94*	*16.01*	*29.77*	*18.79*	*78.51*	*The same can be verified from Various True-up Orders of the Hon'ble Commission. It is to note that the Hon'ble Commission has inadvertently deducted higher provision of Rs. 29.77 Crore in place of Rs. 18.79 Crore.*
2	*FY 2016-17*	*59.24*	*67.86*	*126.95*	*80.36*	*334.41*	
3	*FY 2017-18*	*42.03*	*46.23*	*86.62*	*54.80*	*229.68*	
4	*FY 2018-19*	*33.03*	*35.59*	*66.89*	*41.68*	*177.19*	
5	*FY 2019-20*	*34.73*	*37.07*	*68.82*	*43.11*	*183.73*	
A	***Total (1 to 5)***	***182.97***	***202.76***	***379.05***	***238.74***	***1,003.52***	
(B)	***7th Pay arrears payment made by Discom***						
1	*FY 2015-16*	*-*	*-*	*-*	*-*	*-*	

(Rs in Crores)

Sr. No.	***Particulars***	***DGVCL***	***MGVCL***	***PGVCL***	***UGVCL***	***Total***	***Remarks***
2	*FY 2016-17*	*-*	*-*	*-*	*-*	*-*	
3	*FY 2017-18*	*-*	*-*	*-*	*-*	*-*	
4	*FY 2018-19*	*55.45*	*64.51*	*119.52*	*74.37*	*313.85*	
5	*FY 2019-20*	*-*	*-*	*-*	*-*	*-*	
B	***Total (1 to 5)***	***55.45***	***64.51***	***119.52***	***74.37***	***313.85***	
(C)	***7th Pay arrears payment claimed by Discom from the Hon'ble Commission***						
1	*FY 2015-16*	*-*	*-*	*-*	*-*	*-*	
2	*FY 2016-17*	*-*	*-*	*-*	*-*	*-*	
3	*FY 2017-18*	*-*	*-*	*-*	*-*	*-*	
4	*FY 2018-19*	*-*	*-*	*-*	*-*	*-*	
5	*FY 2019-20*	*55.45*	*64.51*	*119.52*	*74.37*	*313.85*	
6	*Inadvertent higher Deduction of Provision by the Hon'ble Commission during FY 2015-16*				*10.98*	*10.98*	
C	***Total (1 to 6)***	***55.45***	***64.51***	***119.52***	***85.35***	***324.83***	

- ***It is to clarity that in the proceedings for Truing-up of FY 2018-19, Discom has inadvertently mentioned that claim of employee expenses is inclusive of actual payment of arrears. Discom would like to reinstate and confirm that it has not claimed arrears payment made to its employees in its past True-up Petitions and claiming the arrear payment first time in present Petition****."*

Commission's Analysis

PGVCL has claimed actual employee cost of Rs. 1,098.41 Crore for FY 2019-20 as against Rs. 1,004.74 Crore approved in the MTR Order dated 24th April, 2019. The Commission has verified the actual employee expenses from the audited Annual Accounts of PGVCL which comes out to be Rs. 956.75 Crore. The actual employee expenses claimed by PGVCL computes to Rs.978.90 Crore which excludes Rs. 68.82 Crore towards Provision for 7th Pay Commission but includes Rs. 90.97 Crore of Re-measurement of defined benefit plans (Rs.956.75 Cr – Rs.68.82 Cr + Rs.90.97 Cr). PGVCL has further claimed Rs. 119.51 Crore towards the arrears pay out on account of 7th Pay Commission impact which is over and above the Rs. 978.90 Crore as claimed by PGVCL towards employee expenses as per audited annual accounts. Hence, total employee cost of PGVCL for FY 2019-20 is Rs. 1,098.41 Crore (Rs. 978.90 Crore as per employee cost in P&L + Rs. 119.51 Crore as per arrears pay out plan).

The Commission on verifying the details of the 7th pay commission submitted in the petition and as approved in the last tariff order, observes that there was no clarity about the raising of the arrears amount for 7th pay commission provided by the petitioner and its approval. The Commission asked for additional details and clarity on the above issue. The Petitioner has submitted the details as mentioned above and clarified that the claim was not raised for the said amount and there was inadvertent representation in previous petition and hence requested to approve separately in current petition in true-up of FY 2019-20.

Therefore, the Commission considers the actual employee expenses of Rs. 1,098.41 Crore for the purpose of true up of FY 2019-20. The Commission considers the employee cost as a controllable expense, in accordance with the GERC (MYT) Regulations, 2016.

The Commission, accordingly, approves the employee cost at Rs. 1,098.41 Crore in the truing up for FY 2019-20, with the sharing of Gains/(Losses) as shown in the Table below:

Table 4-18: Employee Cost approved in the truing up for FY 2019-20 (Rs. Crore)

Sr. No.	Particulars	Approved in MTR Order	Approved in Truing – Up	Gain/ (loss) due to Controllable Factors	Gain/ (loss) due to uncontrollable Factors
1	Employee Cost	1,004.74	1,098.41	25.84	(119.51)

4.6.1.2 Repairs & Maintenance (R&M) Expenses

PGVCL has claimed R&M expenses of Rs. 176.89 Crore in the truing up for FY 2019-20. The R&M expenses approved for FY 2019-20 in the MTR Order dated 24th April, 2019 and claimed by PGVCL in the truing up are as given in the Table below:

Table 4-19: R&M Expenses claimed by PGVCL for the truing up for FY 2019-20 (Rs. Crore)

Sr. No.	Particulars	Approved in MTR Order	Actual Claimed in Truing - Up	Gain/ (Loss) due to Controllable Factors	Gain/ (Loss) due to Uncontrollable Factors
1	R&M Expenses	165.09	176.89	-	(11.80)

Petitioner's Submission

PGVCL has submitted that the assets of PGVCL are old and require regular maintenance to ensure uninterrupted operations. It has been further submitted that PGVCL has been trying its best to ensure uninterrupted operations of the system by undertaking necessary expenditure for R&M activities. The GERC (MYT) Regulations, 2016 provides for R&M expenses as a controllable expense. PGVCL has also submitted that there was huge rainfall and devastating cyclones "VAYU", "MAHA" etc. were struck within the Company area and damaged the network of the company during the year. Due to cyclones, 786.516 kms HT Line, 140.64 kms LT Line, 1547 nos. of transformers and 18011 nos. of Poles were damaged among others, which has resulted in additional expenditure under R&M. The actual R&M expenses for FY 2019-20 are Rs. 176.89 Crore, which is higher than the approved R&M expenses of Rs. 165.09 Crore. PGVCL has worked out a loss of Rs. 11.80 Crore and requested the GERC to consider the additional expenditure as uncontrollable factors instead of controllable factors as provided in the GERC (MYT) Regulations, 2016.

Commission's Analysis

The actual R&M expenses incurred during FY 2019-20 are Rs. 176.89 Crore, as per the audited annual accounts. The actual R&M expenses incurred by PGVCL are higher than the amount approved in the MTR Order dated 24th April, 2019. PGVCL in its Petition has stated that due to huge rainfall and devastating cyclones "VAYU", "MAHA" etc. were struck within the Company area and damaged the network of company during the year, which has resulted in additional expenditure under R&M. Further, PGVCL has requested the GERC to consider the additional expenditure as uncontrollable factors instead of controllable factors. However, the R&M expenses are a controllable item of expenditure under the GERC (MYT) Regulations, 2016. **The Commission through its data gaps sent to PGVCL has directed to submit or provide the details of such additional R&M expenses incurred due to cyclone effect along with nature of expenses, quantity, location, amount etc. However, the PGVCL has stated that it is not possible for Discom to identify whether cost incurred under head R&M expenses is due to normal R&M or asset impacted due to natural calamity. In absence of any further details & break-up, it is difficult for the Commission to assess the impact of uncontrollable. Accordingly, the Commission has trued up the R&M expenses and the sharing of Gains/(Losses) due to controllable factors, as shown in the Table below**:

Table 4-20: R&M Expenses approved for the truing up for FY 2019-20 (Rs. Crore)

Sr. No.	Particulars	Approved in MTR Order	Approved in Truing-Up	Gain/ (Loss) due to Controllable Factors	Gain/ (Loss) due to Uncontrollable Factors
1	R&M Expenses	165.09	176.89	(11.80)	-

4.6.1.3 Administration & General (A&G) Expenses

PGVCL has claimed A&G expenses of Rs. 182.01 Crore in the truing up for FY 2019-20. The A&G expenses approved for FY 2019-20 in the MTR Order dated 24th April, 2019 and claimed by PGVCL in the truing up are given in the Table below:

Table 4-21: A&G Expenses claimed by PGVCL in the truing up for FY 2019-20 (Rs. Crore)

Sr. No.	Particulars	Approved in MTR Order	Actual Claimed in Truing – Up	Gain/ (Loss) due to Controllable Factors	Gain/ (Loss) due to Uncontrollable Factors
1	A&G Expenses	177.35	182.01	(4.66)	-

Petitioner's Submission

PGVCL has submitted that A&G expenses mainly comprise rents, telephone and other communication expenses, professional charges, conveyance and travelling allowances, etc. The A&G expenses are categorised as controllable expenses in the GERC (MYT) Regulations, 2016 and the actual A&G expenses are higher than the approved expenses, resulting in a loss of Rs. 4.66 Crore for FY 2019-20.

Commission's Analysis

The actual A&G expenses incurred during FY 2019-20 are Rs. 182.01 Crore, as per the audited annual accounts. The actual A&G expenses incurred by PGVCL are higher than the amount approved in the MTR Order dated 24th April, 2019. The A&G expenses are a controllable item of expenditure under the GERC (MYT) Regulations, 2016. Accordingly, the Commission has trued up the A&G expenses and the sharing of Gains/(Losses) due to controllable factors, as shown in the Table below:

Table 4-22: A&G Expenses approved in the truing up for FY 2019-20 (Rs. Crore)

Sr. No.	Particulars	Approved in MTR Order	Approved in Truing-Up	Gain/ Loss due to Controllable Factors	Gain/ (Loss) due to Uncontrollable Factors
1	A&G Expenses	177.35	182.01	(4.66)	-

4.6.1.4 Other Expenses Capitalised

PGVCL has claimed the actual expenses capitalised at Rs. 256.28 Crore in the truing up for FY 2019-20, as against Rs. 247.47 Crore approved in the MTR Order dated 24th April, 2019 as shown in the Table below:

Table 4-23: Other Expenses Capitalised as claimed by PGVCL in the truing up for FY 2019-20 (Rs. Crore)

Sr. No.	Particulars	Approved in MTR Order	Actual Claimed in Truing - Up	Gain/ (Loss) due to Controllable Factors	Gain/ (Loss) due to Uncontrollable Factors
1	Other Expenses Capitalised	(247.47)	(256.28)	-	8.81

Commission's Analysis

The Commission has observed that the other expenses capitalised represent the capitalisation of Employee Expenses and A&G Expenses. The actual other expenses capitalised is Rs. 256.28 Crore, as per the audited annual accounts for FY 2019-20.

The Commission, accordingly, approves the Other Expenses Capitalised at Rs. 256.28 Crore against Rs. 247.47 Crore approved in the MTR Order dated 24th April, 2019. The Commission allows Rs. 8.81 Crore as loss due to uncontrollable factors as shown in the Table below:

Table 4-24: Other Expenses Capitalised approved in the truing up for FY 2019-20 (Rs. Crore)

Sr. No.	Particulars	Approved in MTR Order	Approved in Truing-Up	Gain/ (Loss) due to Controllable Factors	Gain/ (Loss) due to Uncontrollable Factors
1	Other Expenses Capitalised	(247.47)	(256.28)	-	8.81

The total O&M expenses approved in the truing up for FY 2019-20 and the Gain / (Loss) due to controllable and uncontrollable factors are detailed in the Table below:

Table 4-25: Approved O&M expenses and Gain / (Loss) in the truing up for FY 2019-20 (Rs. Crore)

Sr. No.	Particulars	Approved in MTR Order	Actual Claimed in Truing-Up	Approved in Truing-Up	Gain/ (Loss) due to Controllable Factors	Gain/ (Loss) due to Uncontrollable Factors
1	Employee Cost	1,004.74	1,098.41	1,098.41	25.84	(119.51)
2	R&M Cost	165.09	176.89	176.89	(11.80)	-
3	A&G Expenses	177.35	182.01	182.01	(4.66)	-
4	Other Debits	-	-	-		
5	Extraordinary Items	-	-	-		
6	Net Prior Period Expenses / (Income)	-	-	-		
7	Other Expenses Capitalised	(247.47)	(256.28)	(256.28)	-	8.81
8	**O&M Expenses**	**1,099.71**	**1,201.03**	**1,201.03**	**9.37**	**(110.70)**

4.6.2 Capital Expenditure and Capitalization

PGVCL has furnished actual capital expenditure of Rs. 1,766.16 Crore in the truing up for FY 2019-20, against Rs. 1,784.10 Crore approved in the MTR Order dated 24th April, 2019, as given in the Table below:

Table 4-26: Capital Expenditure claimed by PGVCL for FY 2019-20 (Rs. Crore)

Sr. No.	Particulars	FY 2019-20 (Approved)	FY 2019-20 (Actual)	Deviation
A	**Distribution Schemes**			
	Normal Development Scheme	348.60	336.86	11.74
	System Improvement Scheme	100.00	166.75	(66.75)
	Electrification of hutments	7.00	3.07	3.93

Sr. No.	Particulars	FY 2019-20 (Approved)	FY 2019-20 (Actual)	Deviation
	Scheme for meters including installation of SMART Meters	80.00	41.06	38.94
	Total	**535.60**	**547.73**	**(12.13)**
B	**Rural Electrification Schemes**			
	Special Component plan	1.50	2.93	(1.43)
	RE Normal + Tatkal + Dark Zone	935.00	997.69	(62.69)
	Total	**936.50**	**1,000.62**	**(64.12)**
C	**Non Plan Schemes**			
	SCADA/DMS	-	1.17	(1.17)
	Total	**-**	**1.17**	**(1.17)**
D	**Other New Schemes**			
	Civil work	10.00	-	10.00
	Shunt Capacitor	10.00	-	10.00
	Fencing to Distribution Transformer	15.00	-	15.00
	Aerial Bunch Conductors	1.00	-	1.00
	HVDS	100.00	59.59	40.41
	Under Ground System at Pilgrim Places like Dwarka, Somnath, Bhavnath (Junagadh) etc. and important GIDC area	75.00	0.12	74.88
	SKJY	50.00	86.22	(36.22)
	Marine Cable for Shiyalbet	-	-	-
	IPDS	-	5.46	(5.46)
	DDUGJY	-	6.71	(6.71)
	Solar Ag Pump	-	-	-
	FPI	1.00	-	1.00
	DISS	10.00	17.17	(7.17)
	Others schemes (General Schemes)	-	-	-
	Smart Village	-	0.05	(0.05)
	Coastal area scheme	40.00	41.31	(1.31)
	Total	**312.00**	**216.64**	**95.36**
	Capital Expenditure Total	**1,784.10**	**1,766.16**	**17.94**

Petitioner's Submission

PGVCL has submitted that Capital expenditure incurred by PGVCL in FY 2019-20 was Rs. 1766.16 Crore. The actual capital expenditure by PGVCL during the FY 2019-20 is lower than that approved by the Commission.

Scheme-wise deviation in capital expenditure is explained as under:

Normal Development: Expenses under Normal Development Scheme are generally incurred to meet the Supply Obligation of utility. It is mainly based on the numbers of applications received. During FY 2019-20, PGVCL incurred Rs. 336.86 Crore against approved Rs. 348.60 Crore.

System Improvement: Expenses under System Improvement Scheme are generally incurred for renovation/replacement of old distribution lines, bifurcation of feeders, installation/augmentation of distribution transformers etc. System Improvement is carried out on requirement basis with the objective to improve reliability of power supply and also to reduce distribution loss. PGVCL has incurred Rs. 166.75 Crore towards System Improvement against approved Rs. 100 Crore.

Scheme for meters including installation of SMART Meters: The scheme involves replacement of meters at exiting consumers' premises by static/ electronics meters and also installation of meters at Distribution Transformer level. Under the scheme, PGVCL incurred expenditure of Rs.41.06 Crore during FY 2019-20.

RE Scheme: Under RE Schemes, PGVCL releases connections to agriculture category consumers. PGVCL has set the targets for releasing the connections of agriculture category as per the directives of the Commission. Accordingly, during FY 2019-20, PGVCL has released more than 85000 agriculture connections during the year at Rs. 997.69 Crore vis-à-vis approved cost of Rs. 935 Crore.

In accordance with the policy framed by Government of Gujarat, PGVCL has initiated releasing connection in the Dark Zone area from FY 2013-14.

SCADA/DMS: The objective of reducing Aggregate Technical and Commercial (AT&C) losses in the project areas can be achieved by plugging pilferage points, supply of quality power, faster identification of faults & early restoration of power, proper metering, strategic placement of capacitor banks & switches and proper planning & designing of distribution networks. The real time monitoring & control of the distribution system through state-of-the art SCADA/DMS system encompassing all distribution substations & 11 KV network would help in achieving this objective of R-APDRP. For deriving maximum benefits, it is essential that necessary upgradation of distribution S/S & 11kV network shall be carried out to meet the SCADA/DMS requirements. SCADA is to be implemented through SCADA Implementation Agency

(SIA). The scheme involves replacement of meters at existing consumers' premises by static/ electronics meters and also installation of meters at Distribution Transformer level. Under the scheme, PGVCL incurred expenditure of Rs.42.50 Crore during FY 2018-19.

High Voltage Distribution System (HVDS): Company is having large nos. of low-tension category consumers. To eliminate low voltage distribution and to have better voltage profile as well as for reduction in technical loss and associated commercial loss company has proposed to shift over on High Voltage Distribution System by erecting small capacity Transformer matching with the connected load of individual consumer or very small group of consumers in phased manner. Accordingly, under this head during the year company has incurred Rs. 59.59 Crore as against approved Rs. 100 Crore.

Coastal Area Scheme: PGVCL covers largest costal area of the state. Majority of the Distribution network of the Company is "Overhead" type. "Overhead" network is highly susceptible to environmental changes in general and particularly in coastal area. To provide better quality power supply in the coastal belt, Company undertakes various activities like renovation of distribution network, distribution transformer review, providing aerial bunch conductor, conversion of LT distribution network into High Voltage Distribution System etc. Scope of work is planned to depend on time-to-time requirement and exigency of work. Accordingly, PGVCL has spent Rs. 41.31 Crore during FY 2019-20 against approved Rs. 40 Crore.

Underground Network: Government of India has notified "Integrated Power Development System". One of the main components of the scheme is to convert existing overhead system to underground system. Therefore, the earlier proposed "underground" schemes have been now implemented in the limited area like pilgrim places etc. and accordingly PGVCL spent Rs. 0.12 Crore under the scheme during FY 2019-20.

Integrated Power Development Scheme (IPDS): Scheme is applicable in the town/ urban areas having population 5000 and more as per Census 2011. Scheme involves strengthening of sub-transmission and distribution network in urban areas including provisioning of solar panels on Govt. buildings with net-metering, metering of feeders / distribution transformers / consumers in urban areas and, IT enablement of distribution sector and strengthening of distribution network, etc. Under the scheme, Company spent Rs. 5.46 Crore during FY 2019-20.

Deen Dayal Upadhyay Gram Jyot Yojna (DDUGJY): Scheme is applicable in the rural areas of PGVCL. Scheme involves strengthening and augmentation of sub-transmission & distribution to ensure quality power supply in rural areas with reliability, conversion of existing LV network to HV network, improving consumer level metering system, installation of meter at distribution transformers for proper energy accounting, identifying high loss pockets etc. Under the scheme, PGVCL has spent Rs. 6.71 Crore during FY 2019-20.

Sardar Krushi Jyoti Yojna (SKJY): Under the head Sardar Krushi Jyoti Yojna (SKJY), PGVCL carries out replacement, strengthening, renovation etc. of agriculture dominant distribution network under the financial assistance from the state government. Main objective of the scheme is to improve reliability of power supply and also to reduce distribution loss. Company incurred Rs. 86.22 Crore against approved Rs. 50.00 Crore in FY 2019-20.

Distribution Infrastructure Shifting Scheme (DISS): Under this scheme, PGVCL shifts the network obstructing to Local bodies, urban authorities in their development activities, road widening etc. Under the scheme, Company spent Rs.17.17 Crore during FY 2019-20 against approved Rs. 10.00 Crore.

PGVCL has claimed actual capitalisation of Rs. 1796.23 Crore in the truing up for FY 2019-20, as compared to the capitalisation of Rs. 1784.10 Crore approved in the MTR Order dated 24th April 2019.

PGVCL requested the Commission to approve the above deviations.

Commission's Analysis

The capital expenditure (CAPEX) approved for FY 2019-20 in the MTR Order dated 24th April, 2019 was Rs. 1784.10 Crore. The actual capital expenditure incurred is Rs. 1766.16 Crore, which is higher by Rs. 17.94 Crore than the CAPEX approved in the MTR Order dated 24th April, 2019.

The Commission observed that there is higher Capital Expenditure of Rs. 12.13 Crore during FY 2019-20 compared to that approved in MTR Order for Normal Development Distribution Scheme. The Normal Development Distribution Scheme is meant for providing new connections. Any variation in the Capital Expenditure is mainly due to number of applications received by the Licensee.

It is observed by the Commission that expenditure under Distribution Infrastructure Shifting Scheme is dependent upon the proposal for shifting of Distribution Network received from Urban Local Bodies like Nagar Palika, Municipal Corporation, Gram Panchayat etc. It is also observed by the Commission that variation in the Capital Expenditure for electrification of hutments, Kutir Jyoti scheme and Harijan Basti (Petarapa) scheme is due to variation in number of connections released under these schemes.

It is noted by the Commission that PGVCL has released more than 85,000 number of Agriculture Connections during the year at cost of Rs. 997.69 Crore. The Commission has noted that PGVCL has incurred Rs. 64.12 Crore higher than that approved in MTR Order against RE Scheme due to release of more number of connections and releasing connections in Dark Zone area which were pending since FY 2013-14. It is noted by the Commission that expenditure under SKJY, IPDS, DDUGJY and SCADA/ DMS have been incurred by the Petitioner though these schemes were not approved under MTR Order since these schemes were subsequently approved by either Government of India or Government of Gujarat post issuance of the MTR Order.

It is also noted by the Commission that to provide better quality power supply in coastal belt, PGVCL undertakes various activities and during FY 2019-20, PGVCL has incurred Rs. 41.31 Crore against Rs. 40.00 Crore approved in the MTR Order dated 24th April, 2019.

The Commission observes that most of the CAPEX Schemes by the DISCOMs are of continuous and on-going nature. These are based on yearly targets set for meeting the supply obligation, providing quality and reliable power to the consumers, reduction in losses, release of agriculture connections, etc. Generally, there are no pre-defined timelines as the schemes are further bifurcated into various works under the Scheme. Nevertheless, the Licensee should be more realistic in projecting the CAPEX.

The Commission, verified the audited annual accounts of PGVCL and has observed that PGVCL has incurred actual CAPEX of Rs. 1744.50 Crore (against CAPEX of Rs. 1766.16 Crore as claimed in the Petition). The Commission, therefore, approves Rs. 1744.50 Crore as CAPEX in the truing up for FY 2019-20.

4.6.2.1 Funding of Capitalisation

Petitioner's Submission

PGVCL submitted that the funding of actual capitalisation is done through various sources categorised under four headings, viz., Consumer Contribution, Grants, Equity and Debt. The detailed breakup of funding of assets capitalised during FY 2019-20 is given in the Table below:

Table 4-27: Funding of Capitalisation submitted by PGVCL for FY 2019-20 (Rs. Crore)

Particulars	Approved in MTR Order	Claimed in Truing-Up
Capitalisation	**1,784.10**	**1,796.23**
Consumer Contribution	209.27	230.85
Grants	107.50	141.76
Balance CAPEX for the Year	**1,467.33**	**1,423.62**
Debt (70%)	1,027.13	996.54
Equity (30%)	440.20	427.09

Commission's Analysis

It is observed that PGVCL has claimed the funding of Capitalisation, net of Consumer Contribution and Government Grant, in the normative Debt: Equity ratio of 70:30, as specified in the GERC (MYT) Regulations, 2016.

The Petitioner has claimed net addition during the year of Rs. 1796.23 Crore. However, while verifying the Annual Accounts of PGVCL, the Commission has observed that there is a difference in amount claimed in Truing-Up which is Rs. 1796.23 Crore vis-à-vis the amount as mentioned in Audited Annual Accounts for FY 2019-20 which is Rs. 1795.79 Crore. Accordingly, the Commission has approved the Capitalisation of Rs. 1795.79 Crore for FY 2019-20.

The Commission has verified the amount considered by PGVCL against Government Grants and Consumer Contribution from the audited Annual Accounts for FY 2019-20. The Commission has accordingly considered the funding of capitalisation in FY 2019-20 through Consumer Contribution and Grants of Rs. 230.85 Crore and Rs. 141.76 Crore, respectively, in the truing up for FY 2019-20.

The Commission, therefore, approves the funding of Capitalization in the truing up of FY 2019-20 as given in the Table below:

Table 4-28: Approved Capitalisation and sources of funding in the truing up for FY 2019-20 (Rs. Crore)

Particulars	Approved in MTR Order	Claimed in Truing-Up	Approved in Truing-Up
Capitalization	**1,784.10**	**1,796.23**	**1,795.79**
Consumer Contribution	209.27	230.85	230.85
Grants	107.50	141.76	141.76
Balance CAPEX for the Year	**1,467.33**	**1,423.62**	**1,423.18**
Debt (70%)	1,027.13	996.54	996.23
Equity (30%)	440.20	427.09	426.95

4.6.3 Depreciation

PGVCL has claimed Depreciation of Rs. 848.34 Crore in the truing up for FY 2019-20 against the Depreciation of Rs. 712.43 Crore approved in the MTR Order dated 24th April, 2019.

Petitioner's Submission

PGVCL submitted that it has calculated depreciation for FY 2019-20 in accordance with the provisions of the GERC (MYT) Regulations, 2016, as shown in the Table below:

Table 4-29: Fixed Assets & Depreciation computed by PGVCL for FY 2019-20 (Rs. Crore)

Sr. No.	Particulars	Approved in MTR Order	Actual Claimed in Truing-Up	Deviation
1	Gross Block in Beginning of the Year	16,877.44	17,100.97	
2	Additions during the Year	1,784.10	1,796.23	
3	**Depreciation for the Year**	**712.43**	**848.34**	**(135.91)**
4	**Average Rate of Depreciation**	**4.01%**	**4.71%**	

PGVCL further submitted that actual depreciation for FY 2019-20, as against the value approved in the MTR Order, resulted in a net uncontrollable loss of Rs. 135.91 Crore, as shown in the Table below:

Table 4-30: Gain/(Loss) due to Depreciation claimed in the truing up for FY 2018-19 (Rs. Crore)

Particulars	Approved in MTR Order	Actual Claimed in Truing-Up	Gain/ (Loss) due to Controllable Factors	Gain/ (Loss) due to Uncontrollable Factor
Depreciation	712.43	848.34	-	(135.91)

Commission's Analysis

It is observed that the Opening Gross Fixed Assets (GFA) as per Audited accounts, which is readjusted as per IND AS. However, the Petitioner has considered the Opening GFA in the truing up for FY 2019-20 as per the truing up Order for FY 2018-19, which is correct. The Commission has accordingly considered the Closing GFA of FY 2018-19 as Opening GFA of FY 2019-20.

The net addition during the year of Rs. 1,795.79 Crore has been verified from the audited Annual Accounts for FY 2019-20. The depreciation as per audited Annual Accounts for FY 2019-20 is Rs. 848.34 Crore.

The Commission has considered Opening GFA as per Closing GFA in the truing up Order for FY 2018-19 and net addition as per audited Annual Account for FY 2019-20 to work out weighted average rate of depreciation as 4.71%.

The Commission, accordingly, approves Depreciation at Rs. 848.34 Crore in the truing up for FY 2019-20, as shown in the Table below:

Table 4-31: Approved fixed assets & depreciation for FY 2019-20 (Rs. Crore)

Sr. No.	Particulars	Approved in MTR Order	Actual Claimed in Truing-Up	Approved in Truing-Up
1	Gross Block in Beginning of the year	16,877.44	17,100.97	17,100.97
2	Additions during the Year (Net)	1,784.10	1,796.23	1,795.79
3	Gross Block at the end of the year	18,661.54	18,897.20	18,896.76
4	**Depreciation for the year**	712.43	848.34	848.34
5	**Average Rate of Depreciation**	4.01%	4.71%	4.71%

The amount of depreciation is dependent on the quantum of capitalisation, rate of depreciation, etc. The Commission has, therefore, considered the parameters impacting depreciation as uncontrollable.

The Commission, accordingly, approves the Gain /(Loss) on account of depreciation in the truing up for FY 2019-20, as detailed in the Table below:

Table 4-32: Gain/(Loss) due to Depreciation approved in truing up for FY 2019-20 (Rs. Crore)

Particulars	Approved in MTR Order	Approved in Truing-Up	Gain/ (loss) due to Controllable Factors	Gain/ (Loss) due to Uncontrollable Factors
Depreciation	712.43	848.34	-	(135.91)

4.6.4 Interest and Finance charges

PGVCL has claimed Rs. 442.34 Crore towards interest and finance charges in the truing up for FY 2019-20, as against Rs. 444.62 Crore approved in the MTR Order dated 24th April, 2019, as shown in the Table below:

Table 4-33: Interest and Finance Charges claimed by PGVCL in the truing up for FY 2019-20 (Rs. Crore)

Particulars	Approved in MTR Order	Actual Claimed in Truing-Up
Interest and Finance Charges	444.62	442.34

Petitioner's Submission

PGVCL submitted that it has considered the Opening Balance of loans for FY 2019-20 equal to the Closing Balance of Loans approved by the Commission for FY 2018-19. The loan addition in FY 2019-20 is considered as Rs. 996.54 Crore towards funding of CAPEX for FY 2019-20. As per the GERC (MYT) Regulations, 2016, repayment during the year has been considered equal to the depreciation for the financial year.

PGVCL has considered the weighted average rate of interest of 9.71% as against 9.69% approved in the MTR Order dated 24th April, 2019 for FY 2019-20.

In addition, PGVCL has considered the interest on security deposits as per the provisions of the GERC (MYT) Regulations, 2016. The details of interest and finance charges claimed by PGVCL are as given in the Table below:

Table 4-34: Interest and Finance Charges claimed by PGVCL in the truing up for FY 2019-20 (Rs. Crore)

Sr. No.	Particulars	Approved in MTR Order	Actual Claimed in Truing-Up
1	Opening Loans	3,104.83	3,158.88
2	Loan Additions during the Year	1,027.13	996.54

Sr. No.	Particulars	Approved in MTR Order	Actual Claimed in Truing-Up
3	Repayment during the Year	712.43	848.34
4	Closing Loans	3,419.53	3,307.08
5	**Average Loans**	**3,262.18**	**3,232.98**
6	Interest on Loan	315.99	313.92
7	Interest on Consumer's Security Deposit	126.02	126.41
8	Other Bank Charges	2.62	2.01
9	**Total Interest & Finance Charges**	**444.62**	**442.34**
10	Average Interest on Loan	9.69%	9.71%

PGVCL submitted that interest and finance charges are categorised as uncontrollable as per the GERC (MYT) Regulations, 2016, and that it has accordingly computed the gain/(loss) between the actual and the approved expenses under uncontrollable factors, as given in the Table below:

Table 4-35: Gain / (Loss) claimed due to Interest & Finance Charges for FY 2019-20 (Rs. Crore)

Particulars	Approved in MTR Order	Actual Claimed in Truing-Up	Gain/ (Loss) due to Controllable Factors	Gain/ (Loss) due to Uncontrollable Factors
Interest & Finance Charges	444.62	442.34	-	2.28

Commission's Analysis

The Commission has considered the Closing Balance of Loans approved in the true up Order for FY 2018-19, as the Opening Balance of Loans for FY 2019-20. The normative addition of loans during FY 2019-20 has been considered at Rs. 996.23 Crore, as approved in earlier Table of funding of capitalisation. The repayment of loan has been considered equal to the depreciation approved in this Order.

The interest on security deposits of Rs. 126.41 Crore has been verified from the audited Annual Accounts for FY 2019-20. The Guarantee Charges/ Other Bank Charges have been considered as per the audited Annual Accounts for FY 2019-20.

PGVCL has submitted details of the actual loan portfolio and the rate of interest applicable for each loan portfolio for FY 2019-20.

Accordingly, the Commission has computed the weighted average rate of interest as 9.71% in accordance with the Regulation 38 of the GERC (MYT) Regulations, 2016.

Taking all these factors into consideration, the interest and finance charges approved in the truing up for FY 2019-20 is detailed in the Table below:

Table 4-36: Interest and Finance Charges approved by the Commission in the truing up for FY 2019-20 (Rs. Crore)

Sr. No.	Particulars	Approved in the MTR Order	Actual Claimed in Truing-Up	Approved in Truing-Up
1	Opening Loans	3,104.83	3,158.88	3,158.88
2	Loan Addition during the Year	1,027.13	996.54	996.23
3	Repayment during the Year	712.43	848.34	848.34
4	Closing Loans	3,419.53	3,307.08	3,306.76
5	**Average Loans**	**3,262.18**	**3,232.98**	**3,232.82**
6	Interest on Loan	315.99	313.92	313.91
7	Interest on Security Deposit to the Consumers	126.02	126.41	126.41
8	Other Bank Charges	2.62	2.01	2.01
9	**Total Interest & Finance Charges**	**444.63**	**442.34**	**442.33**
10	Average Interest on Loan	9.69%	9.71%	9.71%

The Commission, accordingly, approves the interest and finance charges at Rs. 442.33 Crore in the truing up for FY 2019-20.

As per the GERC (MYT) Regulations, 2016, the parameters which impact interest and finance charges are uncontrollable. The Commission, accordingly, approves the Gain / (Loss) on account of interest and finance charges in the truing up for FY 2019-20, as detailed in the Table below:

Table 4-37: Gain / (Loss) approved in the truing up for FY 2019-20 (Rs. Crore)

Particulars	Approved in MTR Order	Approved in Truing-Up	Gain/ (Loss) due to Controllable Factors	Gain/ (Loss) due to Uncontrollable Factors
Interest & Finance Charges	444.63	442.33	-	2.30

4.6.5 Interest on Working Capital

PGVCL has not claimed any interest on working capital in the truing up for FY 2019-20, against Nil provision approved in the MTR Order dated 24th April, 2019 as detailed in the Table below:

Table 4-38: Interest on Working Capital claimed by PGVCL in the truing up for FY 2019-20 (Rs. Crore)

Sr. No.	Particulars	Approved in the MTR Order	Actual Claimed in Truing-Up
1	Interest on Working Capital	-	-

Petitioner's Submission

PGVCL has submitted that working capital has been calculated and the rate of interest is considered as the rate equal to the weighted average of the 1-year Marginal Cost of Lending Rate (MCLR) of State Bank of India (SBI) during the year plus 250 basis points, as per the GERC (MYT) Regulations, 2016. This rate works out to 10.66%.

The detailed computation of Working Capital requirement as per the provisions of the GERC (MYT) Regulations, 2016 and Interest on Working Capital, is as given in the Table below:

Table 4-39: Interest on Working Capital claimed by PGVCL in the truing up for FY 2019-20 (Rs. Crore)

Sr. No.	Particulars	Approved in the MTR Order	Actual Claimed in Truing-Up
1	O&M Expenses	91.64	100.09
2	Maintenance Spares	168.77	171.01
3	Receivables	1,399.14	1,452.01
4	Amount held as Security Deposit from Consumers	2,016.26	2,112.48
5	Total Working Capital	(356.71)	(389.38)
6	Rate of Interest on Working Capital	10.65%	10.66%
7	Interest on Working Capital	-	-

Commission's Analysis

The Commission has examined the computation of normative working capital under the GERC (MYT) Regulations, 2016. The working capital requirement works out to be negative during FY 2019-20. As the working capital requirement works out to be negative, there cannot be any interest on working capital. Accordingly, neither any interest is claimed by PGVCL nor any interest is approved by the Commission.

The detailed computation of the Working Capital and interest thereon is given in the Table below:

Table 4-40: Interest on working capital approved in the truing up for FY 2019-20 (Rs. Crore)

Sr. No.	Particulars	Approved in MTR Order	Actual Claimed in Truing-Up	Approved in Truing-Up
1	O&M Expenses	91.64	100.09	90.13
2	Maintenance Spares	168.77	171.01	171.01
3	Receivables	1,399.14	1,452.01	1,452.01
4	Amount held as Security Deposit from consumers	2,016.26	2,112.48	2,112.48
5	**Total Working Capital**	**(356.71)**	**(389.38)**	**(399.33)**
6	Rate of Interest on Working Capital	10.65%	10.66%	10.66%
7	**Interest on Working Capital**	**-**	**-**	**-**

The Commission, accordingly, approves the interest on working capital as Nil in the truing up for FY 2019-20.

4.6.6 Bad Debts Written Off

PGVCL has claimed Rs. 74.22 Crore towards bad debts written off in the truing up for FY 2019-20, as against Rs. 2.15 Crore approved in the MTR Order dated 24th April, 2019 as given in the Table below:

Table 4-41: Bad Debts claimed by PGVCL in the truing up for FY 2019-20 (Rs. Crore)

Sr. No.	Particulars	Approved in the MTR Order	Actual Claimed in Truing Up
1	Bad Debts Written Off	2.15	74.22

Petitioner's Submission

PGVCL submitted that as per the audited Annual Accounts for FY 2019-20, bad and doubtful debts written off in FY 2019-20 are Rs. 74.22 Crore. PGVCL has claimed Rs. 74.22 Crore Bad Debts Written Off, resulting in a gain/(loss) of Rs. 72.07 Crore on account of controllable factors, as shown in the Table below:

Table 4-42: Bad Debts claimed by PGVCL in the truing up for FY 2019-20 (Rs. Crore)

Particulars	Approved in MTR Order	Actual Claimed in Truing-Up	Gain/ (Loss) due to Controllable Factors	Gain/ (Loss) due to Uncontrollable Factors
Bad Debts Written Off	2.15	74.22	(72.07)	-

Commission's Analysis

As per Regulation 94.9.1 of the GERC (MYT) Regulations, 2016, the bad debts written off in the Aggregate Revenue Requirement is to be passed through based on the actual write off of bad debts during the year.

The Commission has verified the Bad & Doubtful debts written off from the audited Annual Accounts that PGVCL for FY 2019-20. The Annual Accounts shows the bad & doubtful debts written off as Rs. 74.22 Crore in FY 2019-20, with the Note that the State Government vide its GR No. GUV-2016-3170-K-1-2842 dated 12th October, 2017 has declared Amnesty Scheme for various categories of consumers as one-time settlement of their outstanding dues. The relevant reference of the Note no. 8 (f) is provided below:

> *"GOG vide GR no. GUV-2016-3170-K-1-2842 dated 12.10.2017 has declared Amnesty Scheme-2017. The scheme was implemented with effect from 25.04.2018 to 31.12.2018 vide GoG GR no. GUV-2016-3170-K-1-3226 dated 25.04.2018 and subsequently extended with further amendments vide GR no.GUV-2016-3170-k-1 dated 19.02.2019 upto 31.05.2019 for various categories of consumers as one time settlement of their outstanding dues. Under this Scheme, the Company has waived off amount of Rs. 7422.18 Lakhs (P.Y ₹ 8317.01 Lakhs). Further, the impact of amount received Rs. 292.36 Lakhs after 31st March, 2019 has been considered in the F.Y 2018-19."*

The Commission has earlier ruled vide Order dated 18th June, 2018 that the impact of bad debts written off under the Amnesty Scheme needs to be absorbed by the DISCOMs. Accordingly, the Commission allows Nil Bad & Doubtful Debts Written off during FY 2019-20.

The deviation on account of bad debts written off is Nil and the Commission considers the same as gain/(loss) due to controllable factors, as detailed in the Table below:

Table 4-43: Gain/ (Loss) due to Bad Debts approved in the Truing up for FY 2019-20 (Rs. Crore)

Particulars	Approved in MTR Order	Actual Approved in Truing-Up	Gain/ (Loss) due to Controllable Factors	Gain/ (Loss) due to Uncontrollable Factors
Bad Debts Written Off	2.15	-	2.15	-

4.6.7 Return on Equity

PGVCL has claimed Rs. 588.11 Crore towards Return on Equity (RoE) in the truing up for FY 2019-20 as against Rs. 577.65 Crore approved in the MTR Order dated 24th April, 2019, as given in the Table below:

Table 4-44: Return on Equity claimed by PGVCL in the truing up for FY 2019-20 (Rs. Crore)

Sr. No.	Particulars	Approved in the MTR Order	Actual Claimed in Truing-Up
1	Return on Equity	577.65	588.11

Petitioner's Submission

PGVCL has computed RoE considering the rate of 14% on the average of opening and closing equity, taking into account the additions during the year, as given in the Table below:

Table 4-45: Return on Equity claimed by PGVCL in the truing up for FY 2019-20 (Rs. Crore)

Sr. No.	Particulars	Approved in the MTR Order	Actual Claimed in Truing-Up
1	Opening Equity Capital	3,905.99	3,987.26
2	Equity Additions during the Year	440.20	427.09
3	Closing Equity	4,346.19	4,414.35
4	Average Equity	4,126.09	4,200.80
5	Rate of Return on the Equity	14%	14%
6	**Return on Equity**	**577.65**	**588.11**

PGVCL has computed the Gain / (Loss) on account of RoE in the truing up for FY 2019-20, as detailed in the Table below:

Table 4-46: Gain / (Loss) due to RoE claimed by PGVCL for FY 2019-20 (Rs. Crore)

Particulars	Approved in MTR Order	Actual Claimed in Truing-Up	Gain/ (Loss) due to Controllable Factors	Gain/ (Loss) due to Uncontrollable Factors
Return on Equity	577.65	588.11	-	(10.46)

Commission's Analysis

The Commission has considered the Closing Balance of equity as approved in the truing up of FY 2018-19, as the Opening Balance of equity for FY 2019-20. The Commission has approved the normative Equity addition of Rs. 426.95 Crore in funding of capitalisation in previous section.

The Commission has computed the RoE in the truing up for FY 2019-20 considering the rate of 14% specified in the GERC (MYT) Regulations, 2016 as detailed in the Table below:

Table 4-47: Return on Equity approved in truing up for FY 2019-20 (Rs. Crore)

Sr. No.	Particulars	Approved in MTR Order	Actual Claimed in Truing-Up	Approved in Truing-Up
1	Opening Equity Capital	3,905.99	3,987.26	3,987.26
2	Equity Additions during the Year	440.20	427.09	426.95
3	Closing Equity	4,346.19	4,414.35	4,414.21
4	Average Equity	4,126.09	4,200.80	4,200.74
5	Rate of Return on the Equity	14%	14%	14%
6	**Return on Equity**	**577.65**	**588.11**	**588.10**

The Commission approves the Return on Equity at Rs. 588.10 Crore in the truing up for FY 2019-20.

Deviation in RoE is due to uncontrollable factors as RoE is being allowed on a normative basis and the quantum of equity addition in the year depends upon the capital expenditure and the capitalization achieved during the year.

The Commission, accordingly, approves the Gain/(Loss), on account of RoE, in the Truing up for FY 2019-20 as uncontrollable, as detailed in the Table below:

Table 4-48: Approved Gain / (Loss) due to Return on Equity in the truing up for FY 2019-20 (Rs. Crore)

Particulars	Approved in MTR Order	Approved in Truing-Up	Gain/ (Loss) due to Controllable Factors	Gain/ (Loss) due to Uncontrollable Factors
Return on Equity	577.65	588.10	-	(10.45)

4.6.8 Income Tax

PGVCL has claimed Rs. 5.32 Crore towards Income Tax for FY 2019-20, as against Rs. 28.71 Crore approved in the MTR Order dated 24th April, 2019, as given in the Table below:

Table 4-49: Income Tax claimed by PGVCL in the truing up for FY 2019-20 (Rs. Crore)

Sr. No.	Particulars	Approved in the MTR Order	Actual Claimed in Truing-Up
1	Income Tax	28.71	5.32

Petitioner's Submission

PGVCL submitted that Income Tax being a statutory expense, any variation on this account is uncontrollable. PGVCL has claimed a gain of Rs. 23.39 Crore on this account, as given in the Table below:

Table 4-50: Gain / (Loss) claimed due Income Tax claimed by PGVCL in the truing up (Rs. Crore)

Particulars	Approved in MTR Order	Actual claimed in Truing-Up	Gain/ (Loss) due to Controllable Factors	Gain/ (Loss) due to Uncontrollable Factors
Provisions for Tax/ Tax Paid	28.71	5.32	-	23.39

Commission's Analysis

The Commission has verified the amount of Income Tax and the necessary challans submitted in the data gaps. The Commission, accordingly, approves the Income Tax of Rs. 5.32 Crore in the truing up for FY 2019-20.

Variation in Income Tax is uncontrollable, hence, the Commission approves the Gain/(Loss) on account of Income Tax in the truing up for FY 2019-20, as detailed in the Table below:

Table 4-51: Approved Gain / (Loss) due to Income Tax in the truing up for FY 2019-20 (Rs. Crore)

Particulars	Approved in MTR Order	Approved in Truing-Up	Gain/ (Loss) due to Controllable Factors	Gain/ (Loss) due to Uncontrollable Factors
Income Tax	28.71	5.32	-	23.39

4.6.9 Non-Tariff Income

PGVCL has claimed the actual Non-Tariff Income as Rs. 323.75 Crore in the truing up for FY 2019-20, as against Rs. 258.58 Crore approved in the MTR Order dated 24th April, 2019, as detailed in the Table below:

Table 4-52: Non-Tariff Income claimed by PGVCL in the truing up for FY 2019-20 (Rs. Crore)

Sr. No.	Particulars	Approved in the MTR Order	Actual Claimed in Truing-Up
1	Non-Tariff Income	258.58	323.75

Petitioner's Submission

PGVCL submitted that the actual Non-Tariff Income as per audited Annual Accounts is Rs. 326.63 Crore, which includes interest income on staff advance of Rs.2.89 Crore. However, the PGVCL has excluded income on staff advance. Accordingly, Non-Tariff Income claimed by PGVCL in FY 2019-20 is Rs. 323.75 Crore (i.e., Rs. 326.63 Crore – Rs. 2.89 Crore), as against Rs. 258.58 Crore approved in the MTR Order dated 24th April, 2019. This has resulted in an uncontrollable loss of Rs. 65.17 Crore, as detailed in the Table below:

Table 4-53: Gain / (Loss) claimed due to Non-Tariff Income for FY 2019-20 (Rs. Crore)

Particulars	Approved in MTR Order	Actual Claimed in Truing-Up	Gain/ (Loss) due to Controllable Factors	Gain/ (Loss) due to Uncontrollable Factors
Non-Tariff Income	258.58	323.75	-	(65.17)

Commission's Analysis

The actual Non-Tariff Income as per audited Annual Accounts is Rs. 326.63 Crore for FY 2019-20. However, in line with the approach adopted in previous Orders, the Commission has not considered interest income on staff advance of Rs. 2.89 Crore as part of Non-Tariff Income.

Accordingly, the Commission approves the Non-Tariff Income as Rs. 323.75 Crore in the truing up for FY 2019-20. The deviation in Non-Tariff Income is considered as uncontrollable. The Commission, accordingly, approves the Gains/(Losses) on account of Non-Tariff Income in the truing up for FY 2019-20, as detailed in the Table below:

Table 4-54: Approved Gain/(Loss) due to Non-Tariff Income in the truing up for FY 2019-20 (Rs. Crore)

Particulars	Approved in MTR Order	Approved in Truing-Up	Gain/ (Loss) due to Controllable Factors	Gain/ (Loss) due to Uncontrollable Factors
Non-Tariff Income	258.58	323.75	-	(65.17)

4.7. ARR approved in the Truing up for FY 2019-20

The ARR approved in the MTR Order dated 24th April, 2019, actual claimed in truing up, approved in the truing up and Gain/(Loss) computed in accordance with the GERC (MYT) Regulations, 2016, is given in the Table below:

Table 4-55: ARR approved in truing up for FY 2019-20 (Rs. Crore)

Sr. No.	Annual Revenue Requirement	Approved in MTR Order	Actual Claimed in Truing-Up	Approved in Truing - UP	Deviation +/(-)	Gain/ (Loss) due to Controllable Factors	Gain/ (Loss) due to Uncontrollable Factors
1	Cost of Power Purchase	14573.28	15,447.77	14,228.37	344.91	(139.28)	484.20
2	O&M Expenses	1,099.71	1,201.03	1,201.03	(101.32)	9.37	(110.70)
2.1	*Employee Cost*	1,004.74	1,098.41	1,098.41	(93.67)	25.84	(119.51)
2.2	*R&M Expenses*	165.09	176.89	176.89	(11.80)	(11.80)	-
2.3	*A&G Expenses*	177.35	182.01	182.01	(4.66)	(4.66)	-
2.4	*Other Debits*	-	-	-	-	-	-
2.5	*Extraordinary Items*	-	-	-	-	-	-
2.6	*Net Prior Period Expenses/ (Income)*	-	-	-	-	-	-
2.7	*Other Expenses Capitalised*	(247.47)	(256.28)	(256.28)	8.81	-	8.81
3	Depreciation	712.43	848.34	848.34	(135.91)	-	(135.91)
4	Interest & Finance Charges	444.63	442.34	442.33	2.30	-	2.30

Sr. No.	Annual Revenue Requirement	Approved in MTR Order	Actual Claimed in Truing-Up	Approved in Truing - UP	Deviation +/(-)	Gain/ (Loss) due to Controllable Factors	Gain/ (Loss) due to Uncontrollable Factors
5	Interest on Working Capital	-	-	-	-		
6	Bad Debts Written Off	2.15	74.22	-	2.15	2.15	-
7	Return on Equity	577.65	588.11	588.10	(10.45)	-	(10.45)
8	Income Tax	28.71	5.32	5.32	23.39	-	23.39
9	**ARR (1 to 8)**	**17,438.56**	**18,607.14**	**17,313.49**	**125.07**	**(127.76)**	**252.83**
10	Non-Tariff Income	258.58	323.75	323.75	(65.17)	-	(65.17)
11	Add: DSM Expenses*	2.50					
12	**Total ARR (9-10)**	**17,182.48**	**18,283.39**	**16,989.74**	**190.24**	**(127.76)**	**318.00**

* ***The Petitioner has not shown the amount of DSM Expenses as approved in MTR Order for FY 2019-20 in its Petition***

4.8. GUVNL Profit/ (Loss) Allocation

Petitioner's Submission

The Petitioner has shown GUVNL Profit allocation for FY 2019-20 as part of revenue to reduce the revenue gap. The profit allocation of GUVNL across all DISCOMs for FY 2019-20 in given in the Table below:

Table 4-56: ARR approved in truing up for FY 2019-20 (Rs. Crore)

Particulars	DGVCL	MGVCL	PGVCL	UGVCL	Total
GUVNL Profit	30.50	12.68	36.09	27.14	**106.40**

Commission's Analysis

The Petitioner has utilised the allocated profit amount for FY 2019-20 to reduce the revenue gap. The Commission sought clarification and working of the allocation of the profit amongst the DISCOMs. The Petitioner responded in the replies to data gaps and mentioned that allocation of the profit is done in the ratio of power purchase cost of DISCOMs.

The Commission further took the prudence check of the audited accounts of GUVNL and observed that GUVNL has claimed provisioning amount in the employee expenses and hence such claim ought to be provided different treatment from regulatory point of view.

- **Provisioning of GEB's Contributory Provident Fund Trust claimed in Employee Expenses** – GUVNL in its standalone financial statements for FY 2019-20 in Schedule 31 (page no. 51) has provisioned Rs.109.90 Crore under Retirement and Other benefits and provided explanation under Note no. 48 (page no. 69). The relevant explanation is extracted from financial statement as under:

  GEB's Contributory Provident Fund Trust (GEB's CPF Trust) is an exempted PF Trust (U/s 17 of the Employees Provident Fund & Miscellaneous Provisions Act, 1952) which is responsible for all Provident Fund compliances and also manages the Provident Fund accumulations of all employees of GUVNL & its six Subsidiary Companies. The Trust which is a separate entity had invested a portion of its corpus amounting to Rs. 16510.00 Lakh in 3 IL&FS Group Companies (viz. M/s IL&FS Transport Network Ltd., M/s Infrastructure Leasing & Financial Services Ltd. and M/s. IL&FS Financial Services Ltd.) in accordance with the investment pattern/ guidelines issued by Ministry of Labour & Employment, New Delhi. Due to sudden financial crisis, the IL&FS group companies stopped payment of interest to the Trust in 2018. Thereafter the entire IL&FS Group was referred to National Company Law Tribunal (NCLT) under Insolvency & Bankruptcy code (IBC), 2016.

  As a result, full recovery of principal and interest from IL&FS became doubtful for GEB's CPF Trust. Therefore, GUVNL being the parent establishment of the Trust has withheld a total amount of Rs. 18256.66 Lakhs (towards principal and Interest) from monthly power purchase bills of 7 IL&FS Group Companies (from November, 2018 onwards) with whom the company is having Power Purchase Agreement (PPA). Subsequently, GUVNL has transferred this entire retained amount of Rs. 18256.66 Lakhs to GEB's CPF Trust in March, 2020. As on date, NCLT resolution proceedings are in progress and its ultimate result is awaited.

  Similarly, the Trust had also invested a portion (total Rs. 17397.60 Lakhs) of its corpus in M/s Punjab State Industrial Development Corporation Ltd., M/s Punjab Finance Corporation Ltd., M/s Reliance Capital Ltd., and M/s Dewan Housing Finance Ltd. in accordance with the investment pattern/ guidelines issued by Ministry of Labour & Employment, New Delhi. But due to financial crisis in these organisations, they have stopped payment of interest/ repayment of principal to the Trust. Therefore, GUVNL has provided Rs. 10946.00 Lakhs *towards dues on account of interest and principal considering the future uncertainty regarding full recovery of the same from these companies. As on date, the resolution proceedings for these companies are in progress before different forums, as reflected in Note No. 30: Employee Benefit Expenses.*

This booking of expenses by GUVNL is an extra-ordinary item which is not covered as per MYT Regulations. Further for booking / considering the amount, there are separate laws/ regulations and the designated authorities/ institutions set up by the Government. GUVNL should take up this matter with State Government or other appropriate authority for recovery of the amount. Therefore, the Commission is of the opinion that allowing such provisioning will mean additional impact on the consumers of the DISCOMs. Further, the Commission as per regulatory practice adopted in previous tariff orders is not allowing the expenses for the purpose of true-up. Accordingly, the Profit allocation amount for FY 2019-20 gets revised to Rs. 216.30 Crore (Rs.106.40 Crore + Rs.109.90 Crore). The Commission has considered Energy Input as approved for the petitioner for FY 2019-20 for allocation of GUVNL Profit/ (Loss) allocation for FY 2019-20. The revised profit allocation of GUVNL across all DISCOMs for FY 2019-20 in given in the Table below:

Table 4-57: Revised GUVNL Profit / (Loss) Allocation for FY 2019-20 as approved by the Commission – Rs. Crore

Particulars	DGVCL	MGVCL	PGVCL	UGVCL	Total
Energy Input	21,289.61	11,338.76	35,332.64	25,114.87	93,075.88
Ratio of Energy Input of Discom	22.87%	12.18%	37.96%	26.98%	
Allocation of GUVNL Profit/ (Loss) Allocation	49.48	26.35	82.11	58.36	216.30

The Commission will consider the tax impact if any due to such revision in profit amount in subsequent period based on actual income tax payment by GUVNL.

4.9. Revenue for FY 2019-20

PGVCL has claimed the total revenue of Rs. 17,424.08 Crore in the truing up for FY 2019-20 as against Rs. 16,789.67 Crore approved in the MTR Order dated 24th April, 2019, as detailed in the Table below:

Table 4-58: Revenue submitted in the truing up for FY 2019-20 (Rs. Crore)

Sr. No.	Particulars	Approved in MTR Order dated 24.04.2019 for FY 2019-20	Actual Claimed in Truing-Up
1	Revenue from Sale of Power	11,345.75	16,780.00
2	Revenue from FPPPA	4,776.57	

Sr. No.	Particulars	Approved in MTR Order dated 24.04.2019 for FY 2019-20	Actual Claimed in Truing-Up
3	Other Income (Consumer Related)	215.43	248.66
4	**Total Revenue excluding subsidy (1+2+3)**	**16,337.75**	**17,028.66**
5	Agriculture Subsidy	451.92	395.42
6	**Total Revenue including Subsidy (4+5)**	**16,789.67**	**17,424.08**

Commission's Analysis

The Commission has verified the total category-wise revenue for FY 2019-20 from the audited Annual Accounts. The actual revenue from category-wise sales, as per audited Annual Accounts, is Rs.16780 Crore.

The Other Income as per audited Annual Accounts is Rs. 248.66 Crore. The Commission has considered the actual Agriculture Subsidy Rs. 395.42 Crore separately as per the GERC (MYT) Regulations, 2016.

The aforesaid Agriculture Subsidy has been claimed as a separate item of revenue.

Table 4-59: Revenue approved in the truing up for FY 2019-20 (Rs. Crore)

Sr. No.	Particulars	Approved in MTR Order dated 24.04.2019 for FY 2019-20	Actual Claimed in Truing-Up	Approved in Truing-Up
1	Revenue from Sale of Power	11,345.75	16,780.00	16,780.00
2	Revenue from FPPPA	4,776.57		
3	Other Income (Consumer Related)	215.43	248.66	248.66
4	**Total Revenue excluding Subsidy (1+2+3)**	**16,337.75**	**17,028.66**	17,028.66
5	Agriculture Subsidy	451.92	395.42	395.42
6	**Total Revenue including Subsidy (4+5)**	**16,789.67**	**17,424.08**	**17,424.08**

The Commission, accordingly, approves the total revenue of Rs. 17,424.08 Crore, including consumer related income of Rs. 248.66 Crore and Agriculture Subsidy of Rs. 395.42 Crore, in the truing up for FY 2019-20.

4.10. Revenue (Gap) / Surplus for FY 2019-20

As shown in the Table below, PGVCL has claimed a Revenue Gap of Rs. 395.58 Crore in the truing up considering the treatment of Gain/(Loss) due to controllable/ uncontrollable factors, after comparing the performance with the Tariff Order for FY 2019-20:

Table 4-60: Revenue Surplus/ (Gap) for FY 2019-20 (Rs. Crore)

Sr. No.	Particulars	Actual Claimed
1	Aggregate Revenue Requirement originally approved for FY 2019-20	17,182.47
2	Add: Gap/ (Surplus) of FY 2017-18	(295.40)
3	Gain/ (Loss) on account of Uncontrollable Factor to be passed on to consumers	(901.31)
4	Gain/ (Loss) on account of Controllable Factor to be passed on to consumers (1/3rd of Total Gain/ Loss)	(67.37)
5	**Revised ARR for FY 2019-20 (1+2-3-4)**	**17,855.75**
6	Revenue from Sale of Power	16,780.00
7	Other Income (Consumer Related)	248.66
8	**Total Revenue excluding Subsidy (6+7)**	**17,028.66**
9	Agriculture Subsidy	395.42
10	GUVNL Profit/ (Loss) Allocation	36.09
11	**Total Revenue including Subsidy (8+9+10)**	**17,460.17**
12	**Revised (Gap)/ Surplus after treating Gains/ (Losses) due to Controllable/ Uncontrollable Factors (11-5)**	**(395.58)**

Petitioner's Submission

The Petitioner submitted that the Commission in the MTR Order dated 24th April, 2019 has approved the ARR of Rs. 17182.47 Crore for FY 2019-20.

As per the mechanism specified in the GERC (MYT) Regulations, 2016, PGVCL proposed to pass on 1/3rd of total loss on account of controllable factors, i.e., Rs. 67.37 Crore out of Rs. 202.11 Crore, and total loss on account of uncontrollable factors, i.e., Rs. 901.31 Crore to the consumers.

The past Revenue Surplus of Rs. 295.40 Crore, for FY 2017-18 is also adjusted in the approved Aggregate Revenue Requirement. Accordingly, PGVCL has arrived at the revised ARR for FY 2019-20 at Rs. 17855.75 Crore as shown in the above Table.

The revised ARR is compared against the revised Revenue with Existing Tariff of Rs. 16780 Crore, Other Consumer related Income of Rs. 248.66 Crore and Agriculture Subsidy of Rs. 395.42 Crore. The GUVNL profit of Rs. 106.40 Crore for FY 2019-20 is allocated amongst four DISCOMs, with PGVCL's share being Rs. 36.09 Crore. Accordingly, the Total Revenue considering all these elements works out to Rs. 17460.17 Crore. Revenue (Gap)/Surplus of PGVCL for FY 2019-20 after considering all the above adjustments is computed at Rs. (395.58) Crore.

Commission's Analysis

The Commission has computed the revised ARR and Revenue (Gap)/Surplus for FY 2019-20, based on the expenses and the Gain / (Loss) approved in the truing up for FY 2019-20, and after considering the earlier year's Revenue Surplus. PGVCL's share of GUVNL profit has been considered as Rs. 82.11 Crore for FY 2019-20 as calculated by the Commission.

The Revenue (Gap)/Surplus approved by the Commission after truing up for FY 2019-20, is summarised in the Table below:

Table 4-61: Revenue (Gap)/Surplus approved in the truing up for FY 2019-20 (Rs. Crore)

Sr. No.	Particulars	Actual Claimed	Approved after Truing-Up
1	Aggregate Revenue Requirement originally approved for FY 2019-20	17,182.47	17,182.47
2	Add: Gap/ (Surplus) of FY 2017-18*	(295.40)	295.40
3	Gain/ (Loss) on account of Uncontrollable Factor to be passed on to consumers	(901.31)	318.00
4	Gain/ (Loss) on account of Controllable Factor to be passed on to consumers (1/3rd of Total Gain/ Loss)	(67.37)	(42.59)
5	**Revised ARR for FY 2019-20 (1+2-3-4)**	**17,855.75**	**17,202.46**
6	Revenue from Sale of Power	16,780.00	16,780.00
7	Other Income (Consumer Related)	248.66	248.66
8	**Total Revenue excluding Subsidy (6+7)**	**17,028.66**	**17,028.66**
9	Agriculture Subsidy	395.42	395.42
10	GUVNL Profit/ (Loss) Allocation	36.09	82.11
11	**Total Revenue including Subsidy (8+9+10)**	**17,460.17**	**17,506.19**
12	**Revised (Gap)/ Surplus after considering Gains/ (Losses) due to Controllable/ Uncontrollable Factors (11-5)**	**(395.58)**	**303.73**

* ***The Petitioner has wrongly considered the Gap of FY 2017-18 as Surplus***

The Petitioner has stated that there is an additional payment liability of Rs. 3,595.33 Crore towards various judgements of court. In regard to additional payment liability of Rs. 3,595.33 Crore under the head of "Power Purchase Cost Others", the Petitioner has clarified that no payment is made in FY 2018-19 and FY 2019-20 towards additional payment liability booked in the Accounts for FY 2019-20.

The Commission has verified the additional payment liability of Rs. 3595.33 Crore as claimed by DISCOMs towards additional liability of power purchase expenses which is provisioning in the Audited Accounts of the Discom for FY 2019-20. The said liability is claimed by the Petitioner towards the payments to be made to generators/ PPA liabilities on account of various court judgements.

4.11. Consolidated True-Up ARR Summary for FY 2019-20 for State DISCOMs

It is observed that most of the stakeholders at the time of Public Hearing has requested the Commission to provide the consolidated summary of the components of True-Up as claimed by the DISCOMs and as approved by the Commission in Tariff Order. Accordingly, the Commission is providing the summary of Petition as claimed in Petition as approved by the Commission as detailed below:

Table 4-62: Consolidated True-Up ARR Summary for FY 2019-20 for State DISCOMs (Rs. Crore)

Sr. No.	Annual Revenue Requirement	Approved in MTR Order	Actual Claimed in Truing-Up	Approved in Truing -Up	Deviation +/(-)	Gain/ (Loss) due to Controllable Factors	Gain/ (Loss) due to Uncontrollable Factors
1	Cost of Power Purchase	43,091.92	45,547.34	41,952.01	1,139.91	1,199.39	(59.48)
2	O&M Expenses	3,006.72	3,273.28	3,270.73	(264.01)	20.30	(284.31)
2.1	*Employee Cost*	2,666.89	2,914.30	2,914.30	(247.41)	77.41	(324.81)
2.2	*R&M Expenses*	348.08	399.45	399.45	(51.37)	(51.37)	-
2.3	*A&G Expenses*	458.49	466.78	464.23	(5.74)	(5.74)	-
2.4	*Other Debits*	-	-	-	-	-	-
2.5	*Extraordinary Items*	-	-	-	-	-	-
2.6	*Net Prior Period Expenses/ (Income)*	-	-	-	-	-	-

Sr. No.	Annual Revenue Requirement	Approved in MTR Order	Actual Claimed in Truing-Up	Approved in Truing -Up	Deviation +/(-)	Gain/ (Loss) due to Controllable Factors	Gain/ (Loss) due to Uncontrollable Factors
2.7	*Other Expenses Capitalised*	(466.74)	(507.24)	(507.24)	40.50	-	40.50
3	Depreciation	1,533.73	1,757.25	1,757.25	(223.52)	-	(223.52)
4	Interest & Finance Charges	789.67	843.28	777.30	12.37	-	12.37
5	Interest on Working Capital	-	-	-	-	-	-
6	Bad Debts Written Off	2.66	92.85	-	2.66	2.66	-
7	Return on Equity	1,095.84	1,113.76	1,113.76	(17.92)	-	(17.93)
8	Income Tax	73.12	53.29	53.29	19.83	-	19.83
9	**ARR (1 to 8)**	**49,593.66**	**52,681.06**	**48,924.33**	**669.32**	**1,222.35**	**(553.03)**
10	Non-Tariff Income	688.40	825.75	825.75	(137.35)	-	(137.35)
11	Add: DSM Expenses	2.50	-	-	2.50	-	-
12	**Total ARR (9-10)**	**48,907.77**	**51,855.31**	**48,098.59**	**809.17**	**1,222.35**	**(415.69)**
13	**Gain/(Loss) on account of Controllable/ Uncontrollable Factors**					**407.45**	**(415.69)**

4.12. Consolidated Revenue (Gap)/ Surplus for FY 2019-20 for State DISCOMs

The consolidated revenue (gap)/ surplus as claimed in Petition and as approved by the Commission in the Table below:

Table 4-63: Consolidated Revenue (Gap)/ Surplus Summary for FY 2019-20 for State DISCOMs (Rs. Crore)

Sr. No.	Particulars	Actual Claimed	Approved after Truing-Up
1	Aggregate Revenue Requirement originally approved for FY 2019-20	48,907.77	48,907.77
2	Add: Gap/ (Surplus) of FY 2017-18*	(778.67)	(187.87)
3	Gain/ (Loss) on account of Uncontrollable Factor to be passed on to consumers	(4,235.40)	(415.68)
4	Gain/ (Loss) on account of Controllable Factor to be passed on to consumers (1/3rd of Total Gain/ Loss)	428.45	407.45

Sr. No.	Particulars	Actual Claimed	Approved after Truing-Up
5	**Revised ARR for FY 2019-20 (1+2-3-4)**	**51,936.05**	**48,728.13**
6	Revenue from Sale of Power	48,617.60	48,617.60
7	Other Income (Consumer Related)	861.93	861.93
8	**Total Revenue excluding Subsidy (6+7)**	**49,479.53**	**49,479.53**
9	Agriculture Subsidy	1,008.33	1,008.33
10	GUVNL Profit/ (Loss) Allocation	106.40	216.30
11	**Total Revenue including Subsidy (8+9+10)**	**50,594.26**	**50,704.16**
12	**Revised (Gap)/ Surplus after considering Gains/ (Losses) due to Controllable/ Uncontrollable Factors (11-5)**	**(1,341.79)**	**1,976.03**

PGVCL in its true-up petition has inadvertently considered the Gap of FY 2017-18 as Surplus Rs.295.40 Cr

There is a Cumulative Surplus of Rs. 1,976.03 Crore (Consolidated for all Discoms) after Truing-Up in FY 2019-20. The Commission is not giving any treatment of this amount at this stage because there is a likelihood of additional liabilities of amount of Rs. 3,595.33 Crore which may arise in the subsequent years as payment towards the liability to the generators under PPAs on account of various judgement of the courts and for which the Discoms had projected and raised the claim for Rs. 3,595.33 Crore. The Commission shall give the necessary treatment/ adjustments in the year as and when the liability gets materialised and payment is made, subject to claim in the respective year for Truing-Up and prudence check by the Commission.

The Commission in its MTR Tariff Order for FY 2019-20 dated 24th April, 2019 for the Petitioner had stated that there is a pending Ag. Subsidy of Rs. 1,665 Crore for FY 2017-18 from Government of Gujarat. As per Section 65 of the Electricity Act, 2003, the subsidy was required to be released in advance. GUVNL has requested Government of Gujarat for release of this outstanding subsidy amount.

Accordingly, after consideration of the amount of outstanding subsidy, the resultant surplus works out to Rs. 3,641.03 Crore (Rs.1,665.00 Cr + Rs.1,976.03 Cr) for FY 2019-20.

5. ARR and Tariff Determination for FY 2021-22

5.1 ARR for FY 2021-22

In terms of Regulation 16.2(vi) and 19.2 of the GERC (MYT) Regulations, 2016 that Annual determination of Tariff for the Generating Company, Transmission Licensee, SLDC and Distribution Wire Business and Retail Supply Business, for each financial year within the Control Period, based on the approved forecast and results of the truing-up exercise on an application that shall be filed by the utilities along with the Petition for Truing-Up and tariff determination. As detailed out at para 1.6 in Chapter – 1, the Commission has issued suo-moto order for filing of ARR & Tariff for FY 2021-22.

5.2 Submission of PGVCL

In accordance with above provision, the Paschim Gujarat Vij Company Limited (PGVCL) has submitted the petition for determination of Tariff and Aggregate Revenue Requirement for FY 2021-22.

5.2.1 Summary of the Petition for determination of Tariff and Aggregate Revenue Requirement for FY 2021-22

PGVCL has projected its Revised Aggregate Revenue Requirement and Tariff for FY 2021-22 as per GERC MYT Regulations, 2016 as detailed below:

Table 5-1: Aggregate Revenue Requirement FY 2021-22 (Rs. Crore)

Sr. No.	Particulars	FY 2021-22
		Projected in ARR
1	Power Purchase Cost	15,021.69
2	**Operations & Maintenance Expenses**	**1,285.71**
2.1	Employee Cost	1,171.01
2.2	Repairs & Maintenance Expenses	197.71
2.3	Administration & General Expenses	203.43
2.4	Other Debits	-
2.5	Extraordinary items	-
2.6	Net Prior Period Expenses/ (Income)	-
2.7	Other Expenses Capitalized	(286.44)
3	Depreciation	976.88
4	Interest & Finance Charges	420.85
5	Interest on Working Capital	-
6	Bad Debts Written Off	74.22

Sr. No.	Particulars	FY 2021-22
		Projected in ARR
7	**Sub-Total (1 to 6)**	**17,779.35**
8	Return on Equity	675.94
9	Provision for Tax/ Tax Paid	5.32
10	**Total Expenditure (7 to 9)**	**18,460.61**
11	Less: Non-Tariff Income	323.75
12	Add: DSM Expenses	
13	**Aggregate Revenue Requirement (10-11)**	**18,136.86**
14	Revenue from sale of power	17,560.27
15	Other income Consumer related	248.60
16	**Total Revenue before Subsidy**	**17,808.87**
17	Agriculture Subsidy	418.35
18	**Total Revenue after Subsidy**	**18,227.22**

5.3 Estimation of ARR for FY 2021-22

The Aggregate Revenue Requirement highlights the following items of ARR for FY 2021-22.

- Energy projection
- Consumer profile
- Distribution loss
- Energy Requirement and energy balance
- Power purchase – Bulk supply tariff
- Transmission charges
- Capital expenditure and Funding of CAPEX
- Operations and Maintenance Expenses
- Depreciation
- Interest on loan and finance charges
- Interest on Working Capital
- Return on Equity
- Provision for Tax

The Commission has analysed the energy sales and components of expenditure and discussed under Aggregate Revenue Requirement and Tariff Determination in its section.

5.4 Energy Sales

5.4.1 Projection of Energy sales for FY 2021-22

PGVCL has projected the energy sales for FY 2021-22 based on the trends during the past years. Wherever the trend seemed unreasonable or unsustainable the growth factors have been corrected to arrive at more realistic projections.

The petitioner has furnished the category-wise energy sales for the last 5 years FY 2014-15 to FY 2019-20 based on actuals and projected the sales for FY 2021-22 as per CAGR for 5 year, 4 year, 3 year, 2 year and YoY.

Category-wise sales over the last 5 years are shown in Table below:

Table 5-2: Historical Trend in Category-wise Units sold (MU)

Category	FY 2014-15	FY 2015-16	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20
Low Tension						
RGP	3,291	3,474	3,492	3,608	3,771	3,791
GLP	182	198	210	198	195	196
Non-RGP & LTMD	2,975	3,042	3,227	3,415	3,721	3,672
Public Water Works	597	634	698	751	632	625
Agriculture - Unmetered	4,358	4,437	4,486	4,570	4,635	4,678
Agriculture - Metered	2,210	2,648	2,410	2,682	3,169	2,695
Public Lighting	-	-	-	-	-	-
Sub Total	**13,614**	**14,432**	**14,523**	**15,225**	**16,124**	**15,657**
High Tension						
Industrial HT	6,322	6,757	8,176	10,467	12,486	11,965
Railway Traction	-	-	-	-	-	-
Sub Total	**6,322**	**6,757**	**8,176**	**10,467**	**12,486**	**11,965**
Total	**19,936**	**21,189**	**22,700**	**25,692**	**28,610**	**27,622**

Table 5-3: Category-wise Growth rates of Units sold (%)

Category	5 year CAGR FY 20 over FY 15	4 year CAGR FY 20 over FY 16	3 year CAGR FY 20 over FY 17	2 year CAGR FY 20 over FY 18	1 year CAGR FY 20 over FY 19
Low Tension					
RGP	2.87%	2.21%	2.78%	2.51%	0.53%
GLP	-	-	-2.28%	-0.43%	0.32%
Non-RGP & LTMD	-	-	4.40%	3.69%	-1.33%

Category	5 year CAGR FY 20 over FY 15	4 year CAGR FY 20 over FY 16	3 year CAGR FY 20 over FY 17	2 year CAGR FY 20 over FY 18	1 year CAGR FY 20 over FY 19
Public Water Works	0.91%	-0.37%	-3.62%	-8.82%	-1.11%
Agriculture - Unmetered	1.42%	-	1.40%	1.17%	0.91%
Agriculture - Metered	4.05%	-	3.80%	0.24%	-14.96%
Public Lighting					
Sub Total	**2.84%**	**2.06%**	**2.54%**	**1.41%**	**-2.90%**
High Tension					
Industrial HT	13.61%	15.36%	13.53%	6.92%	-4.17%
Railway Traction					
Sub Total	**13.61%**	**15.36%**	**13.53%**	**6.92%**	**-4.17%**
Total	**6.74%**	**6.85%**	**6.76%**	**3.69%**	**-3.45%**

5.4.2 Consumer Profile

PGVCL has furnished the category-wise number of consumers for the past period and the CAGR growth rates for different periods (5 year, 4 year, 3 year, 2 year and year on year) as given below:

Table 5-4: Category-wise number of Consumers (Nos.)

Category	FY 2014-15	FY 2015-16	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20
Low Tension						
RGP	32,46,802	33,36,538	34,32,067	35,18,261	36,10,315	36,95,787
GLP	30,948	33,435	35,372	36,834	38,433	39,404
Non-RGP & LTMD	5,99,066	6,16,537	6,33,975	6,42,631	6,69,700	6,82,499
Public Water Works	14,900	15,658	16,494	17,036	17,365	17,890
Agriculture - Unmetered	2,59,670	2,59,327	2,58,866	2,58,457	2,57,701	2,56,974
Agriculture - Metered	4,08,030	4,52,167	5,08,532	5,88,360	6,91,223	7,74,802
Public Lighting	-	-	-	-	-	-
Sub Total	**45,59,416**	**47,13,662**	**48,85,306**	**50,61,579**	**52,84,737**	**54,67,356**
High Tension						
Industrial HT	4,134	4,451	4,740	5,229	5,650	5,963
Railway Traction	-	-	-	-	-	-
Sub Total	**4,134**	**4,451**	**4,740**	**5,229**	**5,650**	**5,963**
Total	**45,63,550**	**47,18,113**	**48,90,046**	**50,66,808**	**52,90,387**	**54,73,319**

Table 5-5: Growth rate of Number of Consumers (%)

Category	5 year CAGR FY 20 over FY 15	4 year CAGR FY 20 over FY 16	3 year CAGR FY 20 over FY 17	2 year CAGR FY 20 over FY 18	1 year CAGR FY 20 over FY 19
Low Tension					
RGP	2.62%	2.59%	2.50%	2.49%	2.37%
GLP	-	-	3.66%	3.43%	2.53%
Non-RGP & LTMD	-	-	2.49%	3.06%	1.91%
Public Water Works	3.73%	3.39%	2.75%	2.48%	3.02%
Agriculture - Unmetered	-0.21%	-0.23%	-0.24%	-0.29%	-0.28%
Agriculture - Metered	13.68%	14.41%	15.07%	14.76%	12.09%
Public Lighting					
Sub Total	**3.70%**	**3.78%**	**3.82%**	**3.93%**	**3.46%**
High Tension					
Industrial HT	7.60%	7.59%	7.95%	6.79%	5.54%
Railway Traction					
Sub Total	**7.60%**	**7.59%**	**7.95%**	**6.79%**	**5.54%**
Total	**3.70%**	**3.78%**	**3.83%**	**3.93%**	**3.46%**

5.4.3 Category-wise Connected Load

The Petitioner has also submitted the category-wise connected load for the past period and the CAGR growth rates for different periods (5 year, 4 year, 3 year, 2 year and year on year) as given below:

Table 5-6: Category-wise Connected Load (MW)

Category	FY 2014-15	FY 2015-16	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20
Low Tension						
RGP	2,937	3,069	3,223	3,367	3,542	3,708
GLP	114	127	137	149	164	176
Non-RGP & LTMD	2,454	2,585	2,740	2,917	3,135	3,324
Public Water Works	147	157	168	177	186	194
Agriculture - Unmetered	1,931	1,957	1,974	2,017	2,046	2,053
Agriculture - Metered	2,690	3,072	3,485	4,042	4,742	5,295
Public Lighting	-	-	-	-	-	-
Sub Total	**10,272**	**10,966**	**11,727**	**12,669**	**13,815**	**14,751**

Category	FY 2014-15	FY 2015-16	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20
High Tension						
Industrial HT	2,339	2,606	2,897	3,363	4,090	4,593
Railway Traction	-	-	-	-	-	-
Sub Total	**2,339**	**2,606**	**2,897**	**3,363**	**4,090**	**4,593**
Total	**12,610**	**13,572**	**14,624**	**16,032**	**17,906**	**19,344**

Table 5-7: Growth Rate for Connected Load (%)

Category	5 Year	4 Year	3 Year	2 Year	1 Year
Low Tension					
RGP	4.77%	4.85%	4.79%	4.94%	4.70%
GLP	-	8.66%	8.83%	8.88%	7.83%
Non-RGP & LTMD	-	6.49%	6.66%	6.76%	6.05%
Public Water Works	5.75%	5.46%	4.90%	4.82%	4.14%
Agriculture - Unmetered	1.24%	1.21%	1.32%	0.88%	0.33%
Agriculture - Metered	14.51%	14.58%	14.96%	14.46%	11.65%
Public Lighting					
Sub Total	**7.51%**	**7.69%**	**7.95%**	**7.90%**	**6.78%**
High Tension					
Industrial HT	14.45%	15.22%	16.60%	16.86%	12.28%
Railway Traction					
Sub Total	**14.45%**	**15.22%**	**16.60%**	**16.86%**	**12.28%**
Total	**8.93%**	**9.26%**	**9.77%**	**9.84%**	**8.03%**

5.4.4 Category-wise Projected Growth rates

The year-on-year growth rates considered by the Petitioner for projection of energy sales, number of consumers and connected load for the year FY 2021-22 over, the base number of FY 2019-20 and thereafter on FY 2020-21 are given below:

Table 5-8: Growth Rates used by Petitioner (%)

Sr. No.	Particulars	Sales	Consumers	Connected Load
	Low Tension			
1	RGP	2.87%	2.62%	4.77%
2	GLP	0.00%	3.66%	8.83%
3	Non-RGP & LTMD	4.40%	2.49%	6.66%
4	Public Water Works	0.00%	2.75%	4.90%
5	Agriculture - Unmetered	-	-	-
6	Agriculture - Metered	-	-	-
7	Public Lighting	-	-	-
	High Tension			

Sr. No.	Particulars	Sales	Consumers	Connected Load
1	Industrial HT	5.00%	5.00%	5.00%
2	Railway Traction	-	-	-

5.4.5 Category wise projections for Sales, consumers and connected load for FY 2021-22

The projected energy sales, consumers and connected load for FY 2021-22 by applying above mentioned growth rates y-o-y basis over FY 2019-20 category wise elements are shown in the table below:

Table 5-9: Projected Sales, Consumers and Connected Load for FY 2021-22

Particulars	Sales (MU)	Consumers (Nos)	Connected Load (MW)
Low Tension			
RGP	4,012	38,92,310	4,071
GLP	196	42,344	209
Non-RGP & LTMD	4,002	7,16,895	3,782
Public Water Works	625	18,886	214
Agriculture – Unmetered	4,678	2,56,974	2,053
Agriculture – Metered	2,977	8,34,802	5,722
Public Lighting	-	-	-
High Tension			
Industrial HT	13,192	6,574	5,063
Railway Traction	-	-	-
Total	**29,681**	**57,68,784**	**21,114**

5.4.6 Detailed Analysis of Energy Sales projected

Based on the above submissions of the Petitioner, the Commission now proceeds ahead for analysis and approval of Sales for each category for FY 2021-22.

i. Residential (RGP)

PGVCL has projected the energy sales to Residential category for the FY 2021-22 at 4012 MU

Petitioner's submission:

It is submitted by PGVCL that a 5 year growth rate between FY 2014-15 and FY 2019-20 was 2.87% and the company expects this trend to continue in FY 2021-22.

Commission's Analysis:

The Commission analysed the submitted CAGRs and also analysed average of 2 year (FY 2019-20 over FY 2018-19 and FY 2018-19 over FY 2017-18) growth rate which computed to 2.53%. Since the petitioner's approach is to utilise growth rate y-o-y basis over FY 2019-20 to arrive at sales for FY 2021-22, the Commission has considered a growth rate of 2.87% as claimed by the Petitioner in its petition which is the trend observed between FY 2014-15 and FY 2019-20 and is expecting to continue same in FY 2021-22 also. The growth of 2.87% adopted by PGVCL is considered reasonable and the Commission, therefore, approves the energy sales at 4012.30 MU for FY 2021-22.

The Commission approves the energy sales to residential category at 4012.30 MU.

ii. GLP

Petitioner's submission:

The PGVCL has submitted that the 3 year CAGR for the purpose of projection on the units sold between FY 2016-17 and FY 2019-20 is -2.28%. As the growth rate is negative, the company expects no growth in FY 2021-22.

Commission's Analysis:

The Commission had considered the submission of the Petitioner and accordingly allows no growth in FY 2021-22.

The Commission approves the energy sales to GLP category at 196.05 MU.

iii. Non-RGP and LTMD

Petitioner's submission:

The PGVCL has considered a 3 year growth rate of 4.40% between FY 2016-17 and FY 2019-20 and expects this trend to continue in FY 2021-22.

Commission's Analysis:

The Commission analysed the submitted CAGRs and also analysed average of 2 year (FY 2019-20 over FY 2018-19 and FY 2018-19 over FY 2017-18) growth rate which computed to 3.82%. Since the petitioner's approach is to utilise growth rate y-o-y basis over FY 2019-20 to arrive at sales for FY 2021-22, the Commission had considered the 3 year growth rate of 4.40% for commercial Non-RGP and LTMD for FY 2021-22.

The Commission approves the energy sales to Non-RGP and LTMD category at 4001.98 MU.

iv. Public Water Works

Petitioner's Submission:

PGVCL has submitted that for the purpose of projection of units sold, a 3 year CAGR for the category is coming out to be -3.62 %. As the growth rate is negative, the company expects no growth in FY 2021-22

Commission's Analysis:

The Commission had considered the submission of the Petitioner and accordingly allows no growth in FY 2021-22.

The Commission approves the energy sales to PWW category at 624.52 MU.

v. Agriculture

Petitioner's Submission:

The PGVCL has submitted that based on Government & internal targets, is planning to release new connections under this category but only under the metered category. For the unmetered category the company has decided not to release any new connections therefore has assumed a NIL growth rate to project the sales, no. of consumers and connected load during FY 2021-22.

In regard to the metered category the company has planned to add new connections under this category. The year wise addition of new metered connections during the control period in the serving area of the company has been presented in the table below:

Table 5-10: New metered connections to Agricultural consumer

Sr. No.	Agriculture Metered	No. of connections
1	FY 2020-21	30,000
2	FY 2021-22	30,000

In order to estimate the consumption of this category, PGVCL has gone with the same methodology as followed by the Commission in its previous tariff orders i.e. estimating the overall consumption assuming an average consumption, calculated based on the weighted average consumption of the metered category during the past years. PGVCL has calculated the weighted average consumption based on the data available for the last five years in order to achieve a more reasonable consumption estimate. This approach is same as adopted and approved by the Commission in MYT Order. Thus, based on the figures arrived from above the total sales for each year has been calculated based on the average connected load per consumer for metered and unmetered categories combined in FY 2019-20 and the number of new connections to be added during each year.

Table 5-11: PGVCL – Sales to Agriculture Consumers (Metered)

Sr. No.	Agriculture Metered	No. of Connections	Average HP of Discom	HP Increase	MW Increase	Per HP Consumption	Additional Sale (MU)
1	FY 2020-21	30,000	10	2,86,509	214	492	141
2	FY 2021-22	30,000	10	2,86,509	214	492	141

Commission's Analysis:

As regards the Metered Consumers, PGVCL has projected the sales of 2977 MU for FY 2021-22 at consumption of 492 kWh/HP/Annum with an average HP of 9.55/ consumer.

The Commission has first analysed the projections of number of connections for FY 2021-22. The Commission in its data gaps sought the number of connections released in FY 2020-21 till December, 2020 and the Petitioner submitted that it has released 29,923 connections till December, 2020. Further as per last 5 year trend, the Petitioner has released on an average more than 70,000 new connections in a year and considering the track record and actual released till December, 2020; the Commission approves the 30,000 new connections for FY 2021-22.

The Commission has also analysed the average HP size per consumer for last 2 years on actual basis and as projected by the Petitioner. The Commission finds that the average HP size projected by Petitioner as per past trend is reasonable.

The Commission has also analysed the consumption units per HP for metered category for last 2 years and average of last 5 years with the projections submitted by Petitioner. The Commission has found that the consumption units per HP projected by Petitioner is line with Commission analysis and hence the same is considered for the purpose of sales projection.

The Commission, therefore, considers the consumption at 492 kWh/HP/annum for Metered Consumers with an average size of 9.55 HP / consumer for FY 2021-22 and accordingly approves additional metered sales at 141 MU for FY 2021-22 for new connections.

The consumption (sales) to Agricultural category both for un-metered and metered category for FY 2021-22 would be as below:

Table 5-12: Approved Sales for Agriculture Consumers for FY 2021-22

Sr. No.	Category	Sales (MU)
1	Un-metered	4,677.80
2	Metered	2,976.76
	Total	**7,654.56**

The Commission approves the sales to Agriculture Category at 7654.56 MU for FY 2021-22.

vi. Industrial HT

Petitioner's Submission:

PGVCL has submitted that the Industrial HT category has observed a constant variation in sales in the last five years due to presence of open access, slowdown in the economy, etc. For the purpose of projection of units sold a 3 year CAGR between FY 2016-17 and FY 2019-20 which is 13.53% is normally considered. As the Covid-19 pandemic has affected the sales of this category the company expects a lower growth rate. Hence a growth rate of 5% has been considered in FY 2021.22.

Commission's Analysis:

The Commission analysed the submitted CAGRs and also analysed average of 2 year (FY 2019-20 over FY 2018-19 and FY 2018-19 over FY 2017-18) growth rate which computed to 7.56%. Since the petitioner's approach is to utilise growth rate y-o-y basis over FY 2019-20 to arrive at sales for FY 2021-22 and also considering the fact that Covid-19 pandemic is still hovering across the country, 5% growth rate on y-o-y basis is reasonable for this category in FY 2021-22.

The Commission approves the energy sales to HT Industrial category at 13191.72 MU.

5.4.7 Total Energy Sales

Total Energy sales approved by the Commission based on the above analysis is summarised for FY 2021-22 in the Table below:

Table 5-13: Energy Sales approved for FY 2021-22 (MU)

Sr. No.	Category	FY 2021-22
	LOW TENSION	
1	Residential (RGP)	4,012.30
2	GLP	196.05
3	Non-RGP & LTMD	4,001.98
4	Public Water Works	624.52
5	Agriculture Unmetered	4,677.80
6	Agriculture Metered	2,976.76
8	Public Lighting	-
	Total LT	**16,489.40**
	HIGH TENSION	
9	Industrial HT	13,191.72
10	Railway Traction	-
11	**Total HT**	**13,191.72**
	Total (LT+HT) (8+11)	**29,681.12**

5.5 Distribution Losses

The PGVCL has projected the distribution losses for the FY 2021-22 as given in the Table below:

Table 5-14: Projected Distribution Losses for FY 2021-22 (%)

Sr. No.	Particulars	FY 2021-22
1	Distribution Loss	16.50%

Petitioner's Submission:

The PGVCL has submitted that it has achieved a significant reduction in distribution losses, during recent years. The effort shall continue and will be enhanced. Loss reduction is a slow process and becomes increasingly difficult as the loss levels come down.

Commission's Analysis:

The Commission in the MTR Order dated 24th April, 2019, had approved the distribution loss at 17.00% for FY 2019-20 and 16.00% for FY 2020-21. Also, the Commission in its previous section has approved the distribution loss at 17.00% for FY 2019-20. The Commission through data gaps has asked the reason for projecting distribution loss at 16.50% for FY 2021-22 and also requested to submit distribution loss for FY 2020-21 for the period from April, 2020 to Nov/ Dec 2020 from PGVCL. PGVCL in its reply has stated that the DISCOM is implementing different schemes on massive scale for the consumers to opt for alternate source of power like, rooftop solar, captive and third-party arrangements etc. Moreover, taking into account host of benefits have been made available under the solar and other similar policies on non-conventional power, more viable options would be available to the consumers to meet with power requirement on their own. Under such circumstances, it is apprehended that the high consumption consumers may resort to other alternatives to meet their power requirement either through their own solar generation or any other mechanisms. The provisional distribution loss stated by PGVCL for FY 2020-21 (up to Sept. 2020) is at the level of 18.91%. PGVCL in its reply has held that under such factors, the overall distribution loss of the licensee may change the loss pattern and hence, is difficult to project lower trajectory of Distribution loss. Accordingly, the Commission is of the view that considering actual distribution loss and also consider the trajectory approved of previous years, at least 16.00% is reasonable to be continued for the extended MYT period. Accordingly, the Commission approves the distribution loss as given in the Table below:

Table 5-15: Approved Distribution Losses for FY 2021-22 (%)

Sr. No.	Particulars	Projected	Approved
1	Distribution Loss	16.50%	16.00%

5.6 Energy Requirement and Energy Balance

The total energy requirement of the distribution company to meet the total demand of its consumers is the sum of the estimated energy sales and the system losses (distribution loss) approved by the Commission.

Petitioner's Submission:

The PGVCL has submitted that it has considered the transmission loss at 3.95%, same as per the projection by GETCO in its ARR Petition for FY 2021-22 and pooled losses of PGVCL are assumed at same level as in FY 2019-20 for FY 2021-22. It is further submitted that the distribution loss is taken as per the projections above. Based on the information provided above, Energy Balance of the Company for FY 2021-22 is as shown below:

Table 5-16: Projected Energy Requirement and Energy Balance

Particulars	Unit	FY 2021-22
Energy Sales	MUs	29,681.12
Distribution Losses	MUs	5,865.13
	%	16.50%
Energy Requirement	MUs	35,546.25
Transmission Losses	MUs	1462
	%	3.95%
Total Energy input to Transmission System	MUs	37,008.25
Pooled Losses in PGCIL System	MUs	412.45
Total Energy Requirement	MUs	37,420.70

5.6.1 Energy Requirement

Commission's Analysis:

Based on the energy sales and the distribution losses approved by the commission in above paragraphs, the Energy Requirement is arrived at as given in the Table below:

Table 5-17: Total approved Energy Requirement for FY 2021-22

Sr. No.	Particulars	Unit	FY 2021-22
1	Estimated Energy Sales	MUs	29,681.12

Sr. No.	Particulars	Unit	FY 2021-22
2	Distribution Loss	MUs	5,653.54
		%	16.00%
3	Energy requirement at the Distribution periphery	MUs	35,334.66

5.6.2 Energy Balance

Commission's Analysis:

Energy Balance projected by PGVCL is given in Table 5-16 above. PGVCL has considered Transmission loss at 3.95% which is the same as per the projection of GETCO in its ARR Petition for FY 2021-22. The pooled losses are assumed at same level as in FY 2019-20 for FY 2021-22. The Commission considers the approved Transmission loss at 3.7245% achieved in FY 2019-20 and pooled losses in PGCIL system as projected by PGVCL to arrive at the Energy Balance in the Table below:

Table 5-18: Approved Energy Balance for ARR for FY 2021-22

Particulars	Unit	FY 2021-22
Energy Sales	MUs	29,681.12
Distribution Losses	MUs	5,653.55
	%	16.00%
Energy Requirement`	MUs	35,334.67
Transmission Losses	MUs	1,366.94
Total Energy input to Transmission System	%	3.72%
Total Energy input to Transmission System	MUs	36,701.61
Pooled Losses in PGCIL System	MUs	412.45
Total Energy Requirement	MUs	37,114.06

5.7 Power Purchase Cost- Petitioner's Submission

5.7.1 Power Purchase Sources

Petitioner's submission

The various sources of power purchase by GUVNL on behalf of four Distribution Companies consist of (i) Generating Plants of GSECL (ii) Central Sector Power Plants- NTPC and NPC, (iii) Renewable sources of power - Hydro, Solar, Wind, Other RE Sources (iv) IPPs and (v) Power tied up through competitive bidding etc. The power purchase sources have been differentiated into existing capacity and additional capacity envisaged during the control period.

(i) Existing capacity with GUVNL

The existing contracted capacity tied up by GUVNL as on 31st March, 2020 is 24821 MW. Given below are the names of the existing power plants, their operational parameters, capacity allocated to GUVNL, their fixed cost along with the variable cost of generation per unit as per actual of FY 2019-2020:

Table 5-19: Existing Capacity contracted by GUVNL

Sr. No.	Name of the Station	Capacity allocated to GUVNL (MW)	Auxiliary Consumption (%)	Plant Load Factor (%)	Fixed Cost (Rs. Crore)	Variable Cost (Rs. /kWh)
	GSECL					
1	GSECL Gandhinagar - 5	210	9.50%	52.75%	71	4.02
2	GSECL Wanakbori - 7	210	9.50%	58.26%	63	3.87
3	GSECL Utran Expan	375	3.00%	22.66%	240	3.52
4	GSECL Dhuvaran - 7	107	4.00%	19.95%	50	2.87
5	GSECL Dhuvaran - 8	112	3.00%	9.19%	29	3.14
6	GSECL Ukai	610	9.00%	54.89%	278	3.67
7	GSECL Ukai Expan	500	6.00%	64.62%	493	3.24
8	GSECL Gandhinagar 3-4	420	9.50%	19.55%	229	4.19
9	GSECL Wanakbori 1-6	1,260	9.00%	35.82%	560	3.93
10	GSECL Sikka Expansion	500	12.50%	63.96%	602	3.58
11	GSECL Kutch Lignite	215	12.00%	28.94%	79	2.70
12	GSECL Kutch Lignite Exp unit 4	75	12.00%	45.18%	57	2.52
13	GSECL Ukai Hydro	305	0.60%	28.82%	41	-
14	GSECL Kadana Hydro	242	1.00%	21.21%	69	-
15	GSECL Dhuvaran CCPP III	376	3.00%	16.85%	118	3.41
16	GSECL BLTPS	500	11.00%	12.43%	110	2.89
17	GSECL Wanakbori - 8	800	5.25%	7.62%	142	3.31
	Sub Total	**6,817**				
	IPP's					
1	Gujarat State Energy Generation	156	2.90%	3.15%	31	4.03

Sr. No.	Name of the Station	Capacity allocated to GUVNL (MW)	Auxiliary Consumption (%)	Plant Load Factor (%)	Fixed Cost (Rs. Crore)	Variable Cost (Rs. /kWh)
2	Gujarat State Energy Generation Expansion	351	3.00%	18.83%	169	3.67
3	Gujarat Industries Power Co Ltd (165 MW)*	-	-	-	-	4.10
4	Gujarat Industries Power Co Ltd (SLPP)	250	10.00%	72.20%	134	1.44
5	Gujarat Mineral Development Corp.	250	11.00%	28.05%	62	1.32
6	Gujarat Industries Power Co Ltd (145 MW)	42	2.90%	34.48%	6	2.99
7	Gujarat Industries Power Co Ltd (SLPP - Exp)	250	10.00%	77.62%	261	1.41
8	GPPC Pipavav	702	3.00%	8.76%	313	3.57
	Sub Total	**2,001**				
	Central Sector					
1	NPC-Tarapur 1 & 2	160	10.00%	80.39%	-	5.09
2	NPC-Tarapur 3 & 4	274	9.00%	87.96%	-	4.51
3	NPC-Kakrapar	125	12.50%	90.70%	-	1.48
4	NTPC-Vindhyachal - I	230	9.00%	82.56%	134	1.88
5	NTPC-Vindhyachal - II	239	7.05%	79.82%	115	1.79
6	NTPC-Vindhyachal - III	266	6.25%	87.21%	194	1.77
7	NTPC-Korba	360	7.04%	87.54%	174	1.46
8	NTPC-Korba -II	96	6.25%	86.99%	94	1.42
9	NTPC-Kawas	187	2.75%	30.69%	115	3.04
10	NTPC-Jhanor	237	2.75%	9.21%	181	3.55
11	NTPC-Sipat-I	540	6.25%	85.43%	492	1.52
12	NTPC-Sipat - II	273	6.25%	88.12%	239	1.57
13	NTPC-Kahlagaon	141	6.25%	69.60%	106	2.08
14	NTPC-Vindhyachal - IV	240	6.25%	89.45%	265	1.74
15	NTPC-Mauda	240	6.25%	76.06%	317	3.28
16	NTPC-Vindhyachal - V	94	7.25%	94.31%	112	1.80
17	NTPC-Mauda II	294	6.25%	61.53%	308	3.22
19	NTPC-Gadarwara	152	6.25%	17.30%	154	2.58
20	NTPC-LARA	78	6.25%	37.41%	55	2.55
21	NTPC-Khargone	246	6.25%	5.01%	30	2.97
22	Sardar Sarovar Nigam Ltd	216	0.70%	34.00%	-	2.05

Sr. No.	Name of the Station	Capacity allocated to GUVNL (MW)	Auxiliary Consumption (%)	Plant Load Factor (%)	Fixed Cost (Rs. Crore)	Variable Cost (Rs. /kWh)
	Sub Total	**4,688**				
	Others					
1	Captive Power	8	-	8.43%	-	2.15
	Renewable					
1	Wind Farms	4,170	-	22.50%	-	3.65
2	Solar	1,682	-	18.33%	-	7.82
3	Small/Mini Hydal	21	-	48.26%	-	4.65
4	Biomass	30	-	62.93%	-	5.86
	Competitive Bidding					
1	Essar Power Gujarat Ltd	1,000	-	49.38%	493	1.93
2	Adani Power Ltd - (Unit 1 - 4)	1,200	-	79.62%	810	2.92
3	Adani Power Ltd - (Unit 5 - 6)	1,200	-	25.52%	133	3.12
4	ACB India Ltd.	200	-	72.47%	179	0.67
5	Coastal Gujarat Power Co Ltd	1,805	-	74.03%	1,144	1.89
6	Power Exchange		-	100.00%	-	3.53
7	Short term bilateral		-	100.00%	-	3.17
	Sub Total	**11,316**				
	Total	**24,821**				

(ii) **Capacity additions during FY 2021-22**

The capacity addition plan which includes capacity additions of GSECL, Central Generating stations and IPPs is presented in the Table below with details of the capacity allocated to GUVNL and their unit wise tentative commissioning schedule. It is submitted that the PPA is already signed for these stations and these are expected to get commissioned during FY 2021-22.

The capacity addition envisaged against these stations during FY 2021-22 is around 230 MW. The operational parameters, annual fixed cost and variable cost per unit for these plants is given below. The Annual fixed cost and the availability from the envisaged capacity during FY 2021-22 have been considered on pro-rata basis depending upon the tentative date of commissioning:

Table 5-20: Capacity Addition during FY 2021-22

Sr. No.	Name of the Stations	Capacity allocated to GUVNL (MW)	Axillary consumption (%)	Plant Load Factor (%)	Fixed Cost Rs. Crore	Variable Cost Rs/kWh	COD
1	NTPC-Gadarwara Stage-I U#2	152	6.25%	80%	152.00	2.58	Dec-21
2	NTPC-Lara U#2	78	6.25%	80%	110.00	2.55	Oct-21
3	**Total Capacity Addition**	**230**					

(iii) Renewable Purchase Obligation

In accordance with the GERC (Procurement of Energy from Renewable Sources) Regulations, 2010 and its First and Second Amendments in 2014 and 2018 respectively, the DISCOMs are obligated to procure electricity (in kWh) from renewable energy sources, at a defined minimum percentage of the total consumption of its consumers including T&D loss during a year. The percentage of procurement is defined from FY 2017-18 to FY 2021-22. The minimum Renewable Energy purchase in FY 2019-20 is 2.48% from Solar, 7.75% from Wind and 0.23% from others sources like Biomass, Bagasse, MSW, etc.

As per Clause 6.4 of the National Tariff Policy 2016 dated 28th January, 2016 the States have to achieve 8% Solar RPO targets by FY 2021-22. The relevant extract from the Tariff Policy is given below:

> *"6.4 Renewable sources of energy generation including Co-generation from renewable energy sources:*
>
> *(i) Within the percentage so made applicable, to start with, the SERCs shall also reserve a minimum percentage for purchase of solar energy from the date of notification of this policy which shall be such that it reaches 8% of total consumption of energy, excluding Hydro Power, by March 2022 or as notified by the Central Government from time to time."*

While the Commission has defined the RPO targets for FY 2017-18 to FY 2021-22 through the Second Amendment to the RPO Regulations, GUVNL/DISCOMs proposes to purchase renewable power up to tied up RE capacity only for each of the respective years as per the PPA price. The Petitioner has submitted that it is very difficult to meet such high level of RPO targets and it will not be appropriate to show RE purchase in the absence of any firm PPA. Hence, GUVNL/ DISCOM has only considered RE purchase based on actual tied up capacity.

The year wise purchase from RE sources based on actual tied up capacity has been detailed below:

Table 5-21: Procurement from RE for Meeting Projected RPO

Particulars	FY 2021-22			
	Solar	Wind	Others	Total
Available Capacity up to FY 2019-20 (MUs)	2702	8217	252	11171
Total Requirement (MUs)	104536	104536	104536	104536
RPO Obligation fulfilled	2.58%	7.86%	0.24%	10.69%
RPO Target	8.00%	8.25%	0.75%	17%
RPO Target (MUs)	8363	8624	784	17771
Unmet Target (MUs)	5661	407	532	6600
Additional Capacity based on PPA executed				
Additional Power Purchase (MUs)	4,976	599	340	5,915
Power Purchase Cost (Rs./kwh)	2.62	2.80	6.67	2.87
Power Purchase Cost (Rs. Crore)	1,305	168	227	1,699
Unmet Capacity (MUs)	685	(192)	191	685

5.7.2 Power Purchase Cost

Petitioner's submission:

PGVCL has submitted that in order to optimize the power purchase cost, GUVNL has worked out a comprehensive merit order despatch (MOD) available from tied up generating capacities. The dispatch from individual generating stations is worked out based on the merit order of the variable cost of each generating unit as shown below:

- The NPC power plants, renewable, captive power plants and hydro plants have been considered as must run power plants.
- During merit order despatch, at least 5% availability of each plant has been considered to take care of the peak loads and peak season requirements.

- Availability of Thermal Stations has been considered at 85% / 80% as defined in Regulations (CERC/GERC) and performance in previous years.
- The Fixed & Variable Cost for existing GSECL, IPP, Renewables and Central Sector plants is taken as per actuals of FY 2017-18 as base power purchase cost.

Based on the above factors, the plant-wise dispatchable energy and cost of purchase by GUVNL from various plants of GSECL, Central Generating Stations, IPPs and other sources, the generation fixed cost due to the capacity contracted, and variable cost of generation per unit are given in the Table below. The dispatchable energy (MUs) based on the allocated capacity and merit order stacking consists both for supplying power to DISCOMs as well as for trading purpose.

Table 5-22: Projected Power Purchase cost for FY 2021-22

Sr. No.	Name of the Station	Available	Dispatch	Fixed Cost	Variable Cost	Variable Cost	Total Cost
		(MUs)	(MUs)	(Rs. Cr.)	(Rs. /kWh)	(Rs.Cr.)	(Rs.Cr.)
	GSECL						
1	GSECL Gandhinagar - 5	878	83	71	4.02	33	105
2	GSECL Wanakbori - 7	970	83	63	3.87	32	95
3	GSECL Utran Expan	722	722	240	3.52	254	494
4	GSECL Dhuvaran - 7	179	179	50	2.87	52	101
5	GSECL Dhuvaran - 8	87	87	29	3.14	27	57
6	GSECL Ukai	2,669	2,580	278	3.67	947	1,225
7	GSECL Ukai Expan	2,660	2,660	493	3.24	861	1,354
8	GSECL Gandhinagar 3-4	651	166	229	4.19	70	299
9	GSECL Wanakbori 1-6	3,598	502	560	3.93	198	757
10	GSECL Sikka Expansion	2,451	2,451	602	3.58	877	1,479
11	GSECL Kutch Lignite	261	261	79	2.70	71	150
12	GSECL Kutch Lignite Exp unit 4	261	261	57	2.52	66	122
13	GSECL Ukai Hydro	765	765	41	-	-	41
14	GSECL Kadana Hydro	445	445	69	-	-	69
15	GSECL Dhuvaran CCPP III	538	538	118	3.41	184	302

Sr. No.	Name of the Station	Available	Dispatch	Fixed Cost	Variable Cost	Variable Cost	Total Cost
		(MUs)	(MUs)	(Rs. Cr.)	(Rs. /kWh)	(Rs.Cr.)	(Rs.Cr.)
16	GSECL BLTPS	1,169	1,169	503	2.89	338	841
17	GSECL Wanakbori - 8	5,644	5,644	818	3.31	1,866	2,685
	Sub Total	**23,952**	**18,601**	**4,300**		**5,876**	**10,176**
	IPP's						
1	Gujarat State Energy Generation	42	42	31	4.03	17	48
2	Gujarat State Energy Generation Expansion	562	149	169	3.67	55	224
3	Gujarat Industries Power Co Ltd (165 MW)	13	13	-	4.10	5	5
4	Gujarat Industries Power Co Ltd (SLPP)	1,423	1,423	134	1.44	204	338
5	Gujarat Mineral Development Corp.	547	547	62	1.32	72	134
6	Gujarat Industries Power Co Ltd (145 MW)	123	123	6	2.99	37	42
7	Gujarat Industries Power Co Ltd (SLPP - Exp)	1,530	1,530	261	1.41	216	477
8	GPPC Pipavav	522	522	313	3.57	187	500
9	Essar Power Gujarat Ltd	7,008	7,008	645	1.77	1,239	1,884
10	Adani Power Ltd - (Unit 1 - 4)	8,369	8,369	810	2.92	2,446	3,256
11	ACB India Ltd.	1,270	1,270	179	0.67	85	263
12	Coastal Gujarat Power Co Ltd	12,649	12,649	1,144	1.86	2,358	3,503
13	Power Exchange	1,744	1,744	-	3.53	616	616
14	Short term Bilateral	3,353	3,353	-	3.17	1,062	1,062
	Sub Total	**39,154**	**38,742**	**3,753**		**8,600**	**12,353**
	Central Sector						
1	NPC-Tarapur 1 & 2	631	631	-	2.07	130	130

Sr. No.	Name of the Station	Available	Dispatch	Fixed Cost	Variable Cost	Variable Cost	Total Cost
		(MUs)	(MUs)	(Rs. Cr.)	(Rs. /kWh)	(Rs.Cr.)	(Rs.Cr.)
2	NPC-Tarapur 3 & 4	1,921	1,921	-	3.07	591	591
3	NPC-Kakrapar	869	869	-	2.48	215	215
4	NTPC-Vindhyachal - I	1,514	1,514	134	1.88	285	419
5	NTPC-Vindhyachal - II	1,553	1,553	115	1.79	277	393
6	NTPC-Vindhyachal - III	1,905	1,905	194	1.77	338	532
7	NTPC-Korba	2,566	2,566	174	1.46	375	550
8	NTPC-Korba -II	686	686	94	1.42	97	191
9	NTPC-Kawas	489	489	115	3.04	149	264
10	NTPC-Jhanor	186	186	181	3.55	66	247
11	NTPC-Sipat-I	3,788	3,788	492	1.52	578	1,070
12	NTPC-Sipat - II	1,976	1,976	239	1.57	310	550
13	NTPC-Kahlagaon	984	984	106	2.08	204	311
14	NTPC-Vindhyachal - IV	1,763	1,763	265	1.74	307	573
15	NTPC-Mauda	1,499	1,499	317	3.28	492	808
16	NTPC-Vindhyachal - V	720	720	112	1.80	130	242
17	NTPC-Mauda II	1,486	1,486	308	3.22	479	787
18	NTPC-Gadarwara	2,122	2,122	334	2.58	547	881
19	NTPC-LARA	1,089	1,089	110	2.55	277	387
20	NTPC-Khargone	1,714	1,714	246	2.97	510	756
21	Sardar Sarovar Nigam Ltd	639	639	-	2.05	131	131
	Sub Total	**30,101**	**30,101**	**3,539**		**6,488**	**10,027**
	Others						
1	Captive Power	6	6	-	2.15	1	1
	Renewable						
1	Wind Farms	8,217	8,217	-	3.45	2,835	2,835
2	Solar	2,702	2,702	-	7.82	2,112	2,112
3	Small/Mini Hydal	87	87	-	4.65	40	40
4	Biomass	165	165	-	5.86	97	97
5	Solar (New)	4,976	4,976	-	2.62	1,305	1,305
6	Wind (New)	599	599	-	2.80	168	168
7	Others (New)	340	340	-	6.67	227	227
	Sub Total	**17,092**	**17,092**	**-**		**6,785**	**6,785**
	TOTAL	**110,299**	**104,536**	**11,592**		**27,750**	**39,342**

5.7.3 Transmission and other Cost

Petitioner's submission:

PGVCL has submitted that the total power purchase cost for the company for the FY 2021-22 in addition to above mentioned fixed and variable cost consists of Transmission Charges, GUVNL Cost and SLDC fees and Charges.

5.7.3.1 Transmission Charges

Transmission charges to GETCO have been considered as per the Draft Tariff Petition of GETCO for FY 2021-22.

PGCIL charges for FY 2021-22 are considered same as of FY 2019-20.

SLDC Fees & Charges also have been considered as per the Draft Tariff Petition of SLDC for FY 2021-22.

Based on the transmission charges for PGCIL and GETCO and SLDC charges, the total transmission cost included in the overall Power Purchase Cost of all DISCOMs is given below:

Table 5-23: Projected Transmission charges for FY 2021-22 (Rs. Crore)

Sr. No.	Particulars	FY 2021-22
1	PGCIL Charges	2,443
2	Annual Transmission Charges of GETCO	4,480
3	SLDC Charges	21

5.7.3.2 GUVNL Cost

PGVCL has submitted that GUVNL is entrusted with the function of Bulk Power Purchase on behalf of four Distribution Companies and Bulk Supply of power to Distribution Companies for onwards retail supply to consumers, trading of surplus power on behalf of Distribution Companies and activities related to overall coordination between the subsidiary companies. GUVNL is procuring power on behalf of all four DISCOMs to have economical and optimized power purchase cost. It also undertakes the function of raising and managing overall loan portfolio of GUVNL and its subsidiaries.

GUVNL is charging Rs.0.04 for every transaction of the unit. The total cost has been arrived at after considering the total dispatchable units required to be served to all the four DISCOMs during FY 2021-22 as shown below:

Table 5-24: GUVNL Cost for FY 2021-22 (Rs. Crore)

Sr. No.	Particulars	FY 2021-22
1	GUVNL Cost at Rs.0.04/kWh	418

5.7.4 Total Power Purchase Cost

The total power purchase cost consists of the cost of power purchase from various generating stations, transmission charges of PGCIL and GETCO, SLDC charges, GUVNL costs and trading units.

The total fixed costs, due to the capacity contracted, are passed on to the DISCOMs as shown in the Table below:

Table 5-25: Projected Fixed cost for DISCOMs for FY 2021-22 (Rs. Crore)

Year	Fixed Cost	GETCO Cost	PGCIL Charges	SLDC Charges	Total Fixed Cost	Discom Fixed Cost
FY 2021-22	11,592	4,480	2,443	21	18,536	18,536

The Table below shows the total variable cost for FY 2021-22:

Table 5-26: Projected Variable cost for DISCOMs and trading of energy for FY 2021-22 (Rs. Crore)

Year	Variable Cost	GUVNL Cost	Total Variable Cost	Dispatched (MU)	Variable Cost Rs/ kWh	Discom (MU)	Variable Cost
FY 2021-22	27,750	418	28,168	1,04,536	2.69	1,04,536	28,168

5.7.5 Net Power Purchase Cost

The net power purchase cost is shown in the Table below:

Table 5-27: Projected Net Power Purchase cost for FY 2021-22 (Rs. Crore)

Year	Discom Fixed Cost	Discom Variable Cost	Total Power Purchase Cost
FY 2021-22	18,536	28,168	46,704

5.7.6 Bulk Supply Tariff (BST)

The objective of the differentiation of the BST between DISCOMs is due to the fact that the revenues from tariffs for each DISCOM is different due to different consumer mix and therefore, it is necessary to build a mechanism in the projections to bring them to a level playing field. The basic objective of Bulk Supply Tariff is that:

- GUVNL shall purchase power from various sources in bulk and supply power in bulk to DISCOMs for onward retail supply.
- To ensure uniform retail consumer tariffs in four state owned DISCOMs.
- Since each of the DISCOMs were incorporated on the basis of earlier zonal system, the consumer mix and consumption mix is different for each DISCOM. Consequently, the revenue earning capability of each DISCOM is different.
- It is necessary to build a mechanism to bring them to a level playing field in their paying capacity for power purchase to be achieved through different Bulk Supply Tariff (BST) to each of the DISCOMs.

By undertaking the BST method, it would be possible to ensure uniform retail consumer tariffs in the four DISCOMs.

5.8 Power Purchase Cost– Commission's Analysis

5.8.1 Power Purchase Sources

As mentioned in Para 5.7.1, PGVCL has submitted that GUVNL has entered into contracts for the existing capacity with GSECL, Central Generating Companies, IPPs, Renewable energy sources - Hydro, Solar, Wind, Other RE Sources, IPPs and Power tied up through competitive bidding etc. The details of the existing plants are given in

Table 5-19. GUVNL has also entered into contract for additional capacity likely to be commissioned for FY 2021-22. The details of additional plants likely to be commissioned for FY 2021-22 are given in Table 5-20.

The capacity projected by the Petitioner from each of the sources are summarised in the Table below:

Table 5-28: Capacity Contracted Source – Wise by GUVNL now submitted by PGVCL for FY 2021-22 (MW)

Sr. No.	Particulars	FY 2021-22
		Projected
1	GSECL	6,677
2	IPPs	2,166
3	Central Generating Stations	4,918
4	Renewable	5,903
5	Competitive Bidding & PX	4,205
6	Others – CPP	8
7	**Total**	**23,876**

5.8.2 Power Purchase during FY 2021-22

The power purchase for FY 2021-22 is based on the energy requirement of PGVCL / four DISCOMs approved by the Commission.

The source wise Power available and dispatchable units based on the merit order despatch projected for FY 2021-22 are given in the Table below:

Table 5-29: Energy Available & Dispatchable projected for FY 2021-22

Sr. No.	Particulars	Projected in ARR	
		Available MUs	Dispatch MUs
	GSECL		
1	GSECL Gandhinagar - 5	878	83
2	GSECL Wanakbori - 7	970	83
3	GSECL Utran Expan	722	722
4	GSECL Dhuvaran - 7	179	179
5	GSECL Dhuvaran - 8	87	87
6	GSECL Ukai	2,669	2,580
7	GSECL Ukai Expan	2,660	2,660
8	GSECL Gandhinagar 3-4	651	166
9	GSECL Wanakbori 1-6	3,598	502
10	GSECL Sikka Expansion	2,451	2,451
11	GSECL Kutch Lignite	261	261
12	GSECL Kutch Lignite Exp unit 4	261	261

Sr. No.	Particulars	Projected in ARR	
		Available MUs	Dispatch MUs
13	GSECL Ukai Hydro	765	765
14	GSECL Kadana Hydro	445	445
15	GSECL Dhuvaran CCPP III	538	538
16	GSECL BLTPS	1,169	1,169
17	GSECL Wanakbori - 8	5,644	5,644
	Sub Total	**23,952**	**18,601**
	IPP's		
1	Gujarat State Energy Generation	42	42
2	Gujarat State Energy Generation Expansion	562	149
3	Gujarat Industries Power Co Ltd (165 MW)	13	13
4	Gujarat Industries Power Co Ltd (SLPP)	1,423	1,423
5	Gujarat Mineral Development Corp.	547	547
6	Gujarat Industries Power Co Ltd (145 MW)	123	123
7	Gujarat Industries Power Co Ltd (SLPP - Exp)	1,530	1,530
8	GPPC Pipavav	522	522
9	Essar Power Gujarat Ltd	7,008	7,008
10	Adani Power Ltd - (Unit 1 - 4)	8,369	8,369
11	ACB India Ltd.	1,270	1,270
12	Coastal Gujarat Power Co Ltd	12,649	12,649
13	Power Exchange	1,744	1,744
14	Short term Bilateral	3,353	3,353
	Sub Total	**39,154**	**38,742**
	Central Sector		
1	NPC-Tarapur 1 & 2	631	631
2	NPC-Tarapur 3 & 4	1,921	1,921
3	NPC-Kakrapar	869	869
4	NTPC-Vindhyachal - I	1,514	1,514
5	NTPC-Vindhyachal - II	1,553	1,553

Sr. No.	Particulars	Projected in ARR	
		Available MUs	Dispatch MUs
6	NTPC-Vindhyachal - III	1,905	1,905
7	NTPC-Korba	2,566	2,566
8	NTPC-Korba -II	686	686
9	NTPC-Kawas	489	489
10	NTPC-Jhanor	186	186
11	NTPC-Sipat-I	3,788	3,788
12	NTPC-Sipat - II	1,976	1,976
13	NTPC-Kahlagaon	984	984
14	NTPC-Vindhyachal - IV	1,763	1,763
15	NTPC-Mauda	1,499	1,499
16	NTPC-Vindhyachal - V	720	720
17	NTPC-Mauda II	1,486	1,486
18	NTPC-Gadarwara	2,122	2,122
19	NTPC-LARA	1,089	1,089
20	NTPC-Khargone	1,714	1,714
21	Sardar Sarovar Nigam Ltd	639	639
	Sub Total	**30,101**	**30,101**
	Others		
1	Captive Power	6	6
	Renewable		
1	Wind Farms	8,217	8,217
2	Solar	2,702	2,702
3	Small/Mini Hydal	87	87
4	Biomass	165	165
5	Solar (New)	4,976	4,976
6	Wind (New)	599	599
7	Others (New)	340	340
	Sub Total	**17,086**	**17,086**
	TOTAL	**1,10,299**	**1,04,536**

The available and dispatchable energy from all sources projected by PGVCL for FY 2021-22 are summarised below:

Table 5-30: Availability and Dispatchable as Projected for FY 2021-22 (MUs)

Sr. No.	Particulars	Projected in ARR
		FY 2021-22
1	Available	1,10,299
2	Dispatchable	1,04,536

The reduced availability is due to delay in commissioning of some of the generating stations.

5.8.3 Merit Order despatch and Total Energy requirement including tradable energy

As discussed in para 5.7.1, GUVNL has entered into contract for the existing capacity with GSECL, Central Generating Stations, IPPs, Renewable energy sources, and power tied up through competitive bidding. The details of existing plants etc. are given in Table 5.19.

GUVNL has also entered into contract for new capacity that is likely to be commissioned during FY 2021-22. The details of new plants likely to be commissioned during FY 2021-22 are given in Table 5-20.

The details of capacity contracted by GUVNL, from the existing plant and the additional plants envisaged during FY 2021-22 with operational parameters, fixed and variable costs are given in Table 5-19 and Table 5-20.

Power Purchase in merit order

As discussed in Para 5.7.2 in order to optimize the Power Purchase Cost, GUVNL has worked out a comprehensive merit order despatch (MOD).

The quantum of power dispatchable (to be purchased) is arrived at based on the energy available from various sources less energy requirement by the four DISCOMs and energy that could be traded by GUVNL as given in the Table below:

Table 5-31: Energy requirement and Energy dispatchable as projected by the DISCOMs

Sr. No.	DISCOM	Energy Requirement (MUs)
		FY 2021-22
1	DGVCL	25,583
2	MGVCL	12,700
3	UGVCL	37,421
4	PGVCL	28,832

Sr. No.	DISCOM	Energy Requirement (MUs)
		FY 2021-22
5	**Total requirement at four DISCOMs**	**1,04,536**
6	Tradable energy projected by GUVNL	0.00
7	**Total Despatch units**	**1,04,536**

Though the availability is in the order of 1,10,299 MUs during FY 2021-22, the despatch is limited to 1,04,536 MUs as above to meet the total requirement of the four DISCOMs. The projected dispatchable energy is about 94.77% of the projected available energy during FY 2021-22 the available energy being 1,10,299 MUs and dispatchable energy 1,04,536 MUs as shown in Table 5-30.

The Commission in the analysis of energy sales projected by DISCOMs has approved energy sales and energy requirement of each DISCOM.

The energy requirement projected and energy requirement approved for each DISCOM by the Commission are summarised below:

Table 5-32: Energy requirement projected and approved for each DISCOM (MUs)

Sr. No.	DISCOM	Energy Requirement	
		FY 2021-22	
		Projected	Approved
1	DGVCL	25,583	24,724
2	MGVCL	12,700	12,500
3	PGVCL	37,421	37,114
4	UGVCL	28,832	28,437
5	**Total requirement of four DISCOMs**	**1,04,536**	**1,02,775**
6	Tradable energy projected by GUVNL	0.00	0.00
7	**Total Dispatch units**	**1,04,536**	**1,02,775**

5.8.4 Power Purchase Cost for the period FY 2021-22

PGVCL has submitted the power purchase costs as given in Table 5-22 & Table 5-23.

Also, the fixed cost and variable cost for GSECL stations, IPPs, renewable and Central Plants are taken as per actuals of FY 2019-20 as base power purchase cost. Further, the deficit in overall RPO is considered to be purchased from exchange/ short term at cost of Rs.4.00/kWh which is the weighted average cost of overall RE purchase of GUVNL and also the approx. latest prevailing rate in exchange. The approved requirement of power for all the DISCOMs put together, the Trading Units and revised dispatchable units for FY 2021-22 as discussed above are given in the Tables below:

Table 5-33: Approved Power Purchase Cost for FY 2021-22

Sr. No.	Particulars	Available (MUs)	Dispatch (MUs)	Fixed Cost (Rs. Crore)	Variable Cost (Rs./ Unit)	Variable Cost (Rs. Crore)	Total Cost (Rs. Crore)
	GSECL						
1	GSECL Gandhinagar - 5	878	83	71	4.02	33	105
2	GSECL Wanakbori - 7	970	83	63	3.87	32	95
3	GSECL Utran Expan	722	722	240	3.52	254	494
4	GSECL Dhuvaran - 7	179	179	50	2.87	52	101
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6	GSECL Ukai	2,669	819	278	3.67	301	578
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10	GSECL Sikka Expansion	2,451	2,451	602	3.58	877	1,479
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13	GSECL Ukai Hydro	765	765	41	-	-	41
14	GSECL Kadana Hydro	445	445	69	-	-	69
15	GSECL Dhuvaran CCPP III	538	538	118	3.41	184	302
16	GSECL BLTPS	1,169	1,169	503	2.89	338	841
17	GSECL Wanakbori - 8	5,644	5,644	818	3.31	1,866	2,685
	Sub Total	**23,952**	**16,840**	**4,300**		**5,229**	**9,530**
	IPP's						
1	Gujarat State Energy Generation	42	42	31	4.03	17	48
2	Gujarat State Energy Generation Expansion	562	149	169	3.67	55	224
3	Gujarat Industries Power Co Ltd (165 MW)	13	13	-	4.10	5	5
4	Gujarat Industries Power Co Ltd (SLPP)	1,423	1,423	134	1.44	204	338
5	Gujarat Mineral Development Corp.	547	547	62	1.32	72	134

Sr. No.	Particulars	Available (MUs)	Dispatch (MUs)	Fixed Cost (Rs. Crore)	Variable Cost (Rs./ Unit)	Variable Cost (Rs. Crore)	Total Cost (Rs. Crore)
6	Gujarat Industries Power Co Ltd (145 MW)	123	123	6	2.99	37	42
7	Gujarat Industries Power Co Ltd (SLPP - Exp)	1,530	1,530	261	1.41	216	477
8	GPPC Pipavav	522	522	313	3.57	187	500
9	Essar Power Gujarat Ltd	7,008	7,008	645	1.77	1,239	1,884
10	Adani Power Ltd - (Unit 1 - 4)	8,369	8,369	810	2.92	2,446	3,256
11	ACB India Ltd.	1,270	1,270	179	0.67	85	263
12	Coastal Gujarat Power Co Ltd	12,649	12,649	1,144	1.86	2,358	3,503
13	Power Exchange	1,673	1,673	-	3.53	591	591
14	Short term Bilateral	3,353	3,353	-	3.17	1,062	1,062
	Sub Total	**39,083**	**38,671**	**3,753**		**8,575**	**12,328**
	Central Sector						
1	NPC-Tarapur 1 & 2	631	631	-	2.07	130	130
2	NPC-Tarapur 3 & 4	1,921	1,921	-	3.07	591	591
3	NPC-Kakrapar	869	869	-	2.48	215	215
4	NTPC-Vindhyachal - I	1,514	1,514	134	1.88	285	419
5	NTPC-Vindhyachal - II	1,553	1,553	115	1.79	277	393
6	NTPC-Vindhyachal - III	1,905	1,905	194	1.77	338	532
7	NTPC-Korba	2,566	2,566	174	1.46	375	550
8	NTPC-Korba -II	686	686	94	1.42	97	191
9	NTPC-Kawas	489	489	115	3.04	149	264
10	NTPC-Jhanor	186	186	181	3.55	66	247
11	NTPC-Sipat-I	3,788	3,788	492	1.52	578	1,070
12	NTPC-Sipat - II	1,976	1,976	239	1.57	310	550
13	NTPC-Kahlagaon	984	984	106	2.08	204	311
14	NTPC-Vindhyachal - IV	1,763	1,763	265	1.74	307	573
15	NTPC-Mauda	1,499	1,499	317	3.28	492	808
16	NTPC-Vindhyachal - V	720	720	112	1.80	130	242
17	NTPC-Mauda II	1,486	1,486	308	3.22	479	787
18	NTPC-Gadarwara	2,122	2,122	334	2.58	547	881
19	NTPC-LARA	1,089	1,089	110	2.55	277	387
20	NTPC-Khargone	1,714	1,714	246	2.97	510	756
21	Sardar Sarovar Nigam Ltd	639	639	-	2.05	131	131
	Sub Total	**30,101**	**30,101**	**3,539**	-	**6,488**	**10,027**
	Others						
1	Captive Power	6	6	-	2.15	1	1
	Renewable			-	-		

Sr. No.	Particulars	Available (MUs)	Dispatch (MUs)	Fixed Cost (Rs. Crore)	Variable Cost (Rs./ Unit)	Variable Cost (Rs. Crore)	Total Cost (Rs. Crore)
1	Wind Farms	8,217	8,217	-	3.45	2,835	2,835
2	Solar	2,702	2,702	-	7.82	2,112	2,112
3	Small/Mini Hydal	87	87	-	4.65	40	40
4	Biomass	165	165	-	5.86	97	97
5	Solar (New)	4,976	4,976	-	2.62	1,305	1,305
6	Wind (New)	599	599	-	2.80	168	168
7	Others (New)	340	340	-	6.67	227	227
8	Green Power (RPO Deficit)	71	71	-	4.00	28	28
	Sub Total	**17,163**	**17,163**	**-**		**6,813**	**6,813**
	TOTAL	**1,10,299**	**1,02,775**	**11,592**		**27,106**	**38,698**

The Commission has considered the dispatchable and available energy from the sources considered by the Petitioner to arrive at projection of Power Purchase Cost for FY 2021-22, however, the Petitioner shall follow the Merit Order Principles and Prudence Practices while availing power from different sources.

5.8.5 Transmission and Other Cost

5.8.5.1 Transmission Cost

Transmission cost includes the cost to be paid to PGCIL for regional transmission and cost of GETCO for intra-state transmission.

Transmission charges of PGCIL are approved by the CERC and to be paid by GUVNL on the basis of calculation of Regional Energy Account of Western Region by WRLDC, hence the Commission accepts the projection of PGVCL/GUVNL for PGCIL charges. These charges are same as the actual charges of FY 2019-20.

The Petitioner has submitted that the Transmission charges of GETCO have been considered as per the Tariff Petition of GETCO for FY 2021-22. The Commission has considered the Transmission charges of GETCO as provided by PGVCL/GUVNL. The Commission accordingly approves the Transmission Charges payable to PGCIL and GETCO as given in the Table below:

Table 5-34: Transmission charges approved by the Commission for period FY 2021-22 (Rs. Crore)

Sr. No.	Particulars	FY 2021-22
1	PGCIL Charges	2,443
2	Annual Transmission charges of GETCO	4,480

5.8.5.2 GUVNL Cost

PGVCL has submitted in Para 5.7.3 above that GUVNL is charging Rs. 0.04 for every transaction of one unit of energy for providing the services of procuring power and supply to DISCOMs, the overall co-ordination between the subsidiary companies and also undertaking the function of raising and managing the overall loan portfolio of GUVNL and its subsidiaries.

The Commission observed that the charges of Rs. 0.04/unit to handle power procurement and supply etc., as approved in MYT Order are reasonable and accordingly approves the GUVNL costs as given below, based on energy to be handled during FY 2021-22:

Table 5-35: GUVNL Costs approved by the Commission for the period FY 2021-22

Sr. No.	Particulars	Unit	FY 2021-22
1	Energy	MUs	1,02,775
2	GUVNL Cost at Rs. 0.04/kWh	Rs. Crore	411

5.8.5.3 SLDC Fees and Charges

PGVCL has submitted that SLDC fees and charges have been considered as per the Tariff Petition of SLDC for FY 2021-22.

The Commission approves the SLDC charges as provided by the Petitioner in respect to SLDC for FY 2021-22 as shown in the Table below:

Table 5-36: SLDC charges approved by the Commission for FY 2021-22 (Rs. Crore)

Sr. No.	Particulars	FY 2021-22
1	SLDC Charges	21

5.8.6 Total Power Purchase Cost

5.8.6.1 Fixed Cost

The total fixed cost consists of the fixed cost of the energy procured from various sources, transmission costs of PGCIL and GETCO, SLDC Charges & Fees approved by the Commission. These are aggregated to arrive at the total fixed cost of power purchase for all DISCOMs.

The fixed costs due to capacity contracted by GUVNL are passed on to DISCOMs as given in the Table below:

Table 5-37: Fixed cost of DISCOMs for the period FY 2021-22 (Rs. Crore)

Year	Fixed Cost	GETCO Cost	PGCIL Charges	SLDC Charges	Total Fixed Cost	DISCOMS Fixed Cost
2021-22	11,592	4,480	2,443	21	18,536	18,536

5.8.6.2 Variable Cost

The total variable cost consists of the variable cost of energy supplied to DISCOMs and GUVNL cost. The total variable cost and variable cost per unit are given in the Table below:

Table 5-38: Variable cost for DISCOMs for the period FY 2021-22

Year	Variable Cost (Rs. Crore	GUVNL Cost (Rs. Crore	Total Variable Cost (Rs. Crore)	Total MUs Despatched	Variable Cost (Rs. /Unit
2021-22	27,106	411	27,517	1,02,775	2.68

Table 5-39: Total Cost of Power for DISCOMs for the period FY 2021-22 (Rs. Crore)

Year	Fixed Cost	Variable Cost	Total Cost
2021-22	18,536	27,517	46,053

5.9 Allocation of Power Purchase Cost

Power Purchase cost worked out as above for FY 2021-22 is allocated amongst four DISCOMs based on the methodology adopted by the Commission in the MTR Order dated 29th April, 2019 by working out revenue available for purchase of power, Non-Tariff Income, Agricultural Subsidy and Aggregate Revenue requirement other than power purchase as given in the following Tables:

Table 5-40: Category Wise sales approved and existing average tariff in Rs./kWh

Sr. No.	Category	DGVCL		MGVCL		PGVCL		UGVCL	
		2021-22 Sales (MU)	Average Tariff (2021-22) (Rs./ kWh)	2021-22 Sales (MU)	Average Tariff (2021-22) (Rs./ kWh)	2021-22 Sales (MU)	Average Tariff (2021-22) (Rs./ kWh)	2021-22 Sales (MU)	Average Tariff (2021-22) (Rs./ kWh)
1	Residential (RGP)	3616	3.81	3000	3.94	4012	3.65	2815	3.57
2	GLP	131	4.09	143	4.11	196	4.08	126	4.20
3	Non-RGP & LTMD	6771	5.25	1765	5.50	4002	5.45	2375	5.58
4	Public Water Works	294	3.56	381	3.32	625	3.82	950	3.65
5	Agriculture Unmetered	416	1.41	474	1.40	4678	1.41	6391	1.42
6	Agriculture Metered	569	1.03	870	1.01	2977	1.23	3752	0.90
8	Public Light	0	0	0	0	0	0	0	0
9	Industrial HT	10276	5.63	4154	5.82	13192	5.50	8216	5.54
10	Railway Traction	6	6.80	0		0		0	
11	**Total**	**22079**		**10786**		**29681**		**24624**	

Table 5-41: Revenue with existing Tariffs for FY 2021-22 with approved sales (Rs. Crore)

Sr. No.	Category	DGVCL	MGVCL	PGVCL	UGVCL
		2021-22			
1	RGP	1,377	1,181	1,463	1,005
2	GLP	54	59	80	53
3	Non-RGP and LTMD	3,557	971	2,179	1,325
4	Public Water Works	105	126	239	347
5	Agriculture Unmetered	59	66	661	909
6	Agriculture metered	59	88	365	339
7	Public Light	-	-	-	-
8	Industrial HT	5,785	2,416	7,260	4,548
9	Railway Traction	4	-	-	-
10	**Total**	**10,998**	**4,907**	**12,247**	**8,526**
	Approved Sales	22,079	10,786	29,681	24,624
11	FPPPA @ 1.800 Rs. /kWh for FY 2021-22	3,974	1,941	5,343	4,432
12	Other Income	287	124	249	197
13	Agriculture Subsidy	54	73	418	554
14	**Grand Total**	**15,314**	**7,046**	**18,257**	**13,709**

Table 5-42: Aggregate Revenue Requirement for Power Purchase for FY 2021-22 (Rs. Crore)

Sr. No.	Particulars	FY 2021-22
A	**Total Revenue of DISCOMS (A)**	**54,326**
1	DGVCL	15,314
2	MGVCL	7,046
3	PGVCL	18,257
4	UGVCL	13,709
B	**Expenditure Other than Power Purchase (B)**	**6,555**
5	DGVCL	1,114
6	MGVCL	1,081
7	PGVCL	2,938
8	UGVCL	1,422
C	**Amount available with the DISCOM for Power Purchase (A-B)**	**47,772**
9	DGVCL	14,200
10	MGVCL	5,965
11	PGVCL	15,319

Sr. No.	Particulars	FY 2021-22
12	UGVCL	12,287

Table 5-43: Total Revenue Gap for FY 2021-22 (Rs. Crore)

Sr. No.	Particulars	FY 2021-22
1	Total Power Purchase Cost (A)	46,053
2	Aggregate Amount available for Power Purchase (B)	47,772
3	**Surplus/(Gap)[B-A]**	**1,718.25**

Table 5-44: Energy Requirement and Percentage Energy required for FY 2021-22

Sr. No.	DISCOM	FY 2021-22	
		Energy Required (MUs)	Percentage
1	DGVCL	24,724	24.06%
2	MGVCL	12,500	12.16%
3	PGVCL	37,114	36.11%
4	UGVCL	28,437	27.67%
	Total	**1,02,775**	**100%**

Table 5-45: Allocation of (Gap)/Surplus for FY 2021-22

Sr. No.	Details	DGVCL	MGVCL	PGVCL	UGVCL
1	Total (Gap)/ Surplus for the year (Rs. Cr.)	1718			
2	Ratio of allocation of Gap	24.06%	12.16%	36.11%	27.67%
3	(Gap)/ Surplus allocation (Rs. Cr.)	413	209	620	475

Table 5-46: Bulk Supply Tariff for FY 2021-22

Sr. No.	Details	DGVCL	MGVCL	PGVCL	UGVCL
1	Amount available for power purchase (Rs. Cr.)	14,200	5,965	15,319	12,288
2	(Gap)/ Surplus allocated (Rs. Cr.)	413	209	620	475
3	Power purchase cost for DISCOM (1+2) (Rs. Cr.)	14,613	6,174	15,939	12,763
4	Energy Purchase in DISCOM (MU)	24,724	12,500	37,114	28,437
5	**Bulk Supply Tariff (Rs./kWh)**	5.910	4.939	4.295	4.488

5.10 Renewable Purchase Obligation

The Petitioner has submitted the details for RPO compliance for FY 2021-22 which have been summarized by the Commission in para 5.8.1(iii). The year wise purchase from RE sources as submitted by the Petitioner is given in Table 5-21.

Based on the approved RPO for FY 2021-22, the energy required to be procured from RE sources is tabulated below:

Table 5-47: Procurement from RE for Meeting RPO for FY 2021-22

Particulars	FY 2021-22			
	Solar	Wind	Others	Total
Capacity based on PPA executed (Existing)				
Total Energy Requirement (MUs) – a	1,02,775	1,02,775	1,02,775	1,02,775
Less: Hydro energy exclusion for RPO purpose – b	1,849	1,849	1,849	1,849
Energy Requirement for RPO purpose excluding Hydro energy (MUs) c = a-b	1,00,926	1,00,926	1,00,926	1,00,926
RPO Target - d	8.00%	8.25%	0.75%	17.00%
RPO Target (MUs) e = c * d	8,074	8,326	757	17,157
Existing Available Capacity up to FY 2019-20 (MUs) – f	2,702	8,217	252	11,171
RPO Obligation fulfilled from Existing PPA g = f / c	2.68%	8.14%	0.25%	11.07%
Unmet Target (MU) h = e - f	**5,373**	**109**	**504**	**5,986**
Power Purchase Cost for Existing PPA (Rs. Crore) - i	**2,112**	**2,835**	**137**	**5,085**
Power Purchase Cost for Existing PPA (Rs./kWh) j = i/f*10	**7.82**	**3.45**	**5.44**	**4.55**
Additional Capacity based on PPA executed				
Additional Power Purchase (MU) - k	4,976	599	340	5,915
Power Purchase Cost for Add. PPA executed (Rs. Crore) – l	**1,305**	**168**	**227**	**1,699**
Power Purchase Cost for Addi PPA executed (Rs./kWh) m = l / k *10	2.62	2.80	6.67	**2.87**
Total RPO projected to be met (MU) n = f + k	**7,678**	**8,816**	**593**	**17,086**
Unmet Capacity (MU) o = e – n	**396**	**(490)**	**164**	**71**
Total Power Purchase Cost (Rs. Crore) p = i + l	**3,417**	**3,003**	**364**	**6,784**
Power Purchase Cost (Rs./kWh) q = p/n*10	**4.45**	**3.41**	**6.15**	**3.97**

The distribution entities are advised to adhere to the RPO target and report to the Commission accordingly. Further, the deficit in overall RPO is considered to be purchased from exchange/ short term at cost of Rs.4.00/kWh which is the weighted average cost of overall RE purchase of GUVNL and also the approx. latest prevailing rate in exchange.

5.11 Capital Expenditure

Petitioner's submission

PGVCL has projected capital expenditure of Rs. 1383.93 Crore for FY 2021-22 as detailed in the Table below:

Table 5-48: Capital Expenditure Plan for FY 2021-22 (Rs. Crore)

	Particulars	FY 2021-22 (Projected)
A	**Distribution Schemes**	
	Normal Development Scheme	343.66
	System Improvement Scheme	261.77
	Electrification of hutments	6.00
	Scheme for meters including installation of SMART Meters	50.00
	Total	**661.43**
B	**Rural Electrification Schemes**	
	Special Component plan	1.50
	RE Normal + Tatkal + Dark Zone	345.00
	Total	**346.50**
C	**Non Plan Schemes**	
	SCADA/DMS	-
	Total	-
D	**Other New Schemes**	
	Civil work	-
	Shunt Capacitor	-
	Fencing to Distribution Transformer	-
	Aerial Bunch Conductors	-
	HVDS	90.00
	Under Ground System	180.00
	SKJY	50.00
	Marine Cable for Shiyalbet	-

	Particulars	FY 2021-22 (Projected)
	IPDS	-
	DDUGJY	-
	Solar Ag Pump	-
	FPI	1.00
	DISS	15.00
	Others schemes (General Schemes)	-
	Smart Village	-
	Coastal area scheme	40.00
	Total	**376.00**
	Capital Expenditure Total	**1,383.93**

PGVCL has furnished detailed scheme wise justification for revision in capital expenditure as given below:

a) Normal Development:

Under the head Normal Development Scheme, generally expenses are incurred to meet with the Supply Obligation. Company has to lay distribution lines up to installations of LT/HT consumers. Considerable investment is required for laying / strengthening of LT/HT lines, service connection lines, meters, etc.

According to historical trend, Company has proposed investment under this scheme for FY 2021-22.

b) System Improvement:

Under the head system Improvement Company carry out renovation/replacement of old Distribution line, bifurcation of feeder, installation/ augmentation of Distribution Transformer etc. According to System Requirement, company has proposed investment under this scheme for FY 2021-22.

c) Electrification of Hutment:

The subject scheme is for electrification of hutments in certain areas situated in and around urban and rural areas with a view to support and help socially, economically and educationally weaker sections of society, who are living in the above hutments. The scheme involves energisation of single point power supply to the identified beneficiaries in consultation with Local Body.

d) Scheme for Meters:

The scheme involves replacement of Meters at exiting consumers' premises by Static/ electronics meters and also installation of Meters at Distribution Transformer level.

e) RE Scheme:

Under the head RE Schemes Company releases Agriculture Category connections. Following the directive of the Commission, Company has maximised the targets for releasing the Connections of Agriculture category. Company has proposed 30000 nos. of connections during the FY 2021-22 and accordingly investment is proposed under the scheme.

f) High Voltage Distribution System (HVDS):

Company is having large nos. of Low-Tension category consumers. To eliminate low voltage distribution and to have better voltage profile as well as for reduction of Technical loss and associated commercial loss company converts LT Distribution System to High Voltage Distribution System by erecting small capacity Transformer matching with the connected load of individual consumer or very small group of consumers. Company has decided to continue with the scheme during this control period and investment is proposed accordingly.

g) Coastal Area Scheme:

PGVCL covers largest coastal area of the state. Majority of the Distribution network of the Company is having "Overhead" type. "Overhead" network is highly susceptible to environmental changes in general and particularly in "Costal" area. To provide better quality power supply in the costal belt, company undertakes various activities like renovation of Distribution network, Distribution Transformer review, providing Aerial Bunch Conductor, conversion of LT Distribution network into High Voltage Distribution System etc. Scope of work is planned depending on time-to-time requirement and exigency of work and accordingly investment is proposed under the scheme.

h) Distribution Infrastructure Shifting Scheme: (DISS):

Under this scheme, Company shifts the network obstructing to Local bodies, Urban authorities in their development activities, road widening etc.

i) Underground System:

Under this scheme, PGVCL has proposed to shift the existing overhead network in some of pilgrim places, GIDC areas for better power supply management, aesthetic views of the areas and also to increase the network safety.

Gandhidham town has also been selected for conversion of existing overhead system to underground system in consultation with Gujarat State Disaster Management Authority.

j) Sardar Krushi Jyoti Yojna (SKJY):

Under the head Sardar Krushi Jyoti Yojna (SKJY), PGVCL carries out replacement, strengthening, renovation etc. of Agriculture Dominant Distribution network under the financial assistance from the State Government. Main objective of the scheme is to improve reliability of power supply and also to reduce distribution loss. Company has proposed to continue with the scheme for FY 2021-22.

k) Fault Passage Indicator (FPI)

Fault Passage Indicator is a device which glows when the feeder goes off. Therefore, it helps in early identification of the faulty section /part and expeditious restoration of Power Supply.

Commission's Analysis

The Commission accepts the justification given by PGVCL for the projected capital expenditure of Rs. 1383.93 Crore for FY 2021-22. The Commission has approved the scheme wise CAPEX as proposed by the Petitioner for FY 2021-22. While truing up, Petitioner is required to submit the details of scheme wise CAPEX including target and actual date of commissioning. The Commission shall allow such CAPEX after prudence check in respect to cost incurred, time taken to complete the project and cost benefit analysis. The Petitioner shall also justify the competitiveness of the cost incurred.

Table 5-49: Capital Expenditure Plan Approved for FY 2021-22 (Rs. Crore)

	Particulars	FY 2021-22 (Projected)	FY 2021-22 (Approved)
A	**Distribution Schemes**		
	Normal Development Scheme	343.66	343.66
	System Improvement Scheme	261.77	261.77
	Electrification of hutments	6.00	6.00

	Particulars	FY 2021-22 (Projected)	FY 2021-22 (Approved)
	Scheme for meters including installation of SMART Meters	50.00	50.00
	Total	**661.43**	**661.43**
B	**Rural Electrification Schemes**		
	Special Component plan	1.50	1.50
	RE Normal + Tatkal + Dark Zone	345.00	345.00
	Total	**346.50**	**346.50**
C	**Non Plan Schemes**		
	SCADA/DMS	-	-
	Total	-	-
D	**Other New Schemes**		
	Civil work	-	-
	Shunt Capacitor	-	-
	Fencing to Distribution Transformer	-	-
	Aerial Bunch Conductors	-	-
	HVDS	90.00	90.00
	Under Ground System	180.00	180.00
	SKJY	50.00	50.00
	Marine Cable for Shiyalbet	-	-
	IPDS	-	-
	DDUGJY	-	-
	Solar Ag Pump	-	-
	FPI	1.00	1.00
	DISS	15.00	15.00
	Others schemes (General Schemes)	-	-
	Smart Village	-	-
	Coastal area scheme	40.00	40.00
	Total	**376.00**	**376.00**
	Capital Expenditure Total	**1,383.93**	**1,383.93**

The Commission has approved Rs. 1,784.10 Crore in FY 2019-20 towards Capital Expenditure and Rs. 1,850.68 Crore for FY 2020-21 respectively in its MTR Order whereas, the Capital Expenditure projected by the Petitioner is Rs. 1,383.93 Crore for FY 2021-22 which is much less than earlier years. Since, the amount is reasonable, the Commission is approving the same.

Capitalization and Funding

Petitioner's Submission

PGVCL has submitted that it is expecting all the capital expenditure incurred during the year will be capitalised in the same year. The funding of the projected capital expenditure is envisaged through various sources categorized under four headings namely: Consumer Contribution, Grants, Equity and Debt. PGVCL has submitted that the remaining capital expenditure after deducting consumer contribution and grants is proposed to be funded through debt and equity in the ratio of 70:30. The detailed break-up of funding of capitalisation for FY 2021-22 as furnished by PGVCL is given in the Table below:

Table 5-50: Funding of capitalisation for FY 2021-22 (Rs. Crore)

Sr. No.	Particulars	FY 2021-22
		Projected in ARR
1	Capitalisation	1,383.93
2	Less: Consumer Contribution	177.86
3	Less: Grants	250.00
4	**Balance Capex**	**956.07**
5	Debt @ 70%	669.25
6	Equity @ 30%	286.82

Commission's Analysis

The Commission has observed that PGVCL has proposed capitalization of the entire capital expenditure proposed to be incurred during FY 2021-22. The Commission has observed that in the MYT period the Petitioner has been achieving the Capital expenditure in line with its submission and approval of the Commission. This year being an extended year in MYT control period, the Commission has verified past trend of approved and actual capitalisation achieved by the Petitioner and has considered the minimum of the claimed or highest actual capitalisation achieved in MYT control period. Accordingly, the claimed amount by petitioner for FY 2021-22 is the lowest and the Commission approves the capitalisation of Rs.1,383.93 Crore for FY 2021-22.

In view of above, the Commission approves the CAPEX, capitalization and funding thereof, as proposed by PGVCL for FY 2021-22 as given in the Table below:

Table 5-51: Approved CAPEX, Capitalization and Funding for FY 2021-22 (Rs. Crore)

Particulars	FY 2021-22
CAPEX	1,383.93
Capitalization	1,383.93
Less: Consumer contribution	177.86
Less: Grants	250
Balance Capitalisation	**956.07**
Debt @ 70%	669.25
Equity @ 30%	286.82

5.12 Fixed Charges

5.12.1 Operations and Maintenance (O&M) Expenses

PGVCL has projected the O&M expenses at Rs. 1,285.71 Crore for FY 2021-22 in the ARR petition. The O&M expenses projection as submitted by PGVCL are given in the Table below:

Table 5-52: O&M expenses projected for the FY 2021-22 (Rs. Crore)

Sr. No.	Particulars	FY 2021-22
		Projected in ARR
1	Employee Cost	1,171.01
2	Repairs & Maintenance Expenses	197.71
3	Administration & General Expenses	203.43
4	Other Debits	-
5	Extraordinary Items	-
6	Net Prior Period Expenses / (Income)	-
7	Other Expenses Capitalised	(286.44)
8	**Operations & Maintenance Expenses**	**1,285.71**

Petitioner’s Submission

PGVCL has submitted that the O&M Expenses consist of Employee Cost, Administration & General Expenses, Repairs & Maintenance Expenses, Other Debits, Extraordinary Items, Net Prior Period Income /Expenses and Other Expenses Capitalized.

Regulation 94.8 of the GERC (MYT) Regulations, 2016 states the following methodology for projection of O&M Expenses:

"Operation and Maintenance expenses:

a) The Operation and Maintenance expenses shall be derived on the basis of the average of the actual Operation and Maintenance expenses for the three (3) years ending March 31, 2015, subject to prudence check by the Commission. The average of such operation and maintenance expenses shall be considered as operation and maintenance expenses for the financial year ended March 31, 2014 and shall be escalated year on year at the escalation factor of 5.72% to arrive at operation and maintenance expenses for subsequent years up to FY 2020-21."

To work out O&M expenses for FY 2021-22, actual O&M expense for FY 2019-20 have been escalated by year-on-year escalation rate of 5.72%.

Commission's Analysis

The Commission examined the O&M expenses incurred by PGVCL during FY 2019-20 component wise. In the background chapter, the Commission has stated that determination of ARR and Tariff for FY 2021-22 shall be taken as per GERC (MYT) Regulations, 2016. Accordingly, the Regulation 94.8 of the GERC (MYT) Regulations, 2016, provides the provision for computation of O&M Expenses. The said Regulation is reproduced below:

"94.8 Operation and Maintenance expenses:

a) *The Operation and Maintenance expenses shall be derived on the basis of the average of the actual Operation and Maintenance expenses for the three (3) years ending March 31, 2015, subject to prudence check by the Commission.*

The average of such operation and maintenance expenses shall be considered as operation and maintenance expenses for the financial year ended March 31, 2014 and shall be escalated year on year at the escalation factor of 5.72% to arrive at operation and maintenance expenses for subsequent years up to FY 2020-21.

Provided that in case, the Distribution Licensee has been in operation for less than three (3) years as on the date of effectiveness of these Regulations, the O&M Expenses shall be determined on case-to-case basis."

It is apparent to state that the Commission has considered FY 2021-22 as the extended year of the Control Period. Accordingly, GERC has computed the O&M Expenses for

FY 2021-22 on the basis of the average of the actual approved O&M Expenses for the three (3) years ending 31st March, 2020 i.e. from FY 2017-18 to FY 2019-20. The average of such O&M Expenses has been considered as O&M Expenses for the financial year ended with 31st March, 2019 as a base year (FY 2018-19). Further, the y-o-y escalation @ 5.72% p.a. is applied O&M Expenses on the base year for computing the O&M Expenses viz, Employee Cost, Repairs and Maintenance Expenses, Administration and General Expenses for FY 2021-22.

The approved O&M expenses are given in the Table below:

Table 5-53: O&M expenses approved for FY 2021-22 (Rs. Crore)

Sr. No.	Particulars	FY 2021-22
1	Employee Cost	1,125.40
2	Repairs & Maintenance Expenses	180.38
3	Administration & General Expenses	203.37
4	Other Debits	-
5	Extraordinary Items	-
6	Net Prior Period Expenses / (Income)	-
7	Other Expenses Capitalised	(286.44)
8	**Operations & Maintenance Expenses**	**1,222.71**

5.12.2 Depreciation

PGVCL has projected Depreciation amount of Rs. 976.88 Crore for FY 2021-22. The projected Depreciation for FY 2021-22 are given in the Table below:

Table 5-54: Depreciation projected for FY 2021-22 (Rs. Crore)

Sr. No.	Particulars	FY 2021-22
		Projected in ARR
1	Gross Block at Beginning of the year	20,034.37
2	Additions during the Year (Net)	1,383.93
3	**Depreciation for the Year**	**976.88**
4	**Average Rate of Depreciation**	**4.71%**

Petitioner's Submission

PGVCL has submitted that it has considered the closing Gross block of fixed assets of FY 2019-20 as the opening Gross block of fixed assets of FY 2020-21. The addition during the FY 2020-21 and FY 2021-22 has been projected considering projected capitalisation for the same for each year. Depreciation has been calculated taking into consideration the opening balance of assets in the beginning of the year and the projected capitalisation during the year. This methodology is in line with the GERC (MYT) Regulations, 2016. The depreciation for the other assets has also been computed in accordance with the rates specified in the GERC (MYT) Regulations, 2016.

Commission's Analysis

The Commission has observed that the Petitioner has computed Depreciation based on the provision to Regulation 39(b) of the GERC (MYT) Regulations, 2016. The Commission accordingly taken the Opening GFA as on 1st April, 2020 as the Closing GFA as on 31st March, 2020 as approved for FY 2019-20 and has considered the additions as proposed by PGVCL for FY 2020-21 to arrive at the Closing GFA for 2020-21 which in turn is considered as the Opening GFA as on 1st April, 2021. The additions during FY 2021-22 are also considered as projected by PGVCL. Accordingly, the Commission has approved the Depreciation as given in the Table below:

Table 5-55: Depreciation approved for FY 2021-22 (Rs. Crore)

Sr. No.	Particulars	FY 2021-22
1	Gross Block in Beginning of the year	20,034.37
2	Additions during the Year (Net)	1,383.93
3	Closing GFA	21,418.30
4	Avg. GFA	20,726.34
5	Avg. Rate of Depreciation	4.71%
6	**Depreciation For the year**	**976.88**

The Commission approves the Depreciation at Rs. 976.88 Crore for FY 2021-22 in ARR.

5.12.3 Interest and Finance Charges

PGVCL has projected the interest and finance charges including interest on security deposit from consumers and guarantee charges at Rs. 420.85 Crore for FY 2021-22 in the ARR Petition. The interest charges projected for FY 2021-22 is given in the Table below:

Table 5-56: Interest & Finance Charges projected for FY 2021-22 (Rs. Crore)

Sr. No.	Particulars	FY 2021-22 Projected in ARR
1	Opening Loans	3,020.50
2	Additions during the Year	669.25
3	Repayment during the Year	976.88
4	Closing Loans	2,712.86
5	**Average Loans**	**2,866.68**
6	Weighted Average Rate of Interest	9.71%
7	Interest on Loans	278.35
8	Interest in Security Deposit	140.48
9	Guarantee Charges	2.01
10	**Total Interest & Finance Charges**	**420.85**

Petitioner's submission

PGVCL has submitted that it has considered the Closing Balance of loans for FY 2019-20 as the Opening Balance of FY 2020-21. The normative loan addition in FY 2020-21 to FY 2021-22 is computed as per the Capex funding plan. Repayment of loan for the year during FY 2020-21 and FY 2021-22 is considered equivalent to depreciation and the rate of interest has been taken as the weighted average rate of interest on the actual loan portfolio for FY 2019-20 being 9.71%. The interest on security deposit has been considered at 6.65% prevailing RBI bank rate. Other finance charges comprising guarantee and bank charges are proposed same as actuals of FY 2019-20.

Commission's Analysis

The Opening Balance of loans for FY 2019-20 is taken as per actual normative Closing Balance for FY 2018-19. The Commission has approved the capitalisation and funding of capital expenditure in previous section. The Commission has considered the weighted average rate of interest of 9.71% based on the actual loan portfolio submitted by PGVCL in its Petition for FY 2019-20, as per the GERC (MYT) Regulations, 2016.

In respect of Interest on Security Deposit, PGVCL has considered the bank rate of 6.65%. The Petitioner has inadvertently added 2% over and above the bank rate for computing the Interest on Security Deposit. However, as per Regulation 38.9 of the GERC (MYT) Regulations, 2016 states that the Interest shall be allowed on the amount held as Security Deposit held in cash at the Bank Rate as on 1st April of the financial year in which the Petition is filed. The relevant extract of the Regulation is reproduced below:

> *"38.9 Interest shall be allowed on the amount held as security deposit held in cash from Transmission System Users, Distribution System Users and Retail consumers **at the Bank Rate as on 1st April of the financial year in which the Petition is filed**."*
>
> ***(Emphasis Supplied)***

Accordingly, the Commission has considered the bank rate of 4.65% as on 1st April, 2020. The Commission applied this rate on the average balance of security deposit to arrive at the interest on security deposit. The repayment of loan is considered equivalent to depreciation approved in previous table in accordance with the GERC (MYT) Regulations, 2016. The guarantee and other bank charges are considered at the level of actuals for FY 2019-20. Considering all the above, the Commission has computed the interest and finance charges in the Mid-Term Review as detailed in the Table below:

Table 5-57: Approved Interest & Finance Charges for FY 2021-22 (Rs. Crore)

Sr. No.	Particulars	FY 2021-22
1	Opening Loans	3,020.50
2	Additions during the year	669.25
3	Repayments during the year	976.88
4	Closing Loans	2,712.86
5	Average Loans	2,866.68
6	Rate of Interest	9.71%
7	**Interest Charges**	**278.35**
8	Average Security Deposit	2,112.48
9	Rate of Interest on Security Deposit	4.65%
10	**Interest on Security Deposit**	**98.23**
11	**Guarantee and Other Charges**	**2.01**
12	**Interest and Finance Charges (7+10+11)**	**378.60**

The Commission approves the Interest and Finance Charges at Rs. 378.60 Crore for FY 2021-22.

5.12.4 Interest on Working Capital

PGVCL has not claimed any interest on working capital as detailed in the Table below:

Table 5-58: Interest on Working Capital projected for FY 2021-22 (Rs. Crore)

Sr. No.	Particulars	FY 2021-22
		Projected in ARR
1	O & M expenses	107.14
2	Maintenance Spares	200.34
3	Receivables	1,518.93
4	Less: Security Deposit	2,112.48
5	**Total Working Capital**	**(286.06)**
6	Rate of Interest on Working Capital	10.25%
7	**Interest on Working Capital**	**-**

PGVCL has not claimed any Working Capital and Interest thereon as the Security Deposit is more than the allowable normative Working Capital.

Commission's Analysis

The Commission has examined the computation of interest on working capital submitted by PGVCL. Based on the approved O&M expenses and GFA, the Commission has computed the working capital and interest on working capital, as detailed in the Table below:

Table 5-59: Interest on Working Capital Approved for FY 2021-22 (Rs. Crore)

Sr. No.	Particulars	FY 2021-22
		Approved in ARR
1	O&M expenses	101.89
2	Maintenance Spares	200.34
3	Receivables	1,521.40
4	Less: Amount held as Security Deposit from Consumers	2,112.48
5	**Total Working Capital**	**(288.84)**
6	Rate of Interest on Working Capital	10.25%
7	**Interest on Working Capital**	**-**

5.12.5 Provision for Bad and Doubtful Debts

PGVCL has considered the provision for bad and doubtful debts at Rs. 74.22 Crore for the FY 2021-22 in the ARR petition. The provision for bad & doubtful debts is considered same as actuals of FY 2019-20 as given in the Table below:

Table 5-60: Provision for Bad and Doubtful debts projected for FY 2021-22 (Rs. Crore)

Sr. No	Particulars	FY 2021-22
		Projected in ARR
1	Provision for Bad Debts	74.22

Petitioner's Submission

PGVCL has submitted that it has considered the Provision for bad and doubtful debts for FY 2021-22 as actuals of FY 2019-20. PGVCL has further submitted that it is a very legitimate expenditure which is associated with the business risk and is a consumer related expense as PGVCL is in a distribution business.

Commission's Analysis

Regulation 94.9 of the GERC (MYT) Regulations, 2016, specifies that the Commission may allow bad debts written off as a pass through, in the ARR. The actual bad debts written off were Rs. 74.22 Crore as per the audited annual accounts for FY 2019-20. The Commission approves the provision for bad and doubtful debts written off at the level of approved bad debts written off in FY 2020-21 in its MTR Order dated 24th April, 2019 of Rs. 2.15 for FY 2021-22. However, actual bad debts written off shall be allowed by the Commission after prudence check at the time of truing up for FY 2021-22.

The approved provision for bad and doubtful debts in the ARR is given in the Table below:

Table 5-61: Provision for Bad and Doubtful Debts Written off approved for FY 2021-22 (Rs. Crore)

Sr. No.	Particulars	Approved in ARR
1	Provision for Bad Debts	2.15

5.12.6 Return on Equity

PGVCL has projected the Return on Equity at Rs. 675.94 Crore for FY 2021-22 @ 14% in the ARR petition. The Return on Equity submitted in the ARR Petition are given in the Table below:

Table 5-62: Return on Equity projected for FY 2021-22 (Rs. Crore)

Sr. No.	Particulars	FY 2021-22 Projected in ARR
1	Opening Equity Capital	4,684.73
2	Equity Additions during the Year	286.82
3	Closing Equity	4,971.55
4	Average Equity	4,828.14
5	Rate of Return on the Equity	14%
6	**Return on Equity**	**675.94**

Petitioner's Submission

PGVCL has submitted that Return on Equity has been computed @ 14% on average Equity based on the Opening Balance of Equity and normative additions during the year that was arrived at by considering 30% of the capitalization net of consumer contribution and grants as funded from Equity.

Commission's Analysis

The Commission has computed the Return on Equity @14% on the average Equity of Opening and Closing Balance with additions during the year approved in Table 5-51 above as given in the Table below:

Table 5-63: Approved Return on Equity for FY 2021-22 (Rs. Crore)

Sr. No.	Particulars	FY 2021-22
1	Opening Equity	4,684.73
2	Additions during the year	286.82
3	Closing Equity	4,971.55
4	Average Equity	4,828.14
5	Rate of Return on Equity	14%
6	**Return on Equity**	**675.94**

The Commission approves Return on Equity at Rs. 675.94 Crore for FY 2021-22.

5.12.7 Income Tax

PGVCL has projected Income Tax at Rs. 5.32 Crore for FY 2021-22 as detailed in the Table below:

Table 5-64: Income Tax projected for FY 2021-22 (Rs. Crore)

Sr. No.	Particulars	FY 2021-22
		Projected in ARR
1	Income Tax	5.32

Petitioner's Submission

PGVCL has submitted that it has considered Income Tax as per the actual Income Tax paid in FY 2019-20 as per the audited accounts.

Commission's Analysis

Regulation 41.1 of the GERC (MYT) Regulations, 2016, specifies that the Commission in the MYT order shall provisionally approve income tax payable for each year of the control period, if any, based on the actual income tax paid as per the latest audited accounts available for the applicant, subject to prudence check. The latest audited accounts available for PGVCL is for FY 2019-20 and the Income Tax for FY 2019-20 is Rs. 5.32 Crore.

The Commission, accordingly approves the Income Tax as per the actual Income Tax for FY 2019-20 as same for FY 2021-22 as given in the Table below:

Table 5-65: Income Tax approved for FY 2021-22 (Rs. Crore)

Sr. No.	Particulars	FY 2021-22
1	Income Tax	5.32

5.12.8 Non-Tariff Income

PGVCL has projected the Non-Tariff Income at Rs. 323.75 Crore for FY 2021-22 as detailed in the Table below:

Table 5-66: Non-Tariff Income projected for FY 2021-22

Sr. No.	Particulars	FY 2021-22
		Projected in ARR
1	Non-Tariff Income	323.75

Petitioner's Submission

PGVCL submitted that it has considered Non-Tariff Income for FY 2021-22 under respective heads (excluding Delayed Payment Charges as per Regulation 97.2 of the GERC (MYT) Regulations, 2016) same as the actual figures of FY 2019-20.

Commission's Analysis

The Commission has approved the actual Non-Tariff Income of Rs. 323.75 Crore at Table 4-54 of this Order in the True up of FY 2019-20 which excludes the Delayed Payment Charges. Accordingly, the Commission approves Non-Tariff Income for the year FY 2021-22 as given in the Table below:

Table 5-67: Non-Tariff income approved for the FY 2021-22 (Rs. Crore)

Sr. No.	Particulars	FY 2021-22
1	Non-Tariff Income	323.75

5.13 Aggregate revenue Requirement (ARR)

As discussed in the above paragraphs, the approved revised Annual Revenue Requirement for FY 2021-22 is summarised as given in the Table below:

Table 5-68: Aggregate Revenue Requirement for the FY 2021-22 (Rs. Crore)

Sr. No.	Particulars	FY 2021-22
		Approved in ARR
1	Power Purchase Cost	14,698.49
2	Operations & Maintenance Expenses	
2.1	*Employee Cost*	1,125.40
2.2	*Repairs & Maintenance Expenses*	180.38
2.3	*Administration & General Expenses*	203.37
2.4	*Other Debits*	-
2.5	*Extraordinary items*	-
2.6	*Net Prior Period Expenses/ (Income)*	-
2.7	*Other Expenses Capitalized*	(286.44)
3	Depreciation	976.88
4	Interest & Finance Charges	378.60
5	Interest on Working Capital	-
6	Provision for Bad Debts	2.15
7	**Sub-Total (1 to 6)**	**17,278.83**
8	Return on Equity	675.94
9	Provision for Tax/ Tax Paid	5.32
10	**Total Expenditure (7 to 9)**	**17,960.09**
11	Less: Non-Tariff Income	323.75
12	Add: DSM Expenses	
13	**Aggregate Revenue Requirement (10-11)**	**17,636.34**

Sr. No.	Particulars	FY 2021-22
		Approved in ARR
14	Revenue from sale of power	17,589.89
15	Other income Consumer related	248.60
16	**Total Revenue before Subsidy**	**17,838.49**
17	Agriculture Subsidy	418.35
18	**Total Revenue after Subsidy**	**18,256.84**

The Commission had approved Rs. 17,182.47 Crore for FY 2019-20 and Rs. 18,299.05 Crore for FY 2020-21 in the MTR Order. The Commission approves the revised ARR at Rs. 17,636.34 Crore for FY 2021-22.

6. ARR and Revenue (Gap)/Surplus for FY 2021-22

6.1 Revenue from existing Tariff

Petitioner has estimated the category-wise revenue based on existing tariff at Rs. 12,247.35 Crore in respect of category-wise sale projected in term of MUs for FY 2021-20, as detailed in the Table below:

Table 6-1: Sales (MU) and Revenue (Rs. Cr) from existing tariff projected for FY 2021-22

Sr. No.	Particulars	Sales (MU)	Revenue (Rs. Cr)
	Low Tension		
1	RGP	4,012.30	1,463.45
2	GLP	196.05	80.02
3	Non-RGP & LTMD	4,001.98	2,179.38
4	Public Water Works	624.52	238.84
5	Agriculture - Metered	4,677.80	660.73
6	Agriculture – Unmetered	2,976.76	364.71
7	Public Lighting	-	-
	Sub Total (A)	**16,489.40**	**4,987.11**
	High Tension		
1	Industrial HT	13,191.72	7,260.24
2	Railway Traction	-	-
	Sub Total (B)	**13,191.72**	**7,260.24**
	Total (A+B)	**29,681.12**	**12,247.28**

Petitioner's submission:

Petitioner has submitted that based on the projected sales of 29,681 MU to different categories of consumers as per above table and the existing retail tariff, the revenue from sale of power works out at Rs.12,247.35 Crore for FY 2021-22.

Commission's Analysis

The Commission has analysed the category-wise sales projection for FY 2021-22 in the preceding section and taking into consideration the same and the exiting tariff for each category, the Commission has computed the revenue from sale of power for FY 2021-20 as detailed in the Table below:

Table 6-2: Approved revenue from existing tariff for FY 2021-22

Sr. No.	Particulars	Sales (MU)	Revenue (Rs.Cr)
	Low Tension		
1	RGP	4,012.30	1,463.38
2	GLP	196.05	80.02
3	Non-RGP & LTMD	4,001.98	2,179.38
4	Public Water Works	624.52	238.84
5	Agriculture - Metered	4,677.80	660.73
6	Agriculture - Unmetered	2,976.76	364.71
7	Public Lighting	-	-
	Sub Total (A)	**16,489.40**	**4,987.05**
	High Tension		
1	Industrial HT	13,191.72	7,260.24
2	Railway Traction	-	-
	Sub Total (B)	13,191.72	7,260.24
	Total (A+B)	**29,681.12**	**12,247.28**

6.2 Revenue from FPPPA Charges

Petitioner has estimated revenue from FPPPA charges for FY 2021-22, as detailed in the Table below:

Table 6-3: Revenue from FPPPA Charges for FY 2021-22

Particulars	Amount
Rate of FPPPA (Rs/kWh)	1.79
Sales (MU)	29,681.12
FPPPA Charges in Rs. Crore	5,312.92

Petitioner's submission

The Petitioner has submitted that in the True up for FY 2018-19 and Determination of Tariff Order for FY 2020-21 dated 31st March, 2020, the Commission has considered the base power purchase cost at Rs. 4.30/unit and base FPPPA at Rs. 1.59/unit. As per approved FPPPA formula, any increase in power purchase cost during the year over and above base power purchase cost of Rs. 4.30/unit is to be recovered through FPPPA over and above base FPPPA of Rs. 1.59/unit on quarterly basis. As per projected ARR for FY 2021-22, the weighted average power purchase cost is worked out to Rs. 4.47/unit as against base power purchase cost of Rs. 4.30/unit. Thus, the incremental power purchase cost of Rs. 0.20/unit for FY 2021-22 (i.e. (Rs. 4.47 - 4.30) grossed up by Distribution Losses) will be recovered through FPPPA over and above base FPPPA of Rs. 1.59/unit. Therefore, estimated revenue from FPPPA for FY 2021-22 is considered at Rs. 1.79/unit (i.e. grossing up by approved losses), as shown below.

Table 6-4: FPPPA Charges for the FY 2021-22

Sr. No.	Particulars	FY 2020-21	FY 2021-22
1	Fixed Cost (Rs. Crore)	12,173	11,592
2	Variable Cost (Rs. Crore)	26,105	27,750
3	GETCO Cost (Rs. Crore)	4,502	4,480
4	GUVNL Cost (Rs. Crore)	423	418
5	PGCIL Charges (Rs. Crore)	2,181	2,443
6	SLDC Charges (Rs. Crore)	33	21
7	Total Power Purchase Cost (Rs. Crore)	45,417	46,704
8	Total Energy Requirement (MU)	105,652	104,536
9	**Power Purchase Cost (Rs./kWh)**	**4.30**	**4.47**
10	Increase in Power Purchase Cost (Rs./ KWh)		0.17
11	Additional FPPPA Charges (Grossed up by Distribution Loss) (Rs./kWh)		0.20
12	Existing FPPPA Charges (Rs./kWh)		1.59
13	**Revised FPPPA Charges (Rs./kWh)**		**1.79**

Commission's Analysis

As stated earlier, the Commission has approved base power purchase cost for FY 2021-22 as Rs. 4.481/ kWh. Thus, there is an increase of Rs. 0.180/ kWh in the base power purchase cost of DISCOMs for FY 2021-22 over that of for FY 2020-21 before grossing up with approved loss and Rs.0.21/ kWh after grossing up with overall loss. The revised Base FPPPA charge for FY 2021-22 is shown in table below:

Table 6-5: Approved Base FPPPA Charges for FY 2021-22

Sr. No.	Particulars	FY 2020-21	FY 2021-22
1	Fixed Cost (Rs. Crore)	12,173	11,592
2	Variable Cost (Rs. Crore)	26,105	27,106
3	GETCO Cost (Rs. Crore)	4,502	4,480
4	GUVNL Cost (Rs. Crore)	423	411
5	PGCIL Charges (Rs. Crore)	2,181	2,443
6	SLDC Charges (Rs. Crore)	33	21
7	Total Power Purchase Cost (Rs. Crore)	45,417	46,053
8	Total Energy Requirement (MU)	1,05,652	1,02,775
9	**Power Purchase Cost (Rs./ kWh)**	**4.30**	**4.48**
10	Increase in Power Purchase Cost (Rs./ KWh)		0.18
11	Additional FPPPA Charges (Grossed up by Distribution Loss) (Rs./ kWh)		0.21
12	Existing FPPPA Charges (Rs./ kWh)		1.590
13	**Revised FPPPA Charges (Rs./ kWh)**		**1.800**

Accordingly, the Commission allows Base FPPPA charges and revenue therefrom on the approved sales of 29681.12 MUs for FY 2021-22 at Rs.1.800/ kWh as shown in the table below:

Table 6-6: Approved Revenue from FPPPA Charges for FY 2021-22

Particulars	Amount
Approved Sales (MU)	29,681
Rate of FPPPA (Rs/kWh)	1.800

Particulars	Amount
FPPPA Charges in Rs. Crore	5,342.60

The revised FPPPA base for FY 2021-22 is discussed in Chapter 8.

6.3 Other (consumer related) income

Petitioner has estimated the other consumer related income at Rs. 248.60 Crore for FY 2021-22, i.e., at the same levels as actuals for FY 2019-20, as detailed in the Table below:

Table 6-7: Other Consumer related Income projected by PGVCL for FY 2021-22 (Rs. Crore)

Sr. No.	Particulars	FY 2021-22 (Projected)
1	Other Income consumer related	248.60

Petitioner's Submission

The Petitioner has submitted that the revenue from Other Consumer Related Income comprises of revenue on account of charges other than the basic charges applicable to the Consumers. These include income on account of wheeling charges, inspection charges and miscellaneous charges. PGVCL has projected its Other Consumer related Income for FY 2021-22 same as actuals of FY 2019-20 as per the audited annual accounts and excluding the meter rent, which has been abolished by the Commission.

Commission's Analysis

The Commission observes that PGVCL has projected the other consumer related income for FY 2021-22 at actuals of FY 2019-20 as per audited Annual Accounts. The Commission, accordingly, approves the other consumer related income at Rs. 248.60 Crore for FY 2021-22, as shown in the Table below:

Table 6-8: Approved Other Consumer Related Income for FY 2021-22 (Rs. Crore)

Sr. No.	Particulars	Approved in this Order
1	Other Income consumer related	248.60

6.4 Agriculture Subsidy

Petitioner's Submission

PGVCL submitted that the annual Agricultural Subsidy that was being received by the erstwhile GEB from the State Government will continue to be received by the four

DISCOMs in FY 2021-22, i.e., Rs. 1100 Crore. The share of Agricultural Subsidy for FY 2021-22 is considered on pro-rata basis of agriculture sales of PGVCL vis-à-vis total agricultural sales of all 4 State DISCOMs. PGVCL's share of Agricultural Subsidy for FY 2021-22 is shown in the Table below:

Table 6-9: Agriculture Subsidy projected by PGVCL for FY 2021-22 (Rs. Crore)

Sr. No.	Particulars	FY 2021-22 (Projected)
1	Agriculture Subsidy	418.35

Commission's Analysis

The Commission has considered the Agriculture Subsidy as projected by the Petitioner, and accordingly, approves Agricultural Subsidy as Rs. 418.35 Crore for FY 2021-22, as shown in the Table below:

Table 6-10: Approved Agriculture Subsidy for FY 2021-22 (Rs. Crore)

Sr. No.	Particulars	Approved in this Order
1	Agriculture Subsidy	418.35

6.5 Total Expected Revenue for FY 2021-22

Petitioner's Submission

PGVCL has submitted the total expected revenue for FY 2021-22 as shown in the Table below:

Table 6-11: Revenue projected by PGVCL for FY 2021-22 (Rs. Crore)

Sr. No.	Particulars	FY 2021-22 (Projected)
1	Revenue with Existing Tariff	12,247.35
2	Base FPPPA Charges @ Rs. 1.79/ kWh	5,312.92
3	Other Income (Consumer related)	248.60
4	Agriculture Subsidy	418.35
5	**Total Revenue including subsidy (1 to 4)**	**18,227.22**

Commission's Analysis

The total revenue as estimated by the Commission for FY 2021-22 is shown in the Table below:

Table 6-12: Approved Total Revenue for FY 2021-22 (Rs. Crore)

Sr. No.	Particulars	PGVCL (Projected)	Approved in this Order
1	Revenue with Existing Tariff	12,247.35	12,247.28
2	Base FPPPA Charges approved @ Rs.1.80/kWh	5,312.92	5,342.60
3	Other Income (Consumer related)	248.60	248.60
4	Agriculture Subsidy	418.35	418.35
5	**Total Revenue including subsidy (1 to 4)**	**18,227.22**	**18,256.84**

6.6 Estimated Revenue (Gap)/ Surplus for FY 2021-22

Petitioner's Submission

PGVCL has estimated the cumulative Revenue (Gap)/ Surplus for FY 2021-22 as shown in the Table below:

Table 6-13: Estimated Revenue (Gap)/ Surplus for FY 2021-22 at Existing Tariff (Rs. Crore)

Sr. No.	Particulars	FY 2021-22 (Projected)
1	Aggregate Revenue Requirement	18,136.86
2	Revenue (Gap)/ Surplus from True up of FY 2019-20	(395.58)
3	**Total Aggregate Revenue Requirement**	**18,532.44**
4	Revenue with Existing Tariff	12,247.35
5	FPPPA Charges	5,312.92
6	Other Income (Consumer related)	248.60
7	Agriculture Subsidy	418.35
8	**Total Revenue including subsidy (4 to 7)**	**18,227.22**
9	**(Gap)/Surplus (8 - 3)**	**(305.22)**

The Petitioner requested the Commission to approve the above-mentioned Revenue Gap of Rs. 305.22 Crore.

Commission's Analysis

The Commission has estimated the total Revenue (Gap)/ Surplus for FY 2021-22 at the existing tariff, as shown in the Table below:

Table 6-14: Revenue (Gap)/ Surplus estimated by the Commission for FY 2021-22 at Existing Tariff (Rs. Crore)

Sr. No.	Particulars	Claimed by PGVCL	Approved in this Order
1	Aggregate Revenue Requirement	18,136.86	17,636.34
2	Revenue (Gap)/Surplus from True up of FY 2019-20	(395.58)	-
3	**Total Aggregate Revenue Requirement**	**18,532.44**	**17,636.34**
4	Revenue with Existing Tariff	12,247.35	12,247.28
5	FPPPA Charges	5,312.92	5,342.60
6	Other Income (Consumer related)	248.60	248.60
7	Agriculture Subsidy	418.35	418.35
8	**Total Revenue including subsidy (4 to 7)**	**18,227.22**	**18,256.84**
9	**(Gap)/ Surplus (8 - 3)**	**(305.22)**	**620.49**

6.7 Consolidated ARR of the State-Owned DISCOMs

Petitioner's Submission

Petitioner has submitted that consolidated ARR for FY 2021-22 for all four State-owned DISCOMs is Rs. 53,747.28 Crore.

Commission's Analysis

Based on the approval of the ARR for respective DISCOMs for FY 2021-22, the consolidated position of the DISCOMS is presented in the table below:

Table 6-15: Consolidated ARR computed for FY 2021-22 (Rs. Crore)

Sr. No.	Particulars	FY 2021-22	
		Projected in ARR	Approved in ARR
1	Power Purchase Cost	46,703.66	46,053.41
2	Operations & Maintenance Expenses	3,500.78	
2.1	*Employee Cost*	*3,099.55*	2,986.02
2.2	*Repairs & Maintenance Expenses*	*446.45*	398.83
2.3	*Administration & General Expenses*	*521.70*	515.76
2.4	*Other Debits*	-	-
2.5	*Extraordinary items*	-	-
2.6	*Net Prior Period Expenses/ (Income)*	-	-
2.7	*Other Expenses Capitalized*	*(566.93)*	(566.93)
3	Depreciation	2,075.13	2,061.39

Sr. No.	Particulars	FY 2021-22	
		Projected in ARR	Approved in ARR
4	Interest & Finance Charges	842.82	637.37
5	Interest on Working Capital	-	-
6	Bad Debts Written Off	92.85	2.66
7	**Sub-Total (1 to 6)**	**53,215.24**	**52,088.50**
8	Return on Equity	1,304.52	1,292.04
9	Provision for Tax/ Tax Paid	53.29	53.29
10	**Total Expenditure (7 to 9)**	**54,573.05**	**53,433.83**
11	Less: Non-Tariff Income	**825.75**	**825.75**
12	Add: DSM Expenses	**-**	-
13	**Aggregate Revenue Requirement (10-11)**	**53,747.30**	**52,608.09**
14	Revenue from sale of power	52,279.26	52,369.26
15	Other income Consumer related	857.07	857.07
16	**Total Revenue before Subsidy**	**53,136.34**	**53,226.33**
17	Agriculture Subsidy	1,100.00	1,100.00
18	**Total Revenue after Subsidy**	**54,236.34**	**54,326.33**

6.8 Consolidated Revenue (Gap)/ Surplus of the State-Owned DISCOMs

Petitioner's Submission

Petitioner has submitted that consolidated resultant Revenue Gap for all four State-owned DISCOMs is Rs. 852.79 Crore. It is envisaged that part of estimated Revenue Gap will be mitigated through efficiency measures such as (a) reduction in distribution losses, (b) reduction in technical losses due to network strengthening/ modernisation of distribution network, (c) Economisation in power purchase cost etc. Further, the unmitigated revenue gap, if any, will be considered at the time of true-up of FY 2021-22 and therefore no tariff change is proposed in the petition.

Commission's Analysis

Since the uniform tariff for State-owned DISCOMs has been envisaged in the MYT Order dated 31st March, 2017 and MTR Order dated 24th April, 2019, it is necessary to consider the consolidated (Gap)/ Surplus of FY 2021-22 for all the State-owned DISCOMs, while determining the tariff for FY 2021-22. The consolidated (Gap)/ Surplus computed for FY 2021-22 is shown in the Table below:

Table 6-16: DISCOM-wise (Gap)/ Surplus computed for FY 2021-22 (Rs. Crore)

Particulars	DGVCL	MGVCL	PGVCL	UGVCL	Total
Trued up (Gap)/Surplus of FY 2019-20	812.88	409.41	303.73	450.02	1,976.03
Total (Gap)/ Surplus for FY 2021-22	413.36	208.98	620.49	475.42	1,718.25

The consolidated (Gap)/ Surplus approved by the Commission for FY 2021-22 as shown in the Table above, is Rs. 1718.25 Crore, as compared to Rs. (852.79) Crore estimated by the State-owned DISCOMs. The computations are shown in the Table below:

Table 6-17: Consolidated (Gap)/ Surplus computed for FY 2021-22 (Rs. Crore)

S No.	Particulars	Projected	Approved
1	**Aggregate Revenue Requirement**	**53,747.34**	**52,608.09**
2	Revenue (Gap)/ Surplus from True-Up of FY 2019-20	(1,341.77)	-
3	**Total Aggregate Revenue Requirement (1-2)**	**55,089.11**	**52,608.09**
4	Revenue with Existing Tariff	36,675.76	36,678.59
5	FPPPA Charges	15,603.50	15,690.67
6	Other Income (Consumer related)	857.07	857.07
7	Agriculture Subsidy	1,100.00	1,100.00
8	**Total Revenue including Subsidy (4+5+6+7)**	**54,236.41**	**54,326.33**
9	**(Gap)/ Surplus (8-3)**	**(852.75)**	**1,718.25**

It is observed that the State-owned DISCOMs have not proposed any tariff revision for FY 2021-22, and intend to recover part of the Revenue Gap through efficiency gains and remaining at the time of true-up.

There is a Cumulative Revenue Surplus of Rs. 1718.25 Crore (Consolidated for all Discoms) while determining the ARR for FY 2021-22. The Commission is not giving any treatment of this amount at this stage as this is on estimate basis and also an exception in the extended MYT period of one year i.e. FY 2021-22.

7. Compliance to Directives

7.1 Compliance to earlier directives

The Commission had given various directives to Petitioner in the Order dated 31st March, 2020, compliance of which is mentioned below:

Directive 1: Category wise Cost to Serve Report

The Petitioner should ensure that the Cost to Serve report is submitted along with the tariff petition.

Compliance:

PGVCL is in process of preparation of Cost to Serve Report for FY 2019-20 and shall submit at the earliest.

Commission's comments:

The Petitioner has submitted the Cost to Serve report for FY 2019-20 on 10th February, 2021 to the Commission along with additional submissions as part of data gaps query and also uploaded the same on the website of DISCOMs and GUVNL.

The Petitioner is further directed to submit Cost to Serve report for FY 2020-21 along with next petition on timely basis with further necessary improvement in the report

- Using more specific allocation of costs for demand, energy and customer related.
- Technical losses on actual basis rather than estimation and duly backed by proper analysis and metering data.
- Petitioner should also compute Voltage-wise Cost to serve separately.

Directive 2: Installation of Meters on Distribution Transformer and Energy Audit

Directed to initiate energy audit of Distribution Transformer of each category of feeders having higher distribution losses and report the action taken on such energy audit.

Compliance:

Status of Meters installed on Distribution Transformer as on September, 2020 is as under.

Sr. No.	Particulars	Nos. as on 30.09.2020	Meters installed as on 31.03.2020	%
1	Other Than Agriculture	120089	120089	100
2	Agriculture	830584	830584	100
3	Total	950673	950673	100

PGVCL has initiated "Energy Audit" in the Urban areas. In other areas the process of consumer mapping on the feeder and on relevant Distribution Transformer is underway.

Distribution loss of Urban Category Feeders:

Sr. No.	Year	Unit sent out [MU]	Unit sold out [MU]	% Loss
1	2013-14	5012.00	4181.70	16.57
2	2014-15	5459.75	4618.90	15.40
3	2015-16	5649.86	4817.24	14.74
4	2016-17	5752.84	4954.46	13.88
5	2017-18	5991.58	5179.41	13.56
6	2018-19	6264.97	5460.15	12.85
7	2019-20	6202.29	5482.24	11.61

Commission's comments:

The achievement in reduction in Distribution Losses through the activity of energy audit by Petitioner is noted. Petitioner is directed to continue this activity and report the achievement along with next Tariff Petition.

<u>Directive 3: Losses on Jyoti Gram Yojana feeders</u>

DISCOMs are directed to identify the feeders with more than 50% of loss level and accordingly reduce losses of such feeder and submit the quarterly report about actions taken in this regard to the Commission.

Compliance:

Distribution loss of JGY Feeder:

Sr. No.	Year	Unit sent out [MU]	Unit sold out [MU]	% Loss
1	2014-15	4703.27	2902.94	38.28
2	2015-16	5028.06	3221.70	35.90
3	2016-17	5216.62	3511.92	32.68

Sr. No.	Year	Unit sent out [MU]	Unit sold out [MU]	% Loss
4	2017-18	5483.63	3772.45	31.21
5	2018-19	5874.93	4088.23	30.41
6	2019-20	5930.22	4199.85	29.18

PGVCL covers large rural areas of the state and contribution of JGY category loss in overall loss is also significant. Company has taken stringent steps for reduction of losses of JGY category feeders particularly on high loss JGY feeders for taking corrective action. Besides other activities, following specific activities has been carried out by the Company.

Sr. No.	Activity	UOM	2018 -19	2019-20	2020 – 21 (Upto Sep-20)
1	De-augmentation of Transformer	Nos.	193	121	77
2	DTC meter installation	Nos.	1506	2633	652
3	F meter Replaced - 1 Phase	Nos.	65381	42981	13075
4	F meter Replaced - 3 Phase	Nos.	12489	8968	2448
5	Pilfer proofing of connections - 1 Phase	Nos.	78037	64328	26342
6	Pilfer proofing of connections - 3 Phase	Nos.	11257	12745	3970
7	Replacement of service line having Joint	Nos.	60630	66752	20761
8	Armour service Provided	Nos.	4468	4110	752
9	AB Cable Provided	Kms	921	1161	140
10	5 KVA DTC Installed	Nos.	679	339	39
11	Ag Crossings Removed	Nos.	1233	1016	1105
12	Connections Checked	Nos.	465655	420976	46125
13	Connection Detected	Nos.	73425	60826	4948
14	Locked Premises Verification	Nos.	114567	111382	29721
15	Zero Consumption Verification	Nos.	283748	273998	56426
16	Cross verification of meter reading	Nos.	213898	213338	58008
17	Disconnected conn. Verification	Nos.	112047	117266	26037
18	Unconnected conn. Verification	Nos.	3072	4330	842
19	Verification of X status connection	Nos.	168860	166010	33328

Sr. No.	Activity	UOM	2018 -19	2019-20	2020 – 21 (Upto Sep-20)
20	Verification of Y status connection	Nos.	27434	27919	5058
21	Verification of RGP connections < 50 units	Nos.	255438	366148	64751
22	Verification of NRGP connections < 50 units	Nos.	49486	55382	18371
23	Release of New Connections (All category) through E-Urja	Nos.	53245	56457	11071
24	Maintenance of HT Line	Kms	22900	23647	7015
25	Maintenance of LT Line	Kms	14728	17075	3849
26	Maintenance of T/C Centers	Nos.	18088	19979	6371
27	Augmentation of Transformer for Ag. Load extension	Nos.	170	178	71

As directed by the Commission, PGVCL selected 582 nos. Jyotigram feeders having more than 50% Distribution Loss for focused action such feeders. Aggregate loss of all such feeders was 48.32% as on March, 2017 and have reduced to 43.94% as on March, 2020.

Taking into account the area constraints, available resources and past trend, Company has planned to reduce further 5% during the current financial year.

Commission's comments:

The Commission appreciates the efforts being made by the Petitioners in achieving the target of loss reduction. However, loss reduction activity being continuous, sustained and concerted efforts should be made to reduce the losses in coming years also, as there are still several Feeders having very high loss levels. Thus, the Petitioner is directed to continue efforts for reduction in the losses.

<u>Directive 4: High Distribution Loss of PGVCL</u>

It is observed that the distribution losses are not reducing for PGVCL as projected and approved. PGVCL continuously reporting same type of efforts being undertaken by them for controlling distribution losses. Stakeholders also representing that the honest consumers shall not be adversely affected because of high distribution losses. Now it is required for PGVCL to explore alternative line of action in order to reduce distribution losses for specific areas and accordingly PGVCL is directed to explore other options.

Compliance:

PGVCL is the largest Distribution Company supplying electricity to approximately 50 Lakhs of different category consumers under 12 Districts of Saurashtra & Kutch with 1 Zonal Office, 12 Circle Offices, 45 Divisions and 243 Sub Divisions through 11 KV feeders of various category like; Urban, Industrial, GIDC, Jyotigram, Ag Dom, HT Express, Water Works etc. through HT & LT Network of more than 3 Lakh Kms. over One Lakh Km. geographical area.

PGVCL has started its operation from September, 2005 and over all distribution loss level at the end of March, 2006 was 38.48%. With the strenuous efforts in distribution loss reduction with adoption of new available technology and equipment, best practice implemented across India in other states, continuous monitoring of installation checking activity, etc., PGVCL has been able to achieve reduction of approximately 24% over 15 years of working, and present loss level at the end of March, 2020 is 14.71%. Category wise comparison of distribution loss level as on March, 2006 & March, 2020 is as under:

Sr. No.	Category	% loss as on Mar-06	% loss as on Mar-20
1	Urban	29.90	11.61
2	JGY	64.89	29.18
3	Ag Dom	48.87	25.49
4	Industrial	11.45	1.09
5	GIDC	12.81	-0.13
6	**Overall**	**38.48**	**14.71**

From the table, it can be observed that significant loss reduction is achieved in all category feeders including Jyotigram (JGY) category feeders. Distribution loss of JGY category has been reduced from 64.89% to 29.18 %, while in Urban category, losses are reduced from 29.90 % to 11.61%.

For having focused action on High Loss feeders, feeders are selected based on its Distribution loss on following criteria and specific actions are planned: -

a) Urban category feeders - above 15% loss

b) JGY category feeders - above 50% loss

c) Industrial / GIDC feeders - above 5% loss

d) Ag Dom feeders - above 50% loss

Feeder wise feeder managers for the selected feeders are nominated and responsibility assigned for carrying out loss reduction activities. Comprehensive planning for the work to be carried out on such feeders is done on the basis of actual field report. Moreover, fortnightly & monthly meeting of Feeder Managers is carried out at various level.

Year wise feeders selected and status of Distribution Losses of at the end of each year and at the end of March, 2020 is as under.

Year	Nos. of selected feeders	Reducing trend in Nos. of feeders compared to previous year	% loss at the beginning of Jul-14	% loss at Mar-15	% loss at Mar-16	% loss at Mar-17	% loss at Mar-18	% loss at Mar-19	% loss at Mar-20	% loss at Sep-20	% Increase/reduction in losses in selected feeders
2014-15 (selection in Jul-14)	1283	1022	54.37	48.89	42.12	40.14	38.61	41.00	36.29	38.61	-15.76 % in 6 yrs
2015-16	1491	1297		44.47	40.67	36.51	34.83	36.30	32.56	33.77	-10.99 % in 5.5 yrs
2016-17	1466	1388			44.50	39.01	37.20	38.54	34.42	35.91	-8.59 % in 4.5 yrs
2017-18	1354	1209				42.15	37.44	38.17	34.55	36.11	-6.04 % in 3.5 yrs
2018-19	1307	1112					39.37	37.15	33.93	35.76	-3.61 % in 2.5 yrs
2019-20	1640	1448						43.23	37.51	37.90	-5.33 % in 1.5 yrs
2020-21 (Upto Sep-20)	1292	805							38.38	39.11	0.73 % in 0.5 yrs

It can be seen that significant reduction in Distribution Loss is observed on such feeders. For, FY 2019-20, 1640 Nos. of feeders are selected.

For more specific action, feeders are selected based on Distribution Loss as well as increase compare to respective month of Last year Following criteria has been adopted for selection of such feeders.

a) Urban category feeders - above 15% loss

b) JGY category feeders - above 50% loss

c) Industrial / GIDC feeders - above 5% loss

Accordingly, 110 nos. of feeders were identified and selected for FY 2015-16. The result of loss reduction activities on these feeders is as under:-

Year	% loss at the beginning of the year	% loss at the end of the year	% Loss reduction achieved
2015-16	41.30	34.82	-6.48
2016-17	34.82	31.22	-3.60
2017-18	31.22	30.49	-0.73
2018-19	30.49	32.56	2.07
2019-20	32.56	32.54	-0.02

Similarly, 127 nos. of feeders were identified during FY 2016-17. The result of loss reduction activities on these feeders is as under: -

Year	% loss at the beginning of the year	% loss at the end of the year	% Loss reduction achieved
2016-17	47.07	41.69	-5.38
2017-18	41.69	40.78	-0.91
2018-19	40.78	42.52	1.74
2019-20	42.52	39.44	-3.08

Similarly, 103 nos. of feeders were identified during FY 2017-18. The result of loss reduction activities on these feeders is as under: -

Year	% loss at the beginning of the year	% loss at the end of the year	% Loss reduction achieved
2017-18	45.92	42.52	-3.40
2018-19	42.52	41.43	-1.09
2019-20	41.43	39.83	-1.60

Similarly, 113 nos. of feeders were identified during FY 2018-19. The result of loss reduction activities on these feeders is as under: -

Year	% loss at the beginning of the year	% loss at the end of the year	% Loss reduction achieved
2018-19	35.28	32.06	-3.22
2019-20	32.06	33.26	1.20

For FY 2019-20, 120 Nos. of feeders are selected.

Feeders 2019-20	% loss as on Mar-19	% loss as on Mar-20
120	51.72	47.95

Commission's Comments:

The Commission appreciates activities being carried out by PGVCL to achieve loss reduction target. However, it is observed that during FY 2019-20, distribution losses were marginally higher than that of approved in MYT Order. PGVCL is directed to continue putting up efforts to achieve loss reduction targets and submit report during next year tariff proceedings.

Directive 5: Scheme for Installation of solar pump for agriculture consumers

DISCOMs should expedite the submission of the outcome of pilot project namely Suryashakti Kisan Yojna (SKY).

Compliance:

Response not submitted by petitioner.

Commission's Comments:

The Commission directs to the submit the status report on the pilot project SKY scheme within 3 months from the date of issue of this order.

7.2 Compliance to directives in the recent order

Directive 1:

To carry out study to implement Time of Day Demand Charges i.e. Demand Charges leviable during Peak Demand period and that leviable during off peak Demand Period. It has been Directed to submit the study report by 1st September, 2020.

Compliance:

On behalf of 4 DISCOMs, GUVNL has engaged a consultant to carry out a detailed study as per above directive of the Commission. The study work is under progress and the study report shall be submitted to the Commission in due course upon successful completion of study. The study work was hampered due to Corona Pandemic.

Commission's comments:

The Commission understands that the study involves field work on sampling basis and due to Covid-19 pandemic it has got delayed. The Petitioner is directed to expedite the study work and submit the report positively by 31st May, 2021 to the Commission and also upload the said report on their websites and seek comments from the consumers by 30th June, 2021. The Commission will take appropriate view on the report after hearing the consumers.

Directive 2:

To carry out study for implementation of ToD energy charges for new Residential Roof top Solar Consumer. It has been directed to submit the study report by 1st September, 2020.

Compliance:

On behalf of 4 DISCOMs, GUVNL has engaged a consultant to carry out a detailed study as per above directive of the Commission. The study work is under progress and the study report shall be submitted to the Commission in due course upon successful completion of study. The study work was hampered due to Corona Pandemic.

Commission's comments:

The Commission understands that the study involves field work on sampling basis and due to Covid-19 pandemic it has got delayed. The Petitioner is directed to expedite the study work and submit the report positively by 31st May, 2021 to the Commission and also upload the said report on their websites and seek comments from the consumers by 30th June, 2021. The Commission will take appropriate view on the report after hearing the consumers.

Directive 3:

The Commission by this order has taken various steps viz. reduction in energy charges for LT and HT Lift irrigation category enhancement of Night time rebate for utilisation of electricity by HT Category consumers and enhancement of rebate for Supply at EHV level. While carrying out the said rationalisation, it was expected to achieve some goals which in turn shall benefit the society at large in terms of conservation of energy, betterment of environment, optimisation of power purchases cost and reduction in T & D losses. To analyse whether such goals are met or not, the DISCOMs are directed to keep the record of number of consumers, their consumption during day and night period etc. and report to the Commission on completion of FY 2020-21.

Compliance:

Report will be submitted on completion of FY 2020-21.

Commission's comments:

The response of Petitioner is noted.

Directive 4:

To start Mobile Bill Collection Van facility for the Consumers of Rural area. Compliance of this directive to be submitted latest by 30th June, 2020.

Compliance:

PGVCL has submitted its compliance vide letter dated 24th September, 2020.

Commission's comments:

The response of the petitioner is noted.

7.3 Fresh Directives

Directive 1: Power Purchase Rationalization

The Commission has observed that Petitioner has paid substantial amount under DSM (Deviation & Settlement mechanism) charges as Additional DSM and Sign deviation charge. The Petitioner needs to bring in more accuracy in its forecasting of demand and scheduling of power purchase to ensure DSM are within the permissible limit specified by Hon'ble CERC in its DSM Regulations. The Petitioner needs to submit yearly DSM, Additional DSM, Sign deviation charge details of DSM charges paid and earned including penalty levied on/ collected from all the constituents of Gujarat in the next petition under power purchase section of True-up for FY 2020-21.

Directive 2: Tariff Rationalization

The Commission directs the Petitioner to study the tariff slabs of major consumer categories in other leading / neighbouring States and explore options for further rationalization and reduction in number of slabs.

Directive 3: Conversion of Loan into Grant

The Commission has observed that Petitioner has been mentioning in the notes to audited annual accounts that conversion of Loan into Grant for Central sponsored schemes is pending. The Petitioner is directed to take necessary support from State Govt if needed to pursue the matter with Central Govt for conversion of Loan to Grant and ensure that the necessary amount is received at the earliest. The Commission has been allowing the interest cost on such loans in the ARR and the same has been borne by the consumers in the tariff and needs to be provided appropriate treatment/ adjustment in subsequent ARR. Receipt of such grant on timely manner will reduce the tariff impact on consumers. The Petitioner is directed to prepare status report highlighting the efforts made for follow-up with concerned stakeholders, the amount of Interest and Loan likely to be converted into grant and submit the report by 31st July, 2021 to the Commission.

Directive 4: Green Tariff

The Commission directs the Petitioner to analyse and prepare report on Introduction of Green Tariff for the consumers in the State of Gujarat who are willing to procure such power. The Petitioner to study Green Tariff implementation in other States and accordingly submit the report to the Commission along with next tariff petition including the cost, premium and other parameters.

Directive 5: Implementation of Smart pre-payment meter/ pre-payment meters

The Commission refers to the Electricity (Rights of Consumers) Rules, 2020 notified on 31st December, 2020 and as per this Rule, no connection shall be given without a meter and such meter shall be the Smart pre-payment or pre-payment meter. Further there is recent communication from Ministry of Power, Govt of India seeking plans from the DISCOMs for preparation of scheme of switching over to smart pre-payment/ pre-payment meters in a time bound manner and avail funds from Govt of India. The Petitioner is advised for necessary participation for the scheme which will help in improvement of metering, billing and collection.

Directive 6: Charging Infrastructure for Electric Vehicles

The Commission refers to the Discussion paper on Cross Cutting Themes for Charging Infrastructure for Electric Vehicles issued by Ministry of Power on 17th March, 2021. The Petitioner is suggested to explore the possibility for creation of such infrastructure in its area and may come up with separate capital expenditure plan along with next petition for Commission's approval.

8. Fuel and Power Purchase Price Adjustment

8.1. Fuel Price and Power Purchase Price Adjustment

The Commission its Order in Case No. 1309/2013 and 1313/2013 vide dated 29.10.2013, has approved the formula as mentioned below:

FPPPA = [(PPCA-PPCB)] / [100-Loss in %]; Where,

PPCA	is the average power purchase cost per unit of delivered energy (including transmission cost), computed based on the operational parameters approved by the Commission or principles laid down in the Power Purchase Agreements in Rs./kWh for all the generation sources as approved by the Commission while determining ARR and who have supplied power in the given quarter and transmission charges as approved by the Commission for transmission network calculated as total power purchase cost billed in Rs. Million divided by the total quantum of power purchase in Million Units made during the quarter.
PPCB	is the approved average base power purchase cost per unit of delivered energy (including transmission cost) for all the generating stations considered by the Commission for supplying power to the company in Rs./kWh and transmission charges as approved by the Commission calculated as the total power purchase cost approved by the Commission in Rs. Million divided by the total quantum of power purchase in Million Units considered by the Commission
Loss in %	is the weighted average of the approved level of Transmission and Distribution losses (%) for the four DISCOMs / GUVNL and TPL applicable for a particular quarter or actual weighted average in Transmission and Distribution losses (%) for four DISCOMs / GUVNL and TPL of the previous year for which true-up have been done by the Commission, whichever is lower.

8.2. Base Price of Power Purchase (PPCB)

The Commission has approved the total energy requirement and the total Power Purchase Cost for all the DISCOMs including fixed cost, variable cost, GETCO cost, PGCIL charges, SLDC charges for FY 2021-22 from various sources as given in the Table below:

Table 8-1: Base FPPPA workings for FY 2021-22

Sr. No.	Particulars	FY 2020-21	FY 2021-22
1	Fixed Cost (Rs. Crore)	12,173	11,592
2	Variable Cost (Rs. Crore)	26,105	27,106
3	GETCO Cost (Rs. Crore)	4,502	4,480
4	GUVNL Cost (Rs. Crore)	423	411
5	PGCIL Charges (Rs. Crore)	2,181	2,443
6	SLDC Charges (Rs. Crore)	33	21
7	Total Power Purchase Cost (Rs. Crore)	45,417	46,053
8	Total Energy Requirement (MU)	1,05,652	1,02,775
9	**Power Purchase Cost (Rs./kWh)**	**4.30**	**4.481**
10	Increase in Power Purchase Cost (Rs./ KWh)		0.182
11	Additional FPPPA Charges (Grossed up by Distribution Loss) (Rs./kWh)		0.210
12	Existing FPPPA Charges (Rs./kWh)		1.590
13	**Revised FPPPA Charges (Rs./kWh)**		**1.800**

As mentioned above, the base Power Purchase cost for the DISCOMs is Rs. 4.481/kWh. GUVNL/ DISCOMs may claim difference between actual power purchase cost and base power purchase cost approved in the Table above as per the approved FPPPA formula mentioned above and revised FPPPA base.

Information regarding FPPPA recovery and the FPPPA calculations shall be kept on the website of the Licensee / GUVNL.

For any increase in FPPPA, worked out on the basis of above formula, beyond ten (10) paise per kWh in a quarter, prior approval of the Commission shall be necessary and only on approval of such additional increase by the Commission, the FPPPA can be billed to consumers.

FPPPA calculations shall be submitted to the Commission within one month from the end of the relevant quarter.

8.3. Shifting of Base FPPPA

As stated earlier, the Commission has approved base power purchase cost for FY 2021-22 as Rs. 4.481 /kWh. Thus, there is an increase of Rs. 0.182/kWh in the base power purchase cost of DISCOMs for FY 2021-22 over that of for FY 2020-21 before grossing up with approved loss and Rs. 0.210/kWh after grossing up with approved loss. Accordingly, the base FPPPA for FY 2021-22 is approved as Rs. 1.80/kWh (Rs. 1.59/kWh + Rs. 0.21/kWh).

9. Wheeling Charges and Cross-Subsidy Surcharge

9.1. Allocation Matrix

Regulations 87 of the GERC (MYT) Regulations, 2016 stipulates that the Commission shall determine the Wheeling Charges of Distribution Wires Business of the Distribution Licensees in the ARR and Tariff Order.

The Allocation Matrix for allocation of costs between the Wires Business and Retail Supply Business as specified in the GERC (MYT) Regulations, 2016, is shown in the table below:

Table 9-1: Allocation matrix for segregation of wheeling and retail supply business of Distribution Licensees

Allocation Matrix	Wires Business (%)	Retail Business (%)
Power Purchase Expenses	0%	100%
Employee Expenses	60%	40%
Repairs & Maintenance Expenses	90%	10%
Administration & General Expenses	50%	50%
Other Debits	50%	50%
Extraordinary Items	50%	50%
Net Prior Period Expenses / (Income)	25%	75%
Other Expenses Capitalized	55%	45%
Depreciation	90%	10%
Interest & Finance charges	90%	10%
Interest on Working Capital & Security Deposit	10%	90%
Bad Debts Written off	0%	100%
Income Tax	90%	10%
Return on Equity	90%	10%
Non-Tariff Income	10%	90%

Based on the above Allocation Matrix, the approved ARR for Wires Business and Retail Supply Business for the four State Owned DISCOMs for FY 2021-22 is shown in the Table below:

Table 9-2: Allocation of ARR between Wheeling and Retail Supply Business for the four State Owned DISCOMs for FY 2021-22 (Rs. Crore)

Sr. No.	Particulars	Distribution	Wire Business	Retail Supply Business
1	Power Purchase Expenses	46,053.41	-	46,053.41
2	O & M Expenses	3,333.68	2,096.62	1,237.05
2.1	*Employee Cost*	*2,986.02*	*1,791.61*	*1,194.41*
2.2	*Repairs & Maintenance Expenses*	*398.83*	*358.94*	*39.88*
2.3	*Administration & General Expenses*	*515.76*	*257.88*	*257.88*
2.4	*Other Debits*	-	-	-
2.5	*Extraordinary Items*	-	-	-
2.6	*Net Prior Period Expenses /(Income)*	-	-	-
2.7	*Other Expenses Capitalized*	*(566.93)*	*(311.81)*	*(255.12)*
3	Depreciation	2,061.39	1,855.25	206.14
4	Interest & Finance Charges	345.10	310.59	34.51
5	Interest on Security Deposit	292.26	29.23	263.03
6	Interest on Working Capital	-	-	-
7	Bad Debts written Off	2.66	-	2.66
8	**Total Revenue Expenditure**	**52,088.50**	**4,291.69**	**47,796.81**
9	Return on Equity Capital	1,292.04	1,162.84	129.20
10	Income Tax	53.29	47.96	5.33
11	**Aggregate Revenue Requirement**	**53,433.83**	**5,502.49**	**47,931.34**
12	Less: Non-Tariff Income	825.75	82.57	743.17
13	**Aggregate Revenue Requirement**	**52,608.09**	**5,419.92**	**47,188.17**

9.2. Wheeling charges

The Wheeling Charges for the four Distribution Companies, DGVCL, MGVCL, PGVCL and UGVCL for FY 2021-22, as given below are applicable for use of the distribution system of a Distribution Licensee by other Licenses or Generating Companies or captive power plants or consumers / users who are permitted Open Access under Section 42 (2) of the Electricity Act, 2003

Table 9-3: Wheeling charges for FY 2021-22

Sr. No.	Particulars	Units	Amount
1	Distribution costs of the four DISCOMs	Rs. Crore	5,419.92
2	Distribution cost of the four DISCOMs at 11 kV level (30% of total distribution cost)	Rs. Crore	1,625.98
3	Distribution cost of the four DISCOMs at LT level (70% of total distribution cost)	Rs. Crore	3,793.94
4	Energy input at 11 kV	MUs	97,861

Sr. No.	Particulars	Units	Amount
5	**Wheeling charges at 11 kV**	**Ps./kWh**	**16.62**
6	Energy Input at 400 V	MUs	52,231
7	**Wheeling charges at 400 V (LT)**	**Ps./kWh**	**72.64**

Accordingly, the Commission approves Wheeling Charges for HT network (11 KV system) at Rs. 0.1662/kWh and Wheeling Charges for LT network (400 V system) at Rs. Rs. 0.7264/kWh.

Distribution losses:

The distribution loss at 11 kV and 400 V during FY 2021-22 are given below

Sr. No.	Particulars	Point of Energy Delivered	
		11 kV	**400 Volts**
1	11 kV, 22 kV and 33 kV	10.00%	10.92%
2	400 Volts		1.73%

The losses in HT and LT network are 10.92% and 1.73% respectively, with respect to energy input to the segment of the system. In case injection at 11 kV levels and drawal at LT level envisages use of both the networks, i.e., 11 kV and LT, in that case, the combined loss works out to 10.92% of the energy injection at 11 kV network.

The above Wheeling Charges payable shall be uniform in all the four Distribution Licensees, viz., DGVCL, MGVCL, PGVCL and UGVCL.

9.3. Cross-Subsidy Surcharge

The Cross-Subsidy Surcharge (CSS) is based on the formula given in the Tariff Policy as below:

S = T-[C/ (1-L/100) +D +R]

Where,

- T is the tariff payable by the relevant category of consumers, including reflecting the Renewable Purchase Obligation
- C is the per unit weighted average cost of power purchase by the Licensee, including meeting the Renewable Purchase Obligation

- D is the aggregate of transmission, distribution and wheeling charge applicable to the relevant voltage level
- L is the aggregate of transmission, distribution and commercial losses, expressed as a percentage applicable to the relevant voltage level
- R is the per unit cost of carrying regulatory assets

The CSS based on the above formula is worked out as shown in the Table below:

Table 9-4: Cross subsidy surcharge for FY 2021-22

Sr. No.	Particulars	Units	HT Industry
1	T	Rs./ kWh	7.38
2	C	Rs./ kWh	4.48
3	D	Paise/ kWh	16.62
4	L	%	10%
5	S (Cross Subsidy Surcharge)	Rs./ kWh	2.57

S = 7.38- [4.48/(1-10/100)+0.1662+0] = 2.57

Thus, CSS as per Tariff Policy, 2016 works out to Rs. 2.57/kWh for the four State owned Distribution companies viz. DGVCL, MGVCL, PGVCL and UGVCL.

However, Tariff Policy, 2016 provides that the surcharge shall not exceed 20% of the tariff applicable to the category of the consumers seeking Open Access. Accordingly, the leviable CSS from the consumers of the four State Owned Distribution Companies seeking Open Access, for FY 2020-21 works out to Rs.1.48/kWh.

Accordingly, CSS for HT Category = 1.48 Rs. /kWh for FY 2021-22.

10. Tariff Philosophy and Tariff Proposals

10.1. Tariff Philosophy

The Commission is guided by the provisions of the Electricity Act, 2003, the National Electricity Policy (NEP), the Tariff Policy, the Regulations on Terms and Conditions of Tariff issued by the Central Electricity Regulatory Commission (CERC) and GERC (MYT) Regulations, 2016 notified by the Commission.

Section 61 of the Act lays down the broad principles, and guidelines for determination of retail supply tariff. The basic principle is to ensure that the tariff should progressively reflect the cost of supply of electricity and reduce the cross subsidies amongst categories within a period to be specified by the Commission.

10.2. Tariff Proposal

Discoms have not submitted/ proposed any change in the tariff structure for FY 2021-22. Further, this is an additional year of MYT control period and as already discussed in earlier chapter, the Commission is not considering any change in the present tariff structure.

Commission's Order

The Commission approves the Aggregate Revenue Requirement (ARR) for PGVCL for FY 2021-22 as shown in the Table below:

ARR approved for PGVCL for FY 2021-22 (Rs. Crore)

Sl. No.	Particulars	FY 2021-22
1	Cost of Power Purchase	14,698.49
2	Operations & Maintenance Expenses	1,222.71
2.1	*Employee Cost*	*1,125.40*
2.2	*Repairs & Maintenance*	*180.38*
2.3	*Administration & General Expenses*	*203.37*
2.4	*Other Debits*	-
2.5	*Extraordinary Items*	-
2.6	*Net Prior Period Expenses / (Income)*	-
2.7	*Other Expenses Capitalised*	*(286.44)*
3	Depreciation	976.88
4	Interest & Finance Charges	378.60
5	Interest on Working Capital	-
6	Provision for Bad Debts	2.15
7	**Sub-Total [1 to 6]**	**17,278.83**
8	Return on Equity	675.94
9	Provision for Tax / Tax Paid	5.32
10	**Total Expenditure (7 to 9)**	**17,960.09**
11	Less: Non-Tariff Income	323.75
12	**Aggregate Revenue Requirement (10 – 11)**	**17,636.34**

The retail supply tariffs for PGVCL distribution area for FY 2021-22 determined by the Commission are annexed to this Order. This Order shall come into force with effect from the 1st April, 2021. The revised rate shall be applicable for the electricity consumption from the 1st April, 2021 onwards.

Sd/-	Sd/-	Sd/-
S.R. PANDEY	**M.M. GANDHI**	**ANAND KUMAR**
Member	Member	Chairman

Place: Gandhinagar

Date: 31st March, 2021

ANNEXURE: TARIFF SCHEDULE

TARIFF FOR SUPPLY OF ELECTRICITY AT LOW TENSION, HIGH TENSION, AND EXTRA HIGH TENSION

Effective from 1st April, 2021

General

1. The tariff figures indicated in this tariff schedule are the tariff rates payable by the consumers of Distribution Licensees viz. DGVCL, MGVCL, PGVCL and UGVCL.
2. These tariffs are exclusive of Electricity Duty, tax on sale of electricity, taxes and other charges levied by the Government or other competent authorities from time to time which are payable by the consumers, in addition to the charges levied as per the tariff.
3. All these tariffs for power supply are applicable to only one point of supply.
4. The charges specified are on monthly basis. Distribution Licensee may decide the period of billing and adjust the tariff rate accordingly.
5. Except in cases where the supply is used for purposes for which a lower tariff is provided in the tariff schedule, the power supplied to any consumer shall be utilized only for the purpose for which supply is taken and as provided for in the tariff.
6. The various provisions of the GERC (licensee's power to recover expenditure incurred in providing supply and other miscellaneous charges) Regulations, except Meter Charges, will continue to apply.
7. Conversion of Ratings of electrical appliances and equipments from kilowatt to B.H.P. or vice versa will be done, when necessary, at the rate of 0.746 kilowatt equal to 1 B.H.P.
8. The billing of fixed charges based on contracted load or maximum demand shall be done in multiples of 0.5 (one half) Horse Power, kilo watt or kilo volt ampere (HP, kW, kVA) as the case may be. The fraction of less than 0.5 shall be rounded off to next 0.5. The billing of energy charges will be done on complete one kilo-watt-hour (kWh).
9. The Connected Load for the purpose of billing will be taken as the maximum load connected during the billing period.
10. The Fixed charges, minimum charges, demand charges, and the slabs of consumption of energy for energy charges mentioned shall not be subject to any adjustment on account of existence of any broken period within billing period arising from consumer supply being connected or disconnected any time within the duration of billing period for any reason.
11. Contract Demand shall mean the maximum kW / kVA for the supply of which licensee undertakes to provide facilities to the consumer from time to time.

12. Fuel Cost and Power Purchase Adjustment Charges shall be applicable in accordance with the Formula approved by the Gujarat Electricity Regulatory Commission from time to time.
13. Payment of penal charges for usage in excess of contract demand / load for any billing period does not entitle the consumer to draw in excess of contract demand / load as a matter of right.
14. The payment of power factor penalty does not exempt the consumer from taking steps to improve the power factor to the levels specified in the Regulations notified under the Electricity Act, 2003 and licensee shall be entitled to take any other action deemed necessary and authorized under the Act.
15. Delayed payment charges for all consumers:
    - No delayed payment charges shall be levied if the bill is paid within ten days from the date of billing (excluding date of billing).
    - Delayed payment charges will be levied at the rate of 15% per annum in case of all consumers except Agricultural category for the period from the due date till the date of payment if the bill is paid after due date. Delayed payment charges will be levied at the rate of 12% per annum for the consumer governed under Rate AG from the due date till the date of payment if the bill is paid after due date.
    - For Government dues, the delayed payment charges will be levied at the rate provided under the relevant Electricity Duty Act.

PART - I

SCHEDULE OF TARIFF FOR SUPPLY OF ELECTRICITY

AT LOW AND MEDIUM VOLTAGE

1. RATE: RGP

This tariff is applicable to all services in the residential premises which are not covered under 'Rate: RGP (Rural)' Category.

- Single Phase Supply – Aggregate load up to 6 kW
- Three Phase Supply – Aggregate load above 6 kW

1.1. FIXED CHARGES / MONTH:

Range of Connected Load: (Other than BPL Consumers)

(a)	Up to and including 2 kW	Rs. 15/- per month
(b)	Above 2 to 4 kW	Rs. 25/- per month
(c)	Above 4 to 6 kW	Rs. 45/- per month
(b)	Above 6 kW	Rs. 70/- per month

For BPL Household Consumers

(a)	Fixed Charges	Rs. 5/- per Month

PLUS

1.2. ENERGY CHARGES: FOR THE TOTAL MONTHLY CONSUMPTION: (OTHER THAN BPL CONSUMERS)

(a)	First 50 units	305 Paise per Unit
(b)	Next 50 Units	350 Paise per Unit
(c)	Next 150 Units	415 Paise per Unit
(d)	Above 250 Units	520 Paise per Unit

1.3. ENERGY CHARGES: FOR THE TOTAL MONTHLY CONSUMPTION FOR THE CONSUMERS BELOW POVERTY LINE (BPL) **

(a)	First 50 units	150 Paise per Unit
(b)	For the remaining units	Rate as per RGP

**The consumer who wants to avail the benefit of the above tariff has to produce a copy of the Card issued by the authority concerned at the sub-division office of the Distribution Licensee. The concessional tariff is only for 50 units per month.

1.4. MINIMUM BILL

Payment of fixed charges as specified in 1.1 above

2. RATE: RGP (RURAL)

This tariff will be applicable to all services for residential premises located in areas within Gram Panchayat as defined in the Gujarat Panchayats Act.

- Single Phase Supply – Aggregate load up to 6 kW
- Three Phase Supply – Aggregate load above 6 kW

2.1. FIXED CHARGES

Range of Connected Load: (Other than BPL Consumers)

(a)	Up to and including 2 kW	Rs. 15/- per month
(b)	Above 2 to 4 kW	Rs. 25/- per month
(c)	Above 4 to 6 kW	Rs. 45/- per month
(b)	Above 6 kW	Rs. 70/- per month

For BPL Household Consumers

Fixed Charges	Rs. 5/- per month

PLUS

2.2. ENERGY CHARGES: FOR THE TOTAL MONTHLY CONSUMPTION:
(OTHER THAN BPL CONSUMERS)

(a)	First 50 units	265 Paise per Unit
(b)	Next 50 Units	310 Paise per Unit

(c)	Next 150 units	375 Paise per Unit
(d)	Above 250 units	490 Paise per Unit

2.3. ENERGY CHARGES: FOR THE TOTAL MONTHLY CONSUMPTION: FOR THE CONSUMER BELOW POVERTY LINE (BPL)**

(a)	First 50 units	150 Paise per Unit
(b)	For remaining units	Rate as per RGP (Rural)

**The consumer who wants to avail the benefit of the above tariff has to produce a copy of the Card issued by the authority concerned at the sub-division office of the Distribution Licensee. The concessional tariff is only for 50 units per month.

2.4. MINIMUM BILL

Payment of fixed charges as specified in 2.1 above.

Note: If the part of the residential premises is used for non-residential (commercial) purposes by the consumers located within 'Gram Panchayat' as defined in Gujarat Panchayat Act, entire consumption will be charged under this tariff.

3. RATE: GLP

This tariff is applicable to

(i) the educational institutes and other institutions registered with the Charity Commissioner or similarly placed authority designated by the Government of India for such intended purpose;

(ii) research and development laboratories;

(iii) Street Light*

(a)	Fixed charges	Rs. 70/- per Installation per Month
(b)	Energy charges	390 Paise per Unit

* Maintenance of street lighting conductor provided on the pole to connect the street light is to be carried out by Distribution Licensee. The consumer utilising electricity for street lighting purpose shall arrange for renewal, maintenance and replacement of lamp, associated Fixture, connecting wire, disconnecting device, switch including time switch etc. at his cost by person

authorised by him in this behalf under Rule-3 of the Indian Electricity Rules, 1956/ Rules issued by CEA under the Electricity Act, 2003.

4. RATE: NON-RGP

This tariff is applicable to the services for the premises those are not covered in any other tariff categories and having aggregate load up to and including 40 kW.

Consumer under this category may opt to be charged as per category – 'RATE: LTMD'

4.1. FIXED CHARGES PER MONTH

(a)	First 10 kW of connected load	Rs. 50/- per kW
(b)	For next 30 kW of connected load	Rs. 85/- per kW

PLUS

4.2. ENERGY CHARGES:

(a)	For installation having contracted load up to and including 10 kW: for entire consumption during the month	435 Paise per Unit
(b)	For installation having contracted load exceeding 10 kW: for entire consumption during the month	465 Paise per Unit

4.3. MINIMUM BILL PER INSTALLATION FOR SEASONAL CONSUMERS

4.3.1. "Seasonal Consumers", shall mean a consumer who takes and uses power supply for ice factory, ice candy machines, ginning and pressing factory, oil mill, rice mill, huller, salt industry, sugar factory, khandsari, cold storage plants (including such plants in fisheries industry), tapioca industries manufacturing starch, vegetable dehydration industries.

4.3.2. Any consumer, who desires to be billed for the minimum charges on annual basis shall intimate to that effect in writing at least one month before commencement of billing period about the off-season during which energy consumption, if any, shall be mainly for overhauling of the plant and machinery. The off-season period at any time shall be a full calendar month/months. The total period of the off-season so declared and observed shall be not less than three calendar months in a calendar year.

4.3.3. The total minimum amount under the head "Fixed and Energy Charges" payable by the seasonal consumer satisfying the eligibility criteria under sub-clause 4.3.1 above and complying with the provision stipulated under sub-clause 4.3.2 above shall be Rs. 1800 per annum per kW of the contracted load/ sanctioned load.

4.3.4. The units consumed during the off-season period shall be charged for at a flat rate of 480 Paise per unit.

4.3.5. The electricity bills related to the off-season period shall not be taken into account towards the amount payable against the annual minimum bill. The amount paid by the consumer towards the electricity bills related to the seasonal period only under the heads "Fixed Charges" and "Energy Charges", shall be taken into account while determining the amount of short-fall payable towards the annual minimum bill as specified under sub-clause 4.3.3 above.

4.3.6. Seasonal consumer is required to submit to the Distribution Licensee an irrevocable Bank Guarantee from a Nationalised or Scheduled Commercial Bank equal to the difference of amount/ Bank Guarantee lying with the Distribution Licensee as Security Deposit and minimum bill calculated at the rate shown in para 4.3.3 with the Contracted Load/ Sanctioned Load of such consumer. If the Contracted Load/ Sanctioned Load is revised upward during the calendar year, the consumer shall submit a revised Bank Guarantee or additional Bank Guarantee as calculated above to the Licensee. The cost of such Bank Guarantee/s shall be borne by the consumer. It shall be the responsibility of the consumer to keep the bank guarantee/s valid at all times and to renew the bank guarantee/s at least 1 months prior to its expiry

5. RATE: LTMD

This tariff is applicable to the services for the premises those are not covered in any other tariff categories and having aggregate load above 40 kW and up to 100 kW.

This tariff shall also be applicable to consumer covered in category- 'Rate: Non-RGP' so opts to be charged in place of 'Rate: Non-RGP' tariff.

5.1. DEMAND CHARGE:

(a)	For billing demand up to the Contract demand		
	(i)	For first 40 kW of billing demand	Rs. 90/-per kW per month
	(ii)	Next 20 kW of billing demand	Rs. 130/-per kW per month
	(iii)	Above 60 kW of billing demand	Rs. 195/- per kW per month
(b)	For billing demand in excess of the contract demand		Rs. 265/- per kW

PLUS

5.2. ENERGY CHARGE:

For the entire consumption during the month	460 Paise per Unit

PLUS

5.3. REACTIVE ENERGY CHARGES:

For all the reactive units (kVARh) during the month	10 Paise per kVARh

5.4. BILLING DEMAND

The billing demand shall be highest of the following:

a) Eighty-five percent of the contract demand
b) Actual maximum demand registered during the month
c) 6 kW

5.5. MINIMUM BILL

Payment of demand charges every month based on the billing demand.

5.6. SEASONAL CONSUMERS TAKING LTMD SUPPLY:

5.6.1 The expression, “Seasonal Consumer”, shall mean a consumer who takes and uses power supply for ice factory, ice-candy machines, ginning and pressing factory, oil mill, rice mill, salt industry, sugar factory, khandsari, cold storage plants (including such plants in fishery industry), tapioca industries manufacturing starch, pumping load or irrigation, white coal manufacturers, vegetable dehydration industries.

5.6.2 Any consumer, who desires to be billed for the minimum charges on annual basis shall intimate to that effect in writing at least one month before commencement of billing period about the off-season during which energy consumption, if any, shall be mainly for overhauling of the plant and machinery. The off-season period at any time shall be a full calendar month/months. The total period of the off-season so declared and observed shall be not less than three calendar months in a calendar year.

5.6.3 The total minimum amount under the head “Demand and Energy Charges” payable by a seasonal consumer satisfying the eligibility criteria under sub-clause 5.6.1 above and complying with provisions stipulated under sub-clause 5.6.2 above shall be Rs. 2970 per annum per kW of the billing demand.

5.6.4 The billing demand shall be the highest of the following:

a) The highest of the actual maximum demand registered during the calendar year.

b) Eighty-five percent of the arithmetic average of contract demand during the year.

c) 6 kW

5.6.5 Units consumed during the off-season period shall be charged for at the flat rate of 470 Paise per unit.

5.6.6 Seasonal consumer is required to submit to the Distribution Licensee an irrevocable Bank Guarantee from a Nationalised or Scheduled Commercial Bank equal to the difference of amount/ Bank Guarantee lying with the Licensee as Security Deposit and minimum bill calculated at the rate shown in para 5.6.3 for the higher of Contract Demand or Billing Demand. If the Contract Demand is revised upward during the calendar year, the consumer shall submit a revised Bank Guarantee or additional Bank Guarantee as calculated above to the Licensee. The cost of such Bank Guarantee/s shall be borne by the consumer. It shall be the responsibility of the consumer to keep the bank guarantee/s valid at all times and to renew the bank guarantee/s at least 1 months prior to its expiry.

6. RATE: NON-RGP NIGHT

This tariff is applicable for aggregate load up to 40 kW and using electricity **exclusively during night hours** from 10:00 PM to 06:00 AM next day. (The supply hours shall be regulated through time switch to be provided by the consumer at his cost.)

6.1. FIXED CHARGES PER MONTH:

50% of the Fixed charges specified in Rate Non-RGP above

PLUS

6.2. ENERGY CHARGES:

For the entire consumption during the month	260 Paise per unit

NOTE:

1. *15% of the contracted demand can be availed beyond the night hours prescribed as per para 6 above.*
2. *10% of total units consumed during the billing period can be availed beyond the night hours prescribed as per para 6 above.*
3. *In case the consumer failed to observe condition no. 1 above during any of the billing month, then fixed charge during the relevant billing month shall be billed as per Non-RGP category fixed charge rates given in para 4.1 of this schedule.*
4. *In case the consumer failed to observe condition no. 2 above during any of the billing month, then entire energy consumption during the relevant billing month shall be billed as per Non-RGP category energy charge rates given in para 4.2 of this schedule.*
5. *In case the consumer failed to observe above condition no. 1 and 2 both during any of the billing month, then fixed charge and entire energy consumption during the relevant billing month shall be billed as per Non-RGP category fixed charge and energy charge rates given in para 4.1 and 4.2 respectively, of this schedule.*
6. *This tariff shall be applicable if the consumer so opts to be charged in place of Non-RGP tariff by using electricity exclusively during night hours as above.*

This option can be exercised to shift from NON-RGP tariff category to NON-RGP NIGHT tariff or from NON-RGP NIGHT tariff category to NON-RGP tariff four times in a calendar year by giving not less than 15 days' advance notice in writing before commencement of billing period.

7. RATE: LTMD-NIGHT

This tariff is applicable for aggregate load above 40 kW and using electricity **exclusively during night hours** from 10.00 PM to 06.00 AM next day. (The supply hours shall be regulated through time switch to be provided by the consumer at his cost.)

7.1 DEMAND CHARGES PER MONTH:

50% of the Demand charges specified in Rate **LTMD** above

PLUS

7.2. ENERGY CHARGES:

For entire consumption during the month	260 Paise per unit

PLUS

7.3. REACTIVE ENERGY CHARGES:

For all reactive units (kVARh) drawn during the month	10 Paise per kVARh

NOTE:

1. *15% of the contracted demand can be availed beyond the night hours prescribed as per para 7 above.*
2. *10% of total units consumed during the billing period can be availed beyond the night hours prescribed as per para 7 above.*
3. *In case the consumer failed to observe condition no. 1 above during any of the billing month, then demand charge during the relevant billing month shall be billed as per LTMD category demand charge rates given in para 5.1 of this schedule.*
4. *In case the consumer failed to observe condition no. 2 above during any of the billing month, then entire energy consumption during the relevant billing month shall be billed as per LTMD category energy charge rates given in para 5.2 of this schedule.*
5. *In case the consumer failed to observe above condition no. 1 and 2 both during any of the billing month, then entire energy consumption during the relevant billing month shall be billed as per LTMD category demand charge and energy charge rates given in para 5.1 and 5.2 respectively, of this schedule.*
6. *This tariff shall be applicable if the consumer so opts to be charged in place of LTMD tariff by using electricity exclusively during night hours as above.*
7. *This option can be exercised to shift from LTMD tariff category to LTMD NIGHT tariff or from LTMD- NIGHT tariff category to LTMD tariff four times in a calendar year by giving not less than 15 days' advance notice in writing before commencement of billing period.*

8. RATE: LTP- LIFT IRRIGATION

Applicable for supply of electricity to Low Tension Agricultural consumers contracting load up to 125 HP requiring continuous (twenty-four hours) power supply for lifting water from surface water sources such as canal, river, & dam and supplying water directly to the fields of farmers for agricultural irrigation only.

(a)	Fixed charges per month	Rs. 20/- per HP

PLUS

(b)	Energy charges per month; For entire consumption during the month	80 Paise per Unit

9. RATE: WWSP

This tariff shall be applicable to services used for water works and sewerage pumping purposes.

9.1 Type I- Water works and sewerage pumps operated by other than local authority

(a)	Fixed charges per month	Rs. 25/- per HP
	PLUS	
(b)	Energy charges per month; For entire consumption during the month	430 Paise per Unit

9.2 Type II- Water Works and sewerage pumps operated by local authority such as Municipal Corporation, Gujarat Water Supply & Sewerage Board located outside Gram Panchayat Area will also attract this tariff:

(a)	Fixed charges per month	Rs. 20/- per HP
	PLUS	
(b)	Energy charges per month; For entire consumption during the month	410 Paise per Unit

9.3 Type III- Water Works and sewerage pumps operated by Municipalities/ Nagarpalikas/ and Gram Panchayats or Gujarat Water Supply & Sewerage Board for its installations located in Gram Panchayats:

Energy charges per month: For entire consumption during the month	320 Paise /Unit

9.4 TIME OF USE DISCOUNT:

Applicable to all the water works consumers having connected load of 50 HP and above for the energy consumption during the Off-Peak Load Hours of the Day.

For energy consumption during the off-peak period, viz, 1100 Hrs to 1800 Hrs	40 Paise per Unit

For energy consumption during night hours, viz, 2200 Hrs to 0600 Hrs next day	85 Paise per Unit

10. RATE: AG

This tariff is applicable to services used for irrigation purposes only excluding installations covered under LTP- Lift Irrigation category.

10.1 The rates for following group are as under:

10.1.1 HP BASED TARIFF

For entire contracted load	Rs. 200 per HP per month

ALTERNATIVELY

10.1.2 METERED TARIFF

Fixed Charges	Rs. 20 per HP per month
Energy Charges: For entire consumption during the month	60 Paise per Unit

10.1.3 TATKAL SCHEME

Fixed Charges	Rs. 20 per HP per month
Energy Charges: For entire consumption during the month	80 Paise per Unit

NOTE: The consumers under Tatkal scheme shall be eligible for normal metered tariff as above, on completion of five years period from the date of commencement of supply.

10.2 No machinery other than pump water for irrigation (and a single bulb or CFL up to 40 watts) will be permitted under this tariff. Any other machinery connected in the installation governed under this tariff shall be charged separately at appropriate tariff for which consumers shall have to take separate connection.

10.3 Agricultural consumers who desire to supply water to brick manufacturing units shall have to pay Rs. 100/HP per annum subject to minimum of Rs. 2000/- per year for each brick Mfg. Unit to which water is supplied in addition to existing rate of HP based / metered agricultural tariff.

10.4 Such Agricultural consumers shall have to pay the above charges for a full financial year irrespective of whether they supply water to the brick manufacturing unit for full or part of the Financial Year.

Agricultural consumers shall have to declare their intention for supply of the water to such brick manufacturing units in advance and pay charges accordingly before commencement of the financial year (i.e. in March every year).

11. RATE- TMP

This tariff is applicable to services of electricity supply for temporary period at the low voltage. A consumer not taking supply on regular basis under a proper agreement shall be deemed to be taking supply for temporary period.

11.1 FIXED CHARGE

Fixed Charge per Installation	Rs. 15 per kW per Day

11.2 ENERGY CHARGE

A flat rate of	465 Paise per Unit

Note: Payment of bills is to be made within seven days from the date of issue of the bill. Supply would be disconnected for non-payment of dues on 24 hours' notice.

12. RATE- LT ELECTRIC VEHICLE (EV) CHARGING STATIONS

This tariff is applicable to consumers who use electricity **exclusively** for Electric Vehicle Charging installations.

Other consumers can use their regular electricity supply for charging electric vehicle under same regular category i.e. RGP, RGP (RURAL), GLP, LTMD, NON-RGP NIGHT, LTMD-NIGHT, etc. as the case may be.

12.1 FIXED CHARGES

Fixed Charge	Rs. 25 per Installation per Month

12.2 ENERGY CHARGES: FOR THE ENTIRE MONTHLY CONSUMPTION

Energy Charge	410 Paise per Unit

PART - II

TARIFFS FOR SUPPLY OF ELECTRICITY AT HIGH TENSION

(3.3 KV AND ABOVE, 3-PHASE 50 HERTZ), AND EXTRA HIGH TENSION

The following tariffs are available for supply at high tension for large power services for contract demand not less than 100 kVA

13. RATE- HTP-1

This tariff will be applicable for supply of electricity to HT consumers contracted for 100 kVA and above for regular power supply and requiring the power supply for the purposes not specified in any other HT Categories.

13.1 DEMAND CHARGES:

13.1.1 For billing demand up to contract demand

(a)	For the first 500 kVA of billing demand	Rs. 150/- per kVA per month
(b)	For next 500 kVA of billing demand	Rs. 260/- per kVA per month
(c)	For billing demand in excess of 1000 kVA	Rs. 475/- per kVA per month

13.1.2 For billing Demand in Excess of Contract Demand

For billing demand in excess over the contract demand	Rs. 555 per kVA per month

PLUS

13.2 ENERGY CHARGES

For entire consumption during the month		
(a)	Up to 500 kVA of billing demand	400 Paise per unit
(b)	For billing demand above 500 kVA and up to 2500 kVA	420 Paise per Unit
(c)	For billing demand above 2500 kVA	430 Paise per Unit

PLUS

13.3 TIME OF USE CHARGES

For energy consumption during the two peak periods, viz, 0700 Hrs to 1100 Hrs and 1800 Hrs. to 2200 Hrs.		
(a)	For Billing Demand up to 500 kVA	45 Paise per unit
(b)	For billing demand above 500 kVA	85 Paise per Unit

13.4 BILLING DEMAND

The billing demand shall be the highest of the following:

a) Actual maximum demand established during the month
b) Eighty-five percent of the contract demand
c) One hundred kVA

13.5 MINIMUM BILLS:

Payment of “demand charges” based on kVA of billing demand.

13.6 POWER FACTOR ADJUSTMENT CHARGES:

13.6.1 Penalty for poor Power Factor:

a) The power factor adjustment charges shall be levied at the rate of 1% on the total amount of electricity bills for the month under the head “Energy Charges”, arrived at using tariff as per para 13.2 of this schedule, for every 1% drop or part thereof in the average power factor during the month below 90% up to 85%.
b) In addition to the above clause, for every 1% drop or part thereof in average power factor during the month below 85% at the rate of 2% on the total amount of electricity bill for that month under the head “Energy Charges”, arrived at using tariff as per para 13.2 of this schedule, will be charged.

13.6.2 Power Factor Rebate

If the power factor of the consumer’s installation in any month is above 95%, the consumer will be entitled to a rebate at the rate of 0.5% (half percent) in excess of 95% power factor on the total amount of electricity bill for that month under the head “Energy Charges”, arrived at using tariff as per para 13.2 of this schedule, for every 1% rise or part thereof in the average power factor during the month above 95%.

13.7 MAXIMUM DEMAND AND ITS MEASUREMENT:

The maximum demand in kW or kVA, as the case may be, shall mean an average kW/kVA supplied during consecutive 30/15 minutes or if consumer is having parallel operation with the grid and has opted for 3 minutes, period of maximum use where such meter with the features of reading the maximum demand in kW/kVA directly, have been provided.

13.8 CONTRACT DEMAND:

The contract demand shall mean the maximum kW/kVA for the supply, of which the supplier undertakes to provide facilities from time to time.

13.9 REBATE FOR SUPPLY AT EHV:

On Energy charges:		**Rebate @**
(a)	If supply is availed at 33/66 kV	0.75%
(b)	If supply is availed at 132 kV and above	1.25%

13.10 CONCESSION FOR USE OF ELECTRICITY DURING NIGHT HOURS:

For the consumer eligible for using supply at any time during 24 hours, entire consumption shall be billed at the energy charges specified above. However, the energy consumed during night hours of 10.00 PM to 06.00 AM next morning shall be eligible for concession at the rate of 43 Paise per unit.

13.11 SEASONAL CONSUMERS TAKING HT SUPPLY:

13.11.1 The expression, "Seasonal Consumer", shall mean a consumer who takes and uses power supply for ice factory, ice-candy machines, ginning and pressing factory, oil mill, rice mill, salt industry, sugar factory, khandsari, cold storage plants (including such plants in fishery industry), tapioca industries manufacturing starch, pumping load or irrigation, white coal manufacturers, vegetable dehydration industries.

13.11.2 Any consumer, who desires to be billed for the minimum charges on annual basis shall intimate to that effect in writing at least one month before commencement of billing period about the off-season during which energy consumption, if any, shall be mainly for overhauling of the plant and machinery. The off-season period at any time shall be a full calendar month/months. The total period of the off-season so declared and observed shall be not less than three calendar months in a calendar year.

13.11.3 The total minimum amount under the head "Demand and Energy Charges" payable by a seasonal consumer satisfying the eligibility criteria under sub-clause 13.11.1 above and complying with provisions stipulated under sub-clause 13.11.2 above shall be Rs. 4550 per annum per kVA of the billing demand.

13.11.4 The billing demand shall be the highest of the following:

a) The highest of the actual maximum demand registered during the calendar year.
b) Eighty-five percent of the arithmetic average of contract demand during the year.
c) One hundred kVA

13.11.5 Units consumed during the off-season period shall be charged for at the flat rate of 430 Paise per unit.

13.11.6 Electricity Bills paid during off-season period shall not be taken into account towards the amount payable against the annual minimum bill. The amount paid by the consumer towards the electricity bills for seasonal period only under the heads "Demand Charges" and "Energy Charges" shall be taken into account while determining the amount payable towards the annual minimum bill.

13.11.7 Seasonal consumer is required to submit to the Distribution Licensee an irrevocable Bank Guarantee from a Nationalised or Scheduled Commercial Bank equal to the difference of amount/ Bank Guarantee lying with the Licensee as Security Deposit and minimum bill calculated at the rate shown in para 13.11.3 for the higher of Contract Demand or Billing Demand. If the Contract Demand is revised upward during the calendar year, the consumer shall submit a revised Bank Guarantee or additional Bank Guarantee as calculated above to the Licensee. The cost of such Bank Guarantee/s shall be borne by the consumer. It shall be the responsibility of the consumer to keep the bank guarantee/s valid at all times and to renew the bank guarantee/s at least 1 months prior to its expiry.

14. RATE- HTP-II

Applicability: This tariff shall be applicable for supply of energy to HT consumers contracting for 100 kVA and above, requiring power supply for Water Works and Sewerage pumping stations run by Local Authorities and GW & SB. GIDC Water Works.

14.1 DEMAND CHARGES:

14.1.1 For billing demand up to contract demand

(a)	For the first 500 kVA of billing demand	Rs. 115/- per kVA per month
(b)	For next 500 kVA of billing demand	Rs. 225/- per kVA per month
(c)	For billing demand in excess of 1000 kVA	Rs. 290/- per kVA per month

14.1.2 For billing demand in excess of contract demand

For billing demand in excess of contract demand	Rs. 360 per kVA per month

PLUS

14.2 ENERGY CHARGES:

For entire consumption during the month		
(a)	Up to 500 kVA of billing demand	435 Paise per unit

(b)	For billing demand above 500 kVA and up to 2500 kVA	455 Paise per Unit
(c)	For billing demand above 2500 kVA	465 Paise per Unit

PLUS

14.3 TIME OF USE CHARGES:

For energy consumption during the two peak periods, viz, 0700 Hrs to 1100 Hrs and 1800 Hrs. to 2200 Hrs.		
(a)	For Billing Demand up to 500 kVA	45 Paise per unit
(b)	For billing demand above 500 kVA	85 Paise per Unit

14.4	Billing Demand	Same as HTP-I Tariff
14.5	Minimum Bill	
14.6	Maximum demand and its measurement	
14.7	Contract Demand	
14.8	Rebate for supply at EHV	
14.9	Concession for use of electricity during night hours	

14.10 POWER FACTOR ADJUSTMENT CHARGES

14.10.1 Penalty for poor Power Factor:

a) The power factor adjustment charges shall be levied at the rate of 1% on the total amount of electricity bills for the month under the head "Energy Charges", arrived at using tariff as per para 14.2 of this schedule, for every 1% drop or part thereof in the average power factor during the month below 90% up to 85%.

b) In addition to the above clause, for every 1% drop or part thereof in average power factor during the month below 85% at the rate of 2% on the total amount of electricity bill for that month under the head "Energy Charges", arrived at using tariff as per para 14.2 of this schedule, will be charged.

14.10.2 Power Factor Rebate:

If the power factor of the consumer's installation in any month is above 95%, the consumer will be entitled to a rebate at the rate of 0.5% (half percent) in excess of 95% power factor on the total amount of electricity bill for that month under the head "Energy Charges", arrived at using tariff as per para 14.2 of this schedule, for every 1% rise or part thereof in the average power factor during the month above 95%.

15. RATE- HTP-III

This tariff shall be applicable to a consumer taking supply of electricity at high voltage, contracting for not less than 100 kVA for temporary period. A consumer not taking supply on regular basis under a proper agreement shall be deemed to be taking supply for temporary period.

15.1 DEMAND CHARGES:

For billing demand up to contract demand	Rs. 18/- per kVA per day
For billing demand in excess of contract demand	Rs. 20/- per kVA per day

15.2 ENERGY CHARGES:

For all units consumed during the month	660 Paise/Unit

PLUS

15.3 TIME OF USE CHARGES:

Additional charge for energy consumption during two peak periods, viz, 0700 Hrs. to 1100 Hrs. and 1800 Hrs. to 2200 Hrs.	85 Paise per Unit

15.4	Billing Demand	Same as HTP-I Tariff
15.5	Minimum bill	
15.6	Maximum demand and its measurement	
15.7	Contract Demand	
15.8	Rebate for supply at EHV	

15.9 POWER FACTOR ADJUSTMENT CHARGES

15.9.1 Penalty for poor Power Factor:

a) The power factor adjustment charges shall be levied at the rate of 1% on the total amount of electricity bills for the month under the head "Energy Charges", arrived at using tariff as per para 15.2 of this schedule, for every 1% drop or part thereof in the average power factor during the month below 90% up to 85%.

b) In addition to the above clause, for every 1% drop or part thereof in average power factor during the month below 85% at the rate of 2% on the total amount of electricity bill for that month under the head "Energy Charges", arrived at using tariff as per para 15.2 of this schedule, will be charged.

15.9.2 Power Factor Rebate:

If the power factor of the consumer's installation in any month is above 95%, the consumer will be entitled to a rebate at the rate of 0.5% (half percent) in excess of 95% power factor on the total amount of electricity bill for that month under the head "Energy Charges", arrived at using tariff as per para 15.2 of this schedule, for every 1% rise or part thereof in the average power factor during the month above 95%.

16. RATE- HTP-IV

This tariff shall be applicable for supply of electricity to HT consumers opting to use electricity exclusively during night hours from 10.00 PM to 06.00 AM next day and contracted for regular power supply of 100 kVA and above.

16.1 DEMAND CHARGES:

1/3rd of the Fixed Charges specified in Rate HTP-I above

PLUS

16.2 ENERGY CHARGES:

For all units consumed during the month	225 Paise/Unit

16.3 Billing Demand
16.4 Minimum Bill
16.5 Maximum demand and its measurement
16.6 Contract Demand
16.7 Rebate for supply at EHV

Same as HTP-I Tariff

16.8 POWER FACTOR ADJUSTMENT CHARGES:

16.8.1 Penalty for poor Power Factor:

a) The power factor adjustment charges shall be levied at the rate of 1% on the total amount of electricity bills for the month under the head “Energy Charges”, arrived at using tariff as per para 16.2 of this schedule, for every 1% drop or part thereof in the average power factor during the month below 90% up to 85%.
b) In addition to the above clause, for every 1% drop or part thereof in average power factor during the month below 85% at the rate of 2% on the total amount of electricity bill for that month under the head “Energy Charges”, arrived at using tariff as per para 16.2 of this schedule, will be charged.

16.8.2 Power Factor Rebate:

If the power factor of the consumer’s installation in any month is above 95%, the consumer will be entitled to a rebate at the rate of 0.5% (half percent) in excess of 95% power factor on the total amount of electricity bill for that month under the head “Energy Charges”, arrived at using tariff as per para 16.2 of this schedule, for every 1% rise or part thereof in the average power factor during the month above 95%.

NOTE:

1. 15% of the contracted demand can be availed beyond the night hours prescribed as per para 16 above.
2. 10% of total units consumed during the billing period can be availed beyond the night hours prescribed as per para 16 above.
3. In case the consumer failed to observe condition no. 1 above during any of the billing month, then demand charge during the relevant billing month shall be billed as per HTP-I category demand charge rates given in para 13.1 of this schedule.
4. In case the consumer failed to observe condition no. 2 above during any of the billing month, then entire energy consumption during the relevant billing month shall be billed as per HTP-I category energy charge rates given in para 13.2 of this schedule.
5. In case the consumer failed to observe above condition no. 1 and 2 both during any of the billing month, then demand charge and entire energy consumption during the relevant billing month shall be billed as per HTP-I category demand charge and energy charge rates given in para 13.1 and 13.2 respectively, of this schedule.
6. This tariff shall be applicable if the consumer so opts to be charged in place of HTP-I tariff by using electricity exclusively during night hours as above.

7. This option can be exercised to shift from HTP-I tariff category to HTP-IV tariff or from HTP-IV tariff category to HTP-I tariff four times in a calendar year by giving not less than 15 days' advance notice in writing before commencement of billing period

17. RATE- HTP-V

HT - Agricultural (for HT Lift Irrigation scheme only)

This tariff shall be applicable for supply of electricity to High Tension Agricultural consumers contracting for 100 kVA and above, requiring power supply for lifting water from surface water sources such as canal, river and dam, and supplying water directly to the fields of farmers for agricultural irrigation only.

17.1 DEMAND CHARGES:

Demand Charges Rs. 25 per kVA per month

PLUS

17.2 ENERGY CHARGES:

For all units consumed during the month	80 Paise/Unit

17.3 Billing Demand
17.4 Minimum bill
17.5 Maximum demand and its measurement
17.6 Contract Demand
17.7 Rebate for supply at EHV

} Same as per HTP-I Tariff

17.8 POWER FACTOR ADJUSTMENT CHARGES

17.8.1 Penalty for poor power factor

a) The power factor adjustment charges shall be levied at the rate of 1% on the total amount of electricity bills for the month under the head "Energy Charges", arrived at using tariff as per para 17.2 of this schedule, for every 1% drop or part thereof in the average power factor during the month below 90% up to 85%.

b) In addition to the above clause, for every 1% drop or part thereof in average power factor during the month below 85% at the rate of 2% on the total amount of electricity bill for that month under the head "Energy Charges", arrived at using tariff as per para 17.2 of this schedule, will be charged

17.8.2 Power Factor Rebate

If the power factor of the consumer's installation in any month is above 95%, the consumer will be entitled to a rebate at the rate of 0.5% (half percent) in excess of 95% power factor on the total amount of electricity bill for that month under the head "Energy Charges", arrived at using tariff as per para 17.2 of this schedule, for every 1% rise or part thereof in the average power factor during the month above 95%.

18. RATE- RAILWAY TRACTION

This tariff is applicable for power supply to Railway Traction at 132 kV/66 kV.

18.1 DEMAND CHARGES:

(a)	For billing demand up to the contract demand	Rs. 180 per kVA per month
(b)	For billing demand in excess of contract demand	Rs. 425 per kVA per month

NOTE: In case of the load transfer for traction supply due to non-availability of power supply at preceding or succeeding point of supply or maintenance at Discom's level, excess demand over the contract demand shall be charged at normal rate at appropriate point of supply.

Normal Demand Charges will also apply in case of bunching of trains. However, DISCOMs shall charge excess demand charges while raising the bills and Railways have to give convincing details and documentary proof of bunching of trains if they want to be charged at the normal demand charges. If satisfactory proof of bunching of trains is provided, Discom shall consider that occasion for normal demand charges, otherwise excess demand charges will be applicable specified as above at 18.1 (b).

PLUS

18.2 ENERGY CHARGES:

For all the units consumed during the month	500 Paise per Unit

18.3 Billing Demand:
18.4 Minimum Bill
18.5 Maximum demand and its measurement
18.6 Contract Demand
18.7 Rebate for supply at EHV

Same as HTP-I Tariff

18.8 POWER FACTOR ADJUSTMENT CHARGES

18.8.1 Penalty for poor Power Factor:

a) The power factor adjustment charges shall be levied at the rate of 1% on the total amount of electricity bills for the month under the head “Energy Charges”, arrived at using tariff as per para 18.2 of this schedule, for every 1% drop or part thereof in the average power factor during the month below 90% up to 85%.

b) In addition to the above clause, for every 1% drop or part thereof in average power factor during the month below 85% at the rate of 2% on the total amount of electricity bill for that month under the head “Energy Charges”, arrived at using tariff as per para 18.2 of this schedule, will be charged.

18.8.2 Power Factor Rebate:

If the power factor of the consumer’s installation in any month is above 95%, the consumer will be entitled to a rebate at the rate of 0.5% (half percent) in excess of 95% power factor on the total amount of electricity bill for that month under the head “Energy Charges”, arrived at using tariff as per para 18.2 of this schedule, for every 1% rise or part thereof in the average power factor during the month above 95%.

19. RATE-HT ELECTRIC VEHICLE (EV) CHARGING STATIONS

This tariff is applicable to consumers who use electricity **exclusively** for Electric Vehicle Charging installations.

Other consumers can use their regular electricity supply for charging electric vehicle under same regular category i.e. HTP-I, HTP-II, HTP-III, HTP-IV, HTP-V, RAILWAY TRACTION as the case may be.

19.1 DEMAND CHARGES:

(a)	For billing demand up to the contract demand	Rs. 25/- per kVA per month
(b)	For billing demand in excess of contract demand	Rs. 50/- per kVA per month

PLUS

19.2 ENERGY CHARGES: FOR THE TOTAL MONTHLY CONSUMPTION

ENERGY CHARGE	400 Paise per Unit

19.3 BILLING DEMAND

The billing demand shall be the highest of the following:

a) Actual maximum demand established during the month

b) Eighty-five percent of the contract demand

c) One hundred kVA