GUJARAT ELECTRICITY REGULATORY COMMISSION

Tariff Order

Truing up for FY 2017-18,

Mid-Term Review of ARR for FY 2019-20 to 2020-21

and Determination of Tariff for FY 2019-20

For

Paschim Gujarat Vij Company Limited (PGVCL)

Case No. 1762 of 2018

24th April, 2019

6th Floor, GIFT ONE, Road 5 - C, Zone 5, GIFT CITY
Gandhinagar-382335 (Gujarat), INDIA
Phone: +91-79-23602000 Fax: +91-79-23602054/55
E-mail: gerc@gercin.org: Website www.gercin.org

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GUJARAT ELECTRICITY REGULATORY COMMISSION

(GERC)

GANDHINAGAR

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ABBREVIATIONS

A&G	Administration and General Expenses
ARR	Aggregate Revenue Requirement
CAGR	Compound Annual Growth Rate
CAPEX	Capital Expenditure
CERC	Central Electricity Regulatory Commission
Control Period	FY 2016-17 to FY 2020-21
DGVCL	Dakshin Gujarat Vij Company Limited
DISCOM	Distribution Company
EHV	Extra High Voltage
FPPPA	Fuel and Power Purchase Price Adjustment
FY	Financial Year
GEB	Gujarat Electricity Board
GERC	Gujarat Electricity Regulatory Commission
GETCO	Gujarat Energy Transmission Corporation Limited
GFA	Gross Fixed Assets
GSECL	Gujarat State Electricity Corporation Limited
GUVNL	Gujarat Urja Vikas Nigam Limited
GoG	Government of Gujarat
HT	High Tension
JGY	Jyoti Gram Yojna
kV	Kilo Volt
kVA	Kilo Volt Ampere
kVAh	Kilo Volt Ampere Hour
kWh	Kilo Watt Hour
LT	Low Tension Power
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
O&M	Operation & Maintenance
PGCIL	Power Grid Corporation of India Limited
PGVCL	Paschim Gujarat Vij Company Limited
PPA	Power Purchase Agreement
R&M	Repair and Maintenance
SLDC	State Load Despatch Centre
UGVCL	Uttar Gujarat Vij Company Limited
WRLDC	Western Regional Load Despatch Centre
YoY	Year on Year

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GUJARAT ELECTRICITY REGULATORY COMMISSION

GANDHINAGAR

Case No. 1762/2018

Date of the Order 24.04.2019

CORAM

Shri Anand Kumar, Chairman
Shri K. M. Shringarpure, Member
Shri P. J. Thakkar, Member

ORDER

1 Background and Brief History

1.1 Background

Paschim Gujarat Vij Company Ltd., (hereinafter referred to as "PGVCL" or the "Petitioner") has on 30th November, 2018 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 2017-18, Mid-Term Review of ARR for FY 2019-20 to FY 2020-21 and Determination of retail supply tariff for FY 2019-20.

Gujarat Electricity Regulatory Commission notified the GERC (Multi-Year Tariff) Regulations, 2016 on 29th March, 2016 which shall be applicable for determination of tariff in all cases covered under the Regulations from 1st April, 2016 onwards. 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 2017-18, modification of the ARR for the remaining years of the control period, revenue from the sale of power at existing tariffs and charges for the ensuing year (FY 2019-20), revenue gap or revenue surplus for the ensuing year calculated based on Aggregate Revenue Requirement approved in the MYT Order and truing up for the previous year, application for determination of tariff for the ensuing year (FY 2019-20) to be carried out under Gujarat Electricity Regulatory Commission (Multi-Year Tariff) Regulations, 2016 and Amendment there of time to time.

After technical validation of the petition, it was registered on 04th December, 2018 and as provided under Regulation 29.1 of the GERC (MYT) Regulations, 2016, the Commission has proceeded with this tariff order.

1.2 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:

Generation Company Gujarat State Electricity Corporation Limited (GSECL)

Transmission Company Gujarat Energy Transmission Corporation Limited (GETCO)

Distribution Companies:

Sr. No.	Name of Company
1	Dakshin Gujarat Vij Company Limited (DGVCL)
2	Madhya Gujarat Vij Company Limited (MGVCL)
3	Uttar Gujarat Vij Company Limited (UGVCL)
4	Paschim Gujarat Vij Company Limited (PGVCL)

Gujarat Urja Vikas Nigam Limited (GUVNL), a holding company of the above named 6 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.

1.3 Commission's Order for the Second Control Period

The Petitioner filed its petition for Truing up for 2015-16, Approval of Final ARR for 2016-17, Approval of Multi-Year ARR for FY 2016-17 to FY 2020-21 and Determination of tariff for 2017-18 on 30th November 2016. The petition was registered on 03rd December 2016 (under Case No. 1623 of 2016). The Commission vide Order dated 31st March, 2017 approved the Truing up for 2015-16, Final ARR for 2016-17, Approval of Multi-Year ARR for FY 2016-17 to FY 2020-21 and determined the tariff for FY 2017-18.

1.4 Commission's Order for approval of True Up for FY 2016-17 and determination of Tariff for FY 2018-19

The Petitioner filed its Petition for Truing-up of FY 2016-17 and determination of tariff for FY 2018-19 on 15th January, 2018. After technical validation of the petition, it was registered on 17th January, 2018 (Case No. 1702/2018). The Commission vide order dated 31st March, 2018 approved truing up for FY 2016-17 and determined the tariff for FY 2018-19.

1.5 Background of the Current 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 (i) of the GERC (MYT) Regulations, 2016, provides for filing of Mid-Term Review petition by the utilities and based on which the Commission shall undertake review of ARR of the utilities for remaining years of the control period. Further, 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 a 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).

Also, 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.

1.6 Admission of the Petition and Public Hearing Process

The Petitioner submitted the current Petition for Truing–up of FY 2017-18, Mid-Term review of ARR for FY 2019-20 to FY 2020-21 and Determination of retail supply tariff for FY 2019-20. After technical validation of the petition, it was registered on 04th December, 2018 (Case No. 1762/2018) and as provided under Regulation 29.1 of GERC MYT Regulations, 2016, the Commission has proceeded with this tariff order.

In accordance with Section 64 of the Electricity Act, 2003, the Commission directed PGVCL to publish its application in the abridged form to ensure public participation.

The public notice was issued in the following newspapers on 08th December' 2018 inviting objections / suggestions from its stakeholders on the Mid-Term Review Petition filed by it.

Sl.No.	Name of Newspaper	Language	Date of Publication
1	The Indian Express	English	08/12/2018
2	Gujarat Samachar	Gujarati	08/12/2018

The petitioner also placed the public notice and the petition on the 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 07th January, 2019.

The Commission also placed the petition and additional details received from the petitioner on its website (www.gercin.org) for information and study of all the stakeholders. The Commission also issued a notice for public hearing in the following newspapers in order to solicit wider participation by the stakeholders.

Sl. No.	Name of the Newspaper	Language	Date of publication
1	DNA	English	01.02.2019
2	Gujarat Samachar	Gujarati	01.02.2019
3	Sandesh	Gujarati	01.02.2019

The Commission received objections / suggestions from the consumers/consumer organizations as shown in Table below. The Commission examined the objections / suggestions received and fixed the date for public hearing for the petition on 07th February, 2019 at the Commission's Office, Gandhinagar, and 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 public hearing was conducted in the Commission's Office at Gandhinagar as scheduled on the above date. 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 made oral submissions is given in the Table below.

Sr. No.	Name of Stakeholders	Written Submission	Oral Submission	Present on 07.02.2019
1	All India Vegetable Dehydrated Manufacturer Development Association (AVDMDA)	YES	YES	YES
2	RUDRA GLOBAL INFRA PRODUCTS Ltd.	YES	YES	YES
3	Gujarat Granito Manufacturer's Association	YES	YES	YES
4	Federation of Kutch Industries Associations	YES	YES	YES
5	Bhavnagar Induction Furnace Development Association (BIFDA)	YES	YES	YES

Sr. No.	Name of Stakeholders	Written Submission	Oral Submission	Present on 07.02.2019
6	Sihor Steel Re-rolling Mills Association	YES	YES	YES
7	Gujarat Krushi Vij Grahak Surakhsya Sangha (GKVKSS)	YES	YES	YES
8	Akhil Gujarat Grahak Sewa Kendra	YES	NO	NO
9	Gujarat Udvahan Piyat Sahkari Sangh Ltd.	YES	YES	YES
10	Bharatiya Kisan Sangh	YES	NO	NO
11	RMG Alloys Steel Ltd.	YES	YES	YES
12	K.K. Bajaj	YES	YES	YES
13	Federation of Solar Manufacturers & Intermediaries	YES	YES	YES
14	Greenko Energies Private Ltd.	YES	NO	NO
15	Laghu Udyog Bharati - Gujarat	YES	YES	YES
16	Utility Users Welfare Associations (UUWA)	YES	YES	YES
17	The Gujarat Dyestuff Manufacturers Associations	YES	YES	YES
18	GCCI	YES	YES	YES
19	Southern Gujarat Chamber of Commerce & Industries (Only Written Submission)	YES	YES	YES
20	R.G.Tillan	NO	YES	YES
21	Rajesh Joshi	NO	YES	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 PGVCL and the Commission's views on the response, are briefly given in Chapter 3.

1.7 Approach of this Order

The GERC (Multi-Year Tariff) Regulations, 2016 provide for Truing up of the previous year, modification of the ARR for the remaining years of the control period and determination of Tariff for ensuing year for the third Control Period i.e. FY 2016-17 to FY 2020-21.

PGVCL has approached the Commission with the present petition for Truing up of FY 2017-18, Mid-Term review of ARR for FY 2019-20 and FY 2020-21 and determination of retail supply tariff for FY 2019-20.

The Commission has undertaken Truing up for the FY 2017-18, based on the submissions of the Petitioner. The Commission has undertaken the computation of gain and loss for the FY 2017-18, based on the audited annual accounts.

While truing up of FY 2017-18, 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 2017-18 has been considered, based on the GERC (MYT) Regulations, 2016.

Mid-Term review for FY 2019-20 and FY 2020-21 and Determination of Tariff for FY 2019-20 have been considered as per the GERC (Multi-Year Tariff) Regulations, 2016.

1.8 Contents of this Order

The Order is divided into **Ten Chapters** as detailed under:

1. The **First Chapter** provides the 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, PGVCL's response and Commission's views on the response.
4. The **Fourth Chapter** deals with the 'Truing up' for FY 2017-18.
5. The **Fifth Chapter** deals with Mid-Term Review of ARR for FY 2019-20 and FY 2020-21 and
6. The **Sixth Chapter** deals with Determination of retail supply tariff for FY 2019-20.
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 adjustments.
9. The **Ninth Chapter** deals with wheeling and cross subsidy surcharges.
10. The **Tenth Chapter** deals with tariffs for FY 2019-20.

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 2017-18, Mid-Term Review for Aggregate Revenue Requirement for FY 2019-20 and FY 2020-21 and determination of retail supply tariff for FY 2019-20.

2.2 True up for FY 2017-18

PGVCL submitted the petition on 30th November' 2018 seeking approval of truing up of ARR for FY 2017-18. PGVCL has worked out its Aggregate Revenue Requirement (ARR) for FY 2017-18 as a part of the True Up for FY 2017-18. PGVCL has presented the actual cost components based on audited annual accounts for FY 2017-18. A summary of the proposed ARR for Truing-up of FY 2017-18 compared with the approved ARR for FY 2017-18 in "MYT Order dated 31st March, 2017" is presented in the table given below:

Table 2-1: ARR proposed by PGVCL for FY 2017-18 True Up

(Rs.Crore)

Sr. No.	Particulars	FY 2017-18 (Approved)	FY 2017-18 (Actual)	Deviation
1	Cost of Power Purchase	11185.42	12496.20	(1310.78)
2	Operation & Maintenance Expenses	536.18	954.85	(418.68)
2.1	Employee Expenses	673.66	869.88	(196.22)
2.2	Repairs & Maintenance Expenses	105.53	147.71	(42.18)
2.3	Administration & General Expenses	125.55	158.68	(33.13)
2.4	Other Debits	-	-	-
2.5	Extra ordinary Item	-	-	-
2.6	Net Prior Period Expenses/(Income)	-	-	-
2.7	Other Expenses Capitalised	(368.57)	(221.42)	(147.15)
3	Depreciation	770.54	671.44	99.10
4	Interest & Finance Charges	378.48	351.22	27.26
5	Interest on Working Capital	-	-	-
6	Provision for Bad Debts	-	2.15	(2.15)
7	Sub-Total [1 to 6]	12870.62	14475.86	(1605.25)
8	Return on Equity	485.56	459.51	26.05
9	Provision for Tax/Tax Paid	18.96	28.71	(9.75)
10	Total Expenditure [7 to 9]	13375.14	14964.08	(1588.95)
11	Less: Non Tariff Income	234.07	258.58	(24.51)
12	Aggregate Revenue Requirement [10-11]	13141.07	14705.50	(1564.44)

2.3 Revenue gap for FY 2017-18

The revenue gap of PGVCL for FY 2017-18 has been computed taking into account actual ARR incurred for FY 2017-18 and after treatment of gain/(loss) due to controllable / uncontrollable factors which is computed at Rs. 221.67 Crores as shown in the Table below:

Table 2-2: Revenue Surplus/ (Gap) as claimed by PGVCL for FY 2017-18

(Rs. Crore)

Sr. No.	Particulars	Amount
1	Aggregate Revenue Requirement originally approved for 2017-18	13141.07
2	(Gap)/Surplus of FY 2015-16	288.34
3	Gain / (Loss) on account of Uncontrollable factors to be passed on to consumer	(1672.16)
4	Gain / (Loss) on account of Controllable factors to be passed on to consumer (1/3rd of Total Gain /Loss)	35.91
5	**Revised ARR for FY 2017-18 (1-2-3-4)**	**14488.99**
6	Revenue from Sale of Power	13486.87
7	Other Income (Consumer related)	302.08
8	Agriculture subsidy	435.37
9	GUVNL Profit / (Loss) allocation	**42.99**
10	**Total Revenue including Subsidy (9+10+11)**	**14267.31**
11	**Revised Surplus/(Gap) after treating gains/(losses) due to Controllable/ Uncontrollable factors (10-5)**	**(221.67)**

The above revenue gap arising based on the true up for FY 2017-18 mentioned above shall be added in the ARR for the FY 2019-20.

2.4 Mid-Term Review for FY 2019-20 and FY 2020-21

The comparison of revised projections for FY 2019-20 and FY 2020-21 in the Mid-Term Review Vis-a-Vis the costs approved by the Commission in the MYT Order dated 31st March , 2017 are given as below:

Table 2-3: Mid-Term Review for FY 2019-20 and FY 2020-21 as projected by PGVCL

(Rs.Crore)

Sr. No	Particulars	FY 2019-20 (Approved)	FY 2019-20 (Projected)	FY 2020-21 (Approved)	FY 2020-21 (Projected)
1	Cost of Power Purchase	12718.03	14543.26	13958.12	15526.83
2	Operation & Maintenance Expenses	599.27	1188.75	633.55	1342.17
2.1	Employee Cost	752.93	1177.94	796.00	1330.75
2.2	Repair & Maintenance	117.95	117.95	124.70	124.70

Sr. No	Particulars	FY 2019-20 (Approved)	FY 2019-20 (Projected)	FY 2020-21 (Approved)	FY 2020-21 (Projected)
2.3	Administration & General Expenses	140.33	140.33	148.35	148.35
2.4	Other Debits	-	-	-	-
2.5	Extraordinary Items	-	-	-	-
2.6	Net Prior Period Expense/(Income)	-	-	-	-
2.7	Other Expenses Capitalised	(411.94)	(247.47)	(435.50)	(261.63)
3	Depreciation	945.39	712.43	1025.84	799.62
4	Interest & Finance Charges	420.05	465.85	429.27	508.99
5	Interest on Working Capital	-	-	-	-
6	Provision For Bad Debts	-	2.15	-	2.15
7	**Sub-Total (1 to 6)**	**14682.74**	**16912.43**	**16046.77**	**18179.76**
8	Return on Equity	599.29	577.65	653.53	640.56
9	Provision For Tax/Tax Paid	18.96	28.71	18.96	28.71
10	**Total Expenditure (7 to 9)**	**15300.99**	**17518.79**	**16719.26**	**18849.03**
11	Less : Non-Tariff Income	234.07	258.58	234.07	258.58
12	Add : DSM Expense	-	2.50	-	2.50
13	**Aggregate Revenue Requirement(10-11+12)**	**15066.92**	**17262.71**	**16485.19**	**18592.95**

2.5 PGVCL's request

1. To admit this Petition seeking True up of FY 2017-18, Mid-Term Review of ARR for FY 2019-20 to FY 2020-21 and Determination of Tariff for FY 2019-20.
2. To approve the True up for FY 2017-18 and allow sharing of gain/loss with the Consumers as per sharing mechanism prescribed in the GERC MYT Regulations, 2016.
3. To approve Mid-Term Review of ARR for FY 2019-20 to FY 2020-21 as per GERC (MYT) Regulations 2016.
4. To consider approved True up parameters & Multi-Year ARR of GSECL, GETCO and SLDC while finalizing Tariff of the Petitioner.
5. To approve the terms and conditions of Tariff for FY 2019-20 and various other matters as proposed in this petition and proposed changes therein.
6. Pass suitable orders for implementation of Tariff Proposal for FY 2019-20 for making it applicable from 1st April, 2019 onwards.
7. To grant any other relief as the Commission may consider appropriate.

8. 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
9. 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 the Commission's view

3.1 Stakeholders' suggestions / objections, Petitioner's Response and Commission's observation

In response to the public notice, inviting objections/ suggestions of the stakeholders on the petitions filed by DISCOMs for truing up of FY 2017-18, Mid-Term Review of FY 2019-20 and FY 2020-21 and determination of tariff for FY 2019-20, a number of consumers/ consumer organisations filed their objections/ suggestions within the prescribed timeline. Some of these objectors participated in the public hearing also. 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 concerned DISCOM. The objections/ suggestions connected with the current petition are segregated into two groups viz. common to all DISCOMs and specific to concerned DISCOM. The Commission, has, therefore, addressed the objections/ suggestions issue-wise rather than objector-wise.

3.2 Suggestions/ Objections common to all DISCOMs

1. Supply of water to the Bricks manufacturers should be removed from Agriculture.

The Objector stated that supply of water to the Bricks manufacturers under the head of Agriculture category should be removed.

Response of the Petitioners:

Supply to Bricks Manufactures by an Agriculture consumer is an optional facility and an Ag consumer can opt for it if he desires. This is not a compulsory requirement.

Commission's view:

The Commission has noted the response of the Petitioners which is self explanatory.

2. Quantum and Quality of supply to Agriculture and Supply Hours to Agriculture

The objector sought information on quantum of power supply given to Agriculture Consumers and hours of such power supply. Issue of quality power supply to Agriculture Consumers is also raised.

Response of the Petitioners:

Petitioners submitted that minimum Average eight hours power supply is provided to agriculture sector. Further, a policy related to power supply to agriculture sector has also been formulated by Gujarat Urja Vikas Nigam Ltd as per guidelines from GoG for uniform power supply to agriculture sector in the State and DISCOMs have been implementing the same by ensuring minimum average eight hours 3 phase power supply to agriculture sector. Moreover, during cropping seasons as per the requirement in order to save standing crops, more than 8 hours of power supply is also provided to agriculture sector. In case power supply to Ag Sector is given less than 8hrs during the day due to technical constraints related issues in that case the shortfall in power supply of previous day is compensated during the subsequent period. It is the endeavor of the Distribution Companies to provide the quality power and best possible services well within the time limits specified in Regulations.

Commission's view:

The Commission has always emphasised on providing quality power supply and is of view that Petitioners should take every measure to deliver quality power supply.

3. Un-realistic Projections of demand

The Objector stated that projections are un-realistic for estimating demand of consumers.

Response of the Petitioners:

Petitioners submitted that it estimated Sales, No. of consumers and Connected load based on the growth rates in the past and sale to agriculture metered category are projected based on methodology done in past. This has been done as per Tariff Regulation notified by the Commission

Commission's view:

The Commission has carried out the Mid-Term Review after due diligence and prudence check.

4. Bad Debt accounts:

The objector sought information on bad and doubtful debts written off.

Response of the Petitioners:

Petitioners submitted that every Year, certain billing amount of some consumers are ascertained to be non recoverable and is charged in P&L of the Company under the head of other debits for the respective year.

Commission's view:

The Commission has approved the actual Bad and Doubtful Debts written off in accordance with the provision of the GERC (MYT) Regulations, 2016.

5. Overload Feeders:

The objector sought information on overloaded feeders.

Response of the Petitioners:

Loading on any of the feeder is highly dynamic phenomena. However, feeders having either more length or found to be overloaded on sustained basis are bifurcated on priority. Information on Nos. of Feeders bifurcated during last three years and proposed to be bifurcated during rest of the period of 2018-19 is provided along with expenditure details.

Commission's view:

The Commission is of the view that adequate planning is to be carried out for load management in accordance with provisions of the GERC Distribution Code, 2004, so that overload condition of the feeders is avoided.

6. Reduction in HP Based tariff and special sub-category for AG consumers

The Objector requested for reduction of tariff for HP based tariff category consumers. It is also requested for introduction of new special sub category for Agriculture Consumers and/ or grant relief to the farmers, who accept in a group of entire feeder, the metered tariff.

Response of the Petitioners:

The National Tariff Policy mentions to have rationalization of tariff of various consumer categories such that it is more aligned to the cost of supply and in a band of +/-20 % to the average cost of supply. In order to ensure uniform tariff rates for all four State Owned DISCOMs, differential bulk supply tariff mechanism is in place. Average recovery from agriculture category consumers is much less than average cost of supply.

The present tariff of agriculture is highly subsidized and hence further categorization is not appropriate.

Commission's view:

Agriculture consumers category is a highly subsidized category. The Commission while determining tariff emphasizes to maintain balance between subsidized category and subsidizing category.

7. Concessional tariff to the micro-irrigation system

The Objector requested for introduction of a special concessional tariff rate for individual farmer adopting Micro irrigation systems.

Response of the Petitioners:

Irrigation to agricultural field through micro/drip irrigation system requires less energy consumption compared with normal mode of irrigation. Thus such agriculture consumers are automatically benefitted. Giving benefit to one class of consumer will result into increase in tariff of other class of consumers.

Commission's view:

The Commission noted the response of the Petitioners which is self-explanatory.

8. Abolition of Tatkal Scheme:

The Objector requested for abolition of Tatkal Scheme.

Response of the Petitioners:

The Petitioner had filed Petition No. 1087/2011 on the said issue and the Commission has disposed of the petition.

Commission's view:

The Commission has no role to play in this matter as the scheme is introduced by the State Government.

9. Discontinuation of Energy Efficient Pump Set scheme

The Objector requested to restart Energy Efficient Pump Set scheme

Response of the Petitioners:

Efficient utitization of electrical energy helps in less energy consumption for the same quantum of work. This phenomenon is equally applicable to the agricultural consumers. A demonstrative project was undertaken by replacing old pump sets with efficient pump sets. If the metered agricultural consumer installs energy efficient pump set, reduction in energy consumption as well as energy bill can be reduced.

Commission's view:

The Energy Efficient Pump Set scheme is in place in the area of PGVCL under Demand Side Management Programme was introduced by PGVCL. It is experienced that consumers are not coming forward to avail the benefits of this scheme. The objector being a consumers organisation should make the consumers aware about benefits of the said scheme by opting it.

10. Clarification in LTP-V Tariff Category:

The Objector requested for clarification in LTP – V Tariff Category.

Response of the Petitioners:

LTP-V tariff category is to incentivize use of surface water sources such as river, canal, dam etc. and supplying water directly to the field of farmers for irrigation only. Further this is to motivate the farmers for utilization of surface water and thereby to promote energy and water conservation particularly for the consumers in the command area of Sardar Sarovar project area and such other mini irrigation system. Mainly such projects or system requires 24 hours power supply and therefore a separate tariff category is provided. Since specific tariff is provided for surface water irrigation, the same cannot be extended for filling up the 'houze' etc. prepared in farm for water collection

Commission's view:

Th response of the Petitioners is self explanatory.

11. Introduction of new Tariff Categories

The Objector suggested to introduce new tariff categories for luxury purpose, amusement purpose and entertainment purpose.

Response of the Petitioners:

No response is submitted by the Petitioners.

Commission's view:

The Commission determines the tariff in accordance with provisions of the Electricity Act, 2003 which provides that no undue preferences to any consumer of electricity will be shown while determining the tariff.

12. Not to approve FPPPA

The Objector requested not to allow any interim extra charges by way of FPPPA in between the year.

Response of the Petitioners:

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.

Commission's view:

The cost of Power Purchase varies with variation in the cost of coal freight and other energy sources which is recovered through FPPPA charges. If such FPPPA revisions are not carried out on quarterly basis, huge burden will get imposed on the consumers at the time of truing up.

13. Restrict supply of electricity to non-productive activity

The power supply should be restricted for day and night cricket matches and other non productive activities, until all pending Agri. connections are released.

Response of the Petitioners:

No response is furnished by Petitioners.

Commission's view:

The DISCOMs cannot differentiate amongst the class of consumers.

14. Transmission and Distribution losses

The Objector stated that Distribution Loss and Transmission should be restricted up to 9% and 1.0% respectively. T & D Loss to be restricted up to 10.00 % and above that no loss to be passed on the consumers.

Distribution Losses are being controlled by

(i) Reducing the Supply Hours from 16 To 8

(ii) Sufficient Rain Fall

Feeder Management system has totally failed. Post of Feeder Managers should be totally free from the routine work. No sincere efforts have been made towards reduction of Technical losses.

Response of the Petitioners:

The Commission has approved distribution loss trajectory for the entire MYT control period from FY 2016-17 to FY 7020-71. Except PGVCL, other three DISCOMs have projected same distribution losses as approved by the Commission in MYT Order dated 31.03.2017, while PGVCL has projected lower distribution losses in the Mid-Term Review than approved in the MYT Order dated 31.03.2017. Distribution losses being controllable factor, the Petitioners have given appropriate treatment to the deviation from approved loss in the true up petition for FY 2017-18. It is also submitted that as Transmission losses are beyond the control of Distribution Company, the actual transmission losses are considered by the Petitioners.

Commission's view:

While appreciating the efforts made by the Petitioners in achieving loss reduction up to target level, the Commission is of the view that sustained and concerted efforts should be continued to further reduce the losses than the approved in the MYT Order dated 31.03.2017.

15. Power purchase ceiling rate

The ceiling rate of power purchase during the year has to be decided along with Tariff.

Response of the Petitioners:

No response is furnished.

Commission's view:

The Commission approves base power purchase cost. Any variation in power purchase cost due to variation in cost of coal/ other energy sources is recovered through FPPPA charges to avoid tariff burden at the time of truing up. However, at this time of true up, the Commission examines the purchase cost on prudent basis and as per Regulations.

16. Remove the row of Interest on Working Capital from ARR Table and consider Return on Equity at 12%

The Interest on working Capital is not grantable and the row to be removed from ARR format. It is also stated that the ROE at 14% is too high. It should be reconsidered and reduced to 12%.

Response of the Petitioners:

In true up petition for FY 2017-18, no claim for Interest on working capital is proposed and RoE is worked out as per the GERC (MYT) Regulations, 2016.

Commission's view:

As the Petitioners have huge amount of Security Deposit with them, which they use for Working Capital requirement the Working Capital requirement works out to be negative and accordingly, interest on Working Capital is not calimed by the Petitioners and approved as NIL by the Commission. Further, RoE is approved as per provisions of the GERC (MYT) Regulations, 2016.

17. High projection of Power Purchase Cost

The projection of power purchase cost is too high and Merit Order not being implemented and monitored.

Response of the Petitioners:

No response is furnished.

Commission's view:

The Commission has after due diligence approved the Power Purchase Cost for FY 2019-20 and 2020-21 considering actual fixed and variable cost of FY 2017-18. The issue is discussed in the relevant section of Chapter 5 of this Order.

18. Agriculture Subsidy

The Budgetary provision for Agriculture Subsidy is stagnant at Rs. 1100/- Crores from years and not increased to match with Nos. of Agri. Consumers in the State. It must be at least Rs. 5000/- Crores.

Response of the Petitioners:

No response is furnished.

Commission's view:

Subsidy to agriculture consumers is provided by Government of Gujarat and not decided by the Commission.

19. Large number of pending meters for replacement

There are still 1.50 Lacs meters under non-woring conditions, Details status report is required to be submitted with reasons.

Response of the Petitioners:

Petitioners have submitted status of meters replaced.

Commission's view:

The Commission has already provided directive to Distribution Utilities to adhere to the time lines specified in the GERC (SoP) Regulations, 2005 for replacement of faulty meters.

20. Abolish Fixed Charges for Agriculture and Residential consumers

The Fixed charges on Agriculture and Residential consumers is required to be abolished totally.

Response of the Petitioners:

It is a basic commercial principle for any organization to recover its fixed costs through recovery of fixed charges. In case of DISCOMs even with the proposed tariff, only 36 % fixed cost is recovered through fixed charges. Therefore it is not possible for DISCOMs to abolish fixed charges

Commission's view:

The Commission noted the response of the Petitioners and agrees with the response.

21. Directives of the Commission not fulfilled

The directives of the Commission are not complied as feeder bifurcation work is unsatisfactory, distribution transformer centre review work is reduced, conductor replacement work is reduced, HVDS is not satisfactory and erection work under KHUSHY scheme is poor.

Response of the Petitioners:

The compliance of directive is submitted to the Commission from time to time. Actual expenditure incurred under various schemes vis-à-vis approved by the Commission is provided in the petition.

Commission's view:

The compliance of directives is discussed in detail in Chapter 7 of this Order where the Commission's observation on the compliance is also deliberated in the said Chapter 7.

22. Distribution losses on JGY feeders

The distribution losses on JGY feeders remainuncontrolled and a separate status report is required for work done, expenses and output, results.

Response of the Petitioners:

Petitioners have furnished various activities carried out for loss reduction in JGY feeders.

Commission's view:

The Commission is of the view that thorough energy audit need to be carried out on JGY feeders having higher distribution losses as per the directives issued in previous tariff orders and as discussed during previous meetings of Co-ordination Forum.

23. Distribution Transformer Failure rate

The Distribution Transformer Failure rate is not mentioned.

Response of the Petitioners:

Distribution Transformer Failure Rate is submitted.

Commission's view:

DISCOMs are furnishing quarterly data on Distribution Transformer failure as a part of reports on SoP which are available on the Commission's website.

24. Information on agriculture connections to be released under Normal scheme and Dark Zone scheme

The projections are not made for agriculture connections to be released under Normal scheme and Dark Zone area scheme.

Response of the Petitioners:

Releasing of connections is an on-going task and every year agriculture connections are released under various schemes like Normal, Tatkal, etc. Information on agriculture connections released is provided.

Commission's view:

The response of the Petitioners is self explanatory.

25. Incomplete Consumer Charter

The Consumer Charter related to agriculture consumers does not specify maximum waiting period after registration of agriculture connection application.

Response of the Petitioners:

The consumer charter is prepared for all categories of consumers including agriculture consumers.

Commission's view:

The Commission noted the objection of the Objector and the response of the Petitioners.

26. Demand for establishing new administrative offices

The demand for creation of new administrative offices is pending since long.

Response of the Petitioners:

Theadministrative offices are created for convenience of administration for the Petitioners as well as the consumers. Petitioners are creating new offices as per the requirement.

Commission's view:

The Commission noted the objection of the Objector and response of the Petitioners..

27. To show FPPPA & PPA charges separately

The Objector requested to separate FPPPA charges and mention fuel Charges and Power Purchase charges separately.

Response of the Petitioners:

The Commission has approved the FPPPA formula through its order dated 29.10.2013 and accordingly any incremental power purchase cost compared to base year power purchase cost would be a Power Purchase Price Adjustment only.

Commission's view:

The Commission noted the response of the Petitioners and is in agreement with the same.

28. Prompt Payment Discount

The prompt payment discount @1% is not implemented by DISCOMs and the word “may be” be replaced by “must be”.

Response of the Petitioners:

The expenses of prompt payment discount is to be borne by the DISCOMs and considering present bank interest rate and liquidity of DISCOMs, it is not possible for DISCOMs to offer such discount for early payment of bills just three days before the end of grace period of ten days and therefore, it should be left to the discretion of DISCOMs.

Commission’s view:

The Commission, after careful consideration, has decided to delete the provision of Prompt Payment Discount from the Tariff Schedule to avoid confusion.

29. Not to increase Tariff

The objector requested not to increase electricity tariff.

Response of the Petitioner:

The petition is filed for Truing up of FY 2017-18, Mid-Term Review of FY 2019-20 and FY 2020-21 and Determination of Tariff for FY 2019-20. No tariff increase has been sought.

Commission’s view:

The Commission, after due diligence and prudence check of financials and submission of Petitioners, has made certain decisions which are deliberated in Chapter 9 of this Order.

30. Tariff of LTP – V and HTP – V category

The objector requested to keep the Tariff for HTP V/LTP V at par with normal Agriculture Tariff.

Response of the Petitioners:

The consumers of LTP-V/HTP-V category are provided with 24 hours power supply while agriculture consumers are being provided 8 hours power supply on rotation basis. As the hours of power supply are different for these categories of consumers, it is not viable to keep tariff rate same.

Commission's view:

The issue is discussed in detail in Chapter 10 of this Order.

31. One tariff for all Agriculture Consumers

The objector stated that there should be only one tariff for all the Agriculture consumers

Response of the Petitioners:

The tariff rates are decided by the Commission. Prior to year 2001, agriculture consumers were supplied power without meter. After the year 2001, power supply to agriculture consumers is supplied with meter and accordingly, electricity bill is prepared based on readings. Agriculture consumers who are supplied power without meters are charged based on their contracted demand and such consumers are considered under A-1 category.

Further, agriculture connections are provided under Normal scheme and Tatkal scheme. Estimates provided under Normal scheme and Tatkal scheme are also different and tariff rates for agriculture connections under Normal scheme and Tatkal scheme are different as decided by the Commission. Agriculture connections provided under Normal scheme are considered under A-2 category while agriculture connections provided under Tatkal scheme are considered under A-3 category. Further, the consumers under Tatkal scheme shall be eligible for normal metered tariff on completion of five years period from the date of commencement of supply.

Commission's view:

The Commission has noted the objection of the Objector and the response of the Petitioners.

32. Reduction in flat rate tariff for agriculture consumers

The Objector requested to reduce flat rate tariff for agriculture consumers to Rs. 500/HP/year.

Response of the Petitioners:

As per Tariff Policy, tariff should be within range of +/- 20% of cost to serve and therefore, it is not viable to provide any more concession to agriculture consumers.

Commission's view:

The Commission noted the response of the Petitioners which is self explanatory.

33. Special dispensation in the tariff to sick industrial units

Sick industrial units should be provided with special dispensation in the tariff at maximum Rs. 4.40 per unit (including all charges but not limited to demand charges, Time of Use Charge (TOU), Fuel Surcharge, Energy Charges, Meter Charges, P.F. adjustment/rebate charges, Security Deposit for additional Load etc.). Sick units should also be given relief to pay cross subsidy (at present it is Rs. 2.51/unit)

Response of the Petitioners:

Pursuant to letter dated 16.1.2019 & 31.1.2019 from Energy & Petrochemicals Dept., Govt of Gujarat, the Company has filed a supplementary submission before the Commission for deciding flat rate tariff in-between Rs 4.40 per Unit and Cost to Serve for viable Sick industry provided their ARR is protected.

Commission's view:

This issue is being dealt with separately by the Commission in the Petition filed by the Objector.

34. Separate Tariff for each Distribution Company

Determination of separate tariff for each of the State owned Distribution Utility considering different distribution loss of four State Owned Distribution Utilities.

Response of the Petitioners:

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, which is also one of the objectives of the EA 2003.

The four Distribution Companies are incorporated on the basis of zonal configuration. 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 to bring them to a level playing field. This is achieved through differential Bulk Supply tariff (BST) to each of the DISCOMs which is approved 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.

Commission's view:

Response of the Petitioners is self-explanatory.

35. Additional higher consumption slab for Residential Consumers

Introduction of higher consumption slab of above 400 units per month for residential consumers and to remove existing slab of 200 -250 which has tariff difference of 10 Paise /unit only.

Response of the Petitioners:

Tariff structure of the different States are designed keeping in mind the different social, economic, technical, demographic and other relevant parameters specific to the 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 has taken appropriate decision regarding this in the Tariff Philosophy chapter of this Order.

36. Non-submission of performance parameters

Only financial performance has been submitted by the Petitioners while other performance parameters are not submitted.

Response of the Petitioners:

Petitioners have submitted requisite performance details.

Commission's view:

The Commission timely reviews performance of Petitioners through data submitted as part of SoP Reports and RIMs reports and necessary directives are also issued in case performance is not found satisfactory. Further, during meetings of State Advisory Committee and State Co-Ordination Forum, such performance parameters are deliberated. Minutes of the said Meetings along with SoP and RIMs reports are available on the Commission's website.

37. Review of Performance during 2017-18

Revenue Gap and distribution losses of PGVCL out of four Petitioners are highest during 2017-18. It is requested to not to approve any parameter which is above the limit of approved parameters.

Response of the Petitioner:

Various steps are taken for reduction of distribution losses and all efforts are being made to achieve further reduction in distribution losses. Petitioner endeavours to achieve the loss reduction trajectory as approved by the Commission.

Commission's view:

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.

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.

38. 30% increase in employee cost during FY 2017-18

Inspite of increase of 30% in the employee cost no improvement is seen in the quality of power and services to the consumers. The Commission should direct the Petitioners to reduce their cost by reducing manpower.

Response of the Petitioners:

Employee expenses comprise of salaries, dearness allowance, bonus, terminal benefits in the form of gratuity and leave encashment and staff welfare expenses. The increase in employee cost is purely statutory increase on the basis of the guidelines issued by competent authorities like the State Government. Hence, the entire expenditure is a legitimate expenditure and variation is purely beyond its control.

Commission's view:

The Commission in the true up orders of previous year did not consider provision made for salary increase on account of 7th Pay Commission Order and decided to consider Pay revision at the time of actual pay out. Accordingly, the Commission has considered the impact of actual pay out of 7th Pay Commission Order.

39. Increase in Power purchase cost:

The Petitioners have procured power at higher rate due to non-availability of power from the IPPs.

Response of the Petitioners:

The power is procured from different sources during FY 2017-18 following Merit Order Principle only. The variation in the actual viz-a-viz approved power purchase expenses is on account of various factors such as variation in the fuel cost, variation in the power purchase mix due to operation of merit order principle and availability of generating stations, variation in the quantum of power purchased due to variation in demand during the year as well as variation in the T& D losses in the system.

Commission's view:

The response of the Petitioner is self-explanatory. However, a separate study on principles of Merit Order Despatch was conducted and no discrepancies were found in MoD. The said report was made available to the consumers..

40. Over recovery of FPPPA

The Petitioners are collecting Rs. 990 Crores from consumers by increasing power purchase cost by 12 Paise and FPPPA by 14 Paise per unit. The collection of additional Rs. 990 Crores amounts to increase in tariff by 11 per cent per unit. The Objector requested to merge Rs. 1.00 of FPPPA charges into tariff slabs and revise the base FPPPA.

Response of the Petitioners:

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 account of 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; 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 directives of the Commission.

Commission's view:

As explained by the Petitioners, incremental power purchase cost over the base power purchase cost is to be recovered through FPPPA charges over and above the base FPPPA charges (i.e. Rs. 1.43/unit for FY 2017-18). Detailed clarification has been provided in past years Tariff Orders and also in the Chapter 8 of this Order.

41. Revenue Gap of four DISCOMs for 2019-20

The Petitioners have submitted a deficit of nearly Rs. 1677 Crores to be met from subsidy receivable from Government. The Petitioners have not demanded any increase in tariff for any category of consumers. But there is indirect increase of Rs. 0.11 per unit by increasing base price of PPC and FPPPA charges, which is not justified.

Response of the Petitioners:

In the True up Order for FY 2016-17 dated 31st March, 2018, the Commission has considered the base power purchase cost at Rs. 4.72/unit and base FPPPA at Rs. 1.49/unit. As per approved FPPPA formula, any increase in power purchase cost during the year over and above base power purchase cost of Rs. 4.27/unit is to be recovered through FPPPA over and above base FPPPA of Rs. 1.49/unit on quarterly basis. As per projected ARR for FY 2019-20, the weighted average power purchase cost is worked out to Rs.4.34/unit as against earlier approved base power purchase cost of Rs. 4.22/unit. Thus, the incremental power purchase cost of Rs. 0.12/unit for FY 2019-20 (i.e. Rs. 4.34 - 4.22) will be recovered through FPPPA over and above base FPPPA of Rs. 1.49/unit. Therefore, estimated revenue from FPPPA for FY 2019-20 is considered at Rs. 1.63/unit for FY 2019-20 (i.e. grossing up by approved losses) and accordingly revenue gap has been worked out.

Commissions' view:

As explained by the Petitioners, incremental power purchase cost over the base power purchase cost is to be recovered through FPPPA charges over and above the base FPPPA charges (i.e. Rs. 1.49/unit for FY 2017-18). Detailed clarification has been provided in past years Tariff Orders and also in the Chapter 8 of this Order.

42. Reduction in Electricity Duty in Gujarat:

The Objector has requested for rationalization of Electricity Duty which is highest in Gujarat for few categories. It is requested to reduce the Electricity Duty for Residential, Commercial consumers by 5% each and for HT industrial consumers by 2.5%.

Response of the Petitioners:

Electricity Duty is being levied as per the provisions of the Electricity Duty Act.

Commission's view:

Electricity Duty is the subject matter of the State Government.

43. Submission of Average Power Purchase Cost

The Petitioner should submit the "Average Power Purchase Cost" (APPC) for the year 2017-18 applicable to the solar project commissioned in FY 2018- 19 along with detailed calculation.

Response of the Petitioners:

The issue is not relevant to the present petition.

Commission's view:

The Petitioner's response is self-explanatory.

44. Submission of details on source wise planning to purchase power from renewable sources

The Petitioner should submit the detail source wise planning to purchase power from renewable energy source to comply with the relevant Regulations.

Response of the Petitioners:

The issue is not relevant to the present petition.

Commission's view:

The Commission is of view that the issue of source wise planning to purchase power from renewable sources of energy to meet RPO obligation is very much relevant to this petition and the Petitioners should have responded in this regard. In this petition, the Petitioners have furnished source wise planning of purchase of power for FY 2019-20 and FY 2020-21 in the Power Purchase Cost section. The Commission has considered quantity of purchase of power from renewable sources in accordance with RPO targets fixed by the Commission.

45. Encourage Investment in the State to achieve the Renewable energy target

The State Government can notify a policy to encourage investment in the State by allowing setting up of generating plants, including from renewable energy sources out of which a maximum of 35% of the installed capacity can be procured by the Distribution Licensees of that State for which the tariff may be determined under Section 62 of the Electricity Act, 2003.

Response of the Petitioners:

The issue is not relevant to the present petition.

Commission's view:

It is prerogative of the State Government to notify policies to encourage investment in renewable energy sources.

46. To allow 100% of contract demand for rooftop solar for HT consumers

The objector requested to allow 100 % of capacity for rooftop Solar with reference to contract demand for HT consumers, out of total generation 25 to 35 % generation may be retained by DISCOM to meet its RPO Target at a Preferential tariff or may be decided by the Commission.

Response of the Petitioners:

The issue is not relevant to the present petition.

Commissions' view:

The response of the Petitioner is self-explanatory.

47. Procure power from renewable energy sources through competitive bidding

State shall endeavor to procure power from renewable energy sources through competitive bidding to keep the tariff low, except from the waste to energy plants.

Response of the Petitioners:

The issue is not relevant to the present petition.

Commissions' view:

GUVNL has already started procuring renewable energy power through competitive bidding for four State Owned DISCOMs.

48. To Allow RESCO in rooftop Solar

Allow RESCO in rooftop solar.

Response of the Petitioners:

The issue is not relevant to the present petition.,

Commissions' view:

Not to allow RESCO model in GERC (Net Metering Rooftop Solar PV Grid Interactive Systems) Regulations, 2016 was a decision taken after deliberations and inviting comments/ suggestion from the stakeholders. However, the Commission is of the view that this matter is not a part of this Tariff petition.

49. Innovative Ideas

The Commission should direct the Petitioners to come with some innovative ideas in the national interest to protect environment as well as for the benefit of consumers.

Response of the Petitioners:

This issue is not relevant to the present petition.,

Commissions' view:

The response of the Petitioner is self-explanatory.

50. To install Rooftop solar at Client's premises on lease basis.

The objector suggested that Solar EPC companies install rooftop solar at client's premises on lease basis and DISCOM will collect EMI to reimburse to EPC Company with certain service charge. The Commission may issue the guideline in this regard

Response of the Petitioners:

The issue is not relevant to the present petition.,

Commissions' view:

The Commission noted the objection of the Objector. The Commission is of the view that this matter may be dealt separately and not as a part of this Tariff petition.

51. GUVNL to remain present during hearing on Tariff Petitions

The GUVNL representatives should remain present during hearing on Tariff Petitions.

Response of the Petitioners:

GUVNL is co-petitioner of the petitions filed.

Commission's view:

GUVNL representatives, as a Co-petitioner or otherwise, have always remained present during the hearing to satisfy the queries of the stakeholders.

52. Power Purchase

The Petitioners have procured more power than demand.

Response of the Petitioners:

Power purchase on behalf of all four Discoms is undertaken by GUVNL on the basis of requirement of each Discom. In the process, the surplus power is sold by GUVNL on behalf of DISCOMs and proceeds from the sale are passed on to Discom which ultimately pass on to general mass of consumers.

Commission's view:

For the Petitioners to procure power only as per demand of the consumers is difficult considering the fact that it is not possible to predict exact demand of the consumers. Further, the Petitioners have to supply power 24x7x365 to consumers as per provisions of the Electricity Act, 2003. The revenue from sale of power to GUVNL is reduced from the power purchase cost and thus consumers are given benefit out of the revenue earned from sale of power by GUVNL.

53. Subsidies not accounted in the Annual Accounts

The Agriculture tariff subsidies, FPPPA and water works subsidies are not accounted in Annual Financial Reports. This great financial irregularity need to be corrected.

Response of the Petitioners:

As per the tariff order of the Commission, FPPPA charge is a part of tariff. In case of Agricultural consumers, the FPPPA charges payable by the Agriculture consumers is not recovered from the consumers but it is being compensated by State Government. Revenue received from Agriculture consumers is mentioned in the Annual Accounts of the Petitioners for FY 2017-18 which is inclusive of FPPPA subsidy and the subsidy for tariff compensation from Government for FY 2017-18, as tabulated below;

DISCOM	Note No.	FPPPA subsidy (Rs. Crore)	Subsidy for tariff compensation (Rs. Crore)
DGVCL	49	75.16	42.15
PGVCL	29	672.87	442.31
MGVCL	30	114.38	48.52
UGVCL	29	837.58	602.79

Similarly, Subsidy received from the State Government towards the Water Works connections is also mentioned in the Annual Accounts as shown below:

DISCOM	Note No.	Subsidy towards Water Works Connections (Rs. Crore)
DGVCL	49	37.21
PGVCL	29	181.52
MGVCL	30	46.80
UGVCL	29	134.46

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 the Company and also in the True up proposal.

Commission's view:

The response of the Petitioners is self-explanatory.

54. Basis of charging GETCO and PGCIL charges

The Objector requested the Commission to direct GUVNL to submit its basis for charging PGCIL and GETCO charges from individual Petitioner.

Response of the Petitioners:

PGCIL and POSOCO charges are applicable in accordance with Order / Regulations of Hon'ble CERC. PGCIL and GETCO charges and losses both are separate matter and governed as per the Order/ Regulations of Hon'ble CERC and GERC respectively and therefore appropriate treatment is given for the losses and charges.

Commission's view:

GETCO losses are considered to work out total energy requirement and thus, per unit power purchase cost to determine gain/ loss on account of distribution loss. However, PGCIL and GETCO Charges are part of power purchase cost, considering distribution utilities as beneficiaries of State and National transmission system, and thus part of ARR to determine gap/ surplus of the truing up year.

55. Higher Return on Equity

The Objector objected to give Return on Equity @ 14% due to non-audited assets of the Petitioners.

Response of the Petitioners:

Return on Equity is claimed as per the relevant provisions of MYT Regulations and as explained in the petition, for assessing actual return on equity for FY 2017-18, Company has considered the opening balance of equity of FY 2017-18 equivalent to the closing balance of equity of FY 2016-17 as approved by the Commission in the True up order dated 31st March, 2018 and normative addition during FY 2017-18 based on actual capitalization

Commission's view:

The Commission approves normative equity addition at 30% of approved capitalization and allows Return on Equity at the rate of 14%. Further, as per Regulation 33 of the GERC (MYT) Regulations, 2016, where actual equity employed is more than 30% of capital cost approved by the Commission, the amount of equity for the purpose of tariff is limited to 30% and the balance is considered as loan, thereby capping the equity at 30% of the capital cost approved by the Commission.

56. Disclosure of Total Income-

The objector has sought for disclosure of total income by the petitioners recovered from the consumers in accordance with various Regulations notified by the Commission and revenue earned from FPPPA Charges.

Response of the Petitioners:

As per Accounting practice, revenue accounted in the Annual Accounts includes revenue from sale of power to GUVNL (surplus sale) and DSM charges, besides revenue from sale of power to retail consumer categories. Whereas in the ARR petition, net power purchase cost is shown i.e. after reducing amount towards sale of surplus power to GUVNL from total power purchase cost, as per requirement of ARR mechanism. Therefore the amounts of revenue in the annual accounts and in the true-up petition cannot be same being requirement of different accounting treatment in the ARR and Annual Accounts. Revenue from sale of Power includes revenue through FPPPA charges, revenue from temporary connections also. Further, the head "Other Income" is classified under the head of non-tariff income in the petition and the same has been reduced from total ARR rather than including it in the revenue. So the total income is disclosed in the petition but presentation is different as per Accounting Practice and requirement as per MYT Regulations.

Commission’s view:

During prudence check of the submission from licensee, whenever required the Commission asks licensee to provide additional details and clarification and all such additional information received from licensee in tariff determination exercise are placed on the Commissions’ website and made it available to all the stakeholders. Non-Tariff Income is reduced from ARR to work out at Revenue Gap/ Surplus while carrying out truing up exercise so that consumers get the benefit of the Non-Tariff Income.

57. Higher rates of temporary connection

The tariff rates for temporary connections are higher than tariff rates for normal supply of electricity and income from such temporary connections is not disclosed by the petitioners.

Response of the Petitioners:

Being temporary by nature, the tariff for “Temporary Connection” should always be higher than the tariff for permanent category consumers.

Commission’s view:

The response of the Petitioners is self-explanatory.

58. Introduction of LTMD Tariff above 6 kW in all categories

The Objector requested either to create new demand based NRGP/RGP/GLP tariff (Both for Rural and General area) for consumers having connected load from 1 kW to 15 kW (LTMD 1) or LTMD tariff should be applicable to all small consumers having load from 6 kW and above in all categories including Residential /Commercial/ Industrial and GLP category.

Response of the Petitioners:

This is the suggestion to the Commission and any modification to be made by the Commission should be revenue neutral to the Company.

Commission's view:

The Commission has dealt with this issue appropriately in the tariff Schedule attached to this order.

59. High loss making feeders

The Objector sought the list of high loss making feeders with plan of action and improvement in reducing the losses. The objector requested the Commission to differentiate between Tariff and Tariff schedule.

Response of the Petitioners:

Petitioners submitted that they have 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 level goes down. 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.

Commission's view:

While appreciating the efforts of the Petitioners to achieve loss reduction target, the Commission is of view as part of compliance of directives, where Petitioners have been submitting identified high loss making JGY feeders and steps to reduce losses of such feeders, the Petitioners should continue identifying high loss making feeders and target shall be set for loss reduction and steps should be taken to achieve the set target.

60. Revenue Billed and Revenue Collected

The Objector asked the petitioners to submit Revenue Billed and Revenue Collected for FY 2017-18.

Response of the Petitioners:

Petitioners submitted their collection efficiency as tabulated below;

DISCOM	Collection efficiency (%)
DGVCL	100.08
MGVCL	100.05
PGVCL	100.00
UGVCL	100.00

Commission's view:

The response of the Petitioner is self-explanatory.

61. Higher recovery of FPPPA Charges

The FPPPA recovered is more than the basic FPPPA approved in the tariff order.

Response of the Petitioners:

As per the order of the Commission, incremental power purchase cost over the base power purchase cost is to be recovered through FPPPA charges over and above the base FPPPA charges (i.e. Rs. 1.43/unit for FY 2017-18). Therefore, during FY 2017-18 incremental power purchase cost over the base power purchase cost was recovered over and above the base FPPPA of Rs. 1.43/unit during the quarter. Thus, there is no excess recovery of FPPPA charges from the consumers during FY 2017-18.

Commission's view:

As explained by the Petitioners, incremental power purchase cost over the base power purchase cost is to be recovered through FPPPA charges over and above the base FPPPA charges (i.e. Rs. 1.43/unit for FY 2017-18).

62. Non submission of GETCO, PGCIL and SLDC charges in Power Purchase Cost-

In truing up of FY 2017-18, Petitioners have not submitted GETCO, GUVNL, SLDC Charges and PGCIL Charges.

Response of the Petitioners:

Petitioners have not furnished any response in this regard.

Commission's view:

PGCIL and GETCO Charges are part of power purchase cost, considering the distribution utilities as beneficiaries of State and National transmission system, and thus part of ARR to determine gap/ surplus of the truing up year. SLDC Charges as shown in A & G expenses in the accounts have been considered in Power Purchase Cost. GUVNL cost is included in Power Purchase Cost.

63. Quantum of UI/DSM sales not submitted, sale of bulk supply not considered in energy balance and DSM charges are less and SLDC charges are different for four DISCOMs.

Details regarding quantum of UI/DSM sales to GUVNL along with UI charges borne by the petitioners are not submitted. Sale of bulk supply power is also not considered in energy balance and DSM charges are less. It is also submitted that SLDC charges are different for four DISCOMs.

Response of the Petitioners:

"Energy Balance" is carried out to estimate the "Energy Requirement" for retail sale to the consumers of the Company. To meet the "Energy Requirement" Power is procured by the Petitioners from different sources and during the process of real time operation, "Surplus" Energy is sold to others through GUVNL.

Commission's view:

DSM charges depend on system frequency. Treatment of DSM charges i.e. cost and revenue is given while determining Power Purchase Cost. It is also to mention that SLDC charges are levied based on contracted capacity which is different in case of four DISCOMs and therefore, SLDC charges are different. Moreover, sale of bulk supply in case of PGVCL is sale of power to KPT. It is not considered in energy balance so as to not distribute power purchase cost of KPT amongst other consumers.

64. Less revenue shown in the ARR/ True up proposal

Less revenue is shown in the ARR / True Up proposal.

Response of the Petitioners:

Revenue in annual accounts includes revenue from sale of surplus power to GUVNL and DSM charges, besides revenue from sale to different consumer categories as per Accounting practice. Whereas in the ARR petition, the net power purchase cost is shown after reducing the amount of surplus power as per requirement of ARR. Netting of the same heads i.e. revenue from sale of power to GUVNL and DSM Charges have been done and they have been reduced from total power purchase cost so the amount of revenue from annual accounts and shown in petition is not same. Revenue from sale of Power from respective category includes revenue through FPPPA. Also the head "Other Income" is classified under the head of non-tariff income in the petition and the same has been reduced from total ARR rather than including it in the revenue. So there is no error in the petition but presentation is in different format as per Accounting Practice and requirement as per MYT Regulations.

Commission's view:

The Commission has approved the proposal after prudence check considering revenue from different sources.

65. Subsidizing Agriculture Tariff category consumers

Though agriculture tariff category consumers are being subsidized, subsidizing category consumers should not pay such tariff rates to subsidize agriculture tariff category consumers with the reason that agriculture tariffs will be paid by the State Government.

Response of the Petitioners:

The National Tariff Policy mentions the need to have a rationatization of tariff to various consumer categories such that it is more aligned to the cost of supply and in a band of +-20 % to the average cost of supply. However, while implementing the above, ground realities of the sector have to be kept in view. One of the primary beneficiaries of the State's efforts to supply good quality, uninterrupted power is the industries and commercial entities in the State. On the other hand, agriculture category is being supplied only limited power per day for 8 hours. Further, mostly this power is supplied to them during off peak hours and during night time, when the average cost of power purchase from various generating stations is much lower due to merit order stacking mechanism for power off take. In effect, the cost of supply to agriculture category would be much lower than to other categories enjoying power during peak hours also. Thus, it is natural that the tariff rates for agriculture is significantly lower than other consumer categories.

While in the long run it would be desirable to have some rationalization of tariff across consumer categories, the socio-economic situation of power consumers cannot be neglected as supplying power at affordable rates to all classes of consumers is a primary responsibility of a power utility.

In the era when most of the public utilities are working with the principle of subsidising some part of the consumers, it is not possible for the utility to bill a particular category on the basis of cost to serve without changing the tariff of the other categories of consumer. Further, to ensure uniform tariff rates for all four state owned Distribution Companies, differential bulk supply tariff mechanism is in place.

Commission’s view:

The Commission has always endeavoured to reduce the cross subsidy as provided under the Electricity Act, 2003 and the Tariff Policy.

66. Waiver of Bad loans

The write off of the dues from Essar Group as indicated in annual accounts has not be shown in the petition.

Response of the Petitioners:

Generally the amount settled through Lok Adalat, Order received from any of the judicial forum etc. or amount which is otherwise not recovered even after completing process / efforts, the same is written-off. This is the practice followed in all business.

Commission’s view:

DGVCL has shown written off amount as Extra Ordinary Items as part of O & M expenses in the Petition and also in the annual accounts.

67. No reason provided for deviation from MYT parameters and CAPEX

The Petitioners have not specified reasons for deviation in Mid-Term Review from MYT parameters and CAPEX

Response of the Petitioners:

The petitions have been as per the principles laid down by the Commission in the applicable GERC (MYT) Regulations. Growth rates observed for various category of consumers during the initial two years of the Control Period target for releasing new connections, implementation of various schemes necessitated review of ARR and therefore, Company has filed petition for mid-term review of ARR. Capital Expenditure is mainly proposed to meet with the supply obligation and for System Improvement etc. GUVNL trades the eventual surplus power and income earned through trading is being passed on to the consumers of its subsidiary Distribution Companies. GUVNL's Annual Accounts are available on GUVNL's website.

Commission's view:

The Commission has approved CAPEX after prudence check in accordance with the provisions of the GERC (MYT) Regulations, 2016.

68. Energy savings due to LED bulbs

The Petitioners have not provided any details of energy savings by sale of LED bulbs in their licensed area.

Response of the Petitioners:

Energy consumption by the consumers is a function of many parameters, therefore, it is very difficult to derive the exact saving due to LED Bulbs. However, 9 Watts LED lamps are being used in place of higher wattages of CFL or GLS lamps etc., therefore, there is energy savings due to LED bulbs.

Commission's view:

The Commission, with an intention of monitoring the progress of implementation of DSM Programmes, has asked the Petitioners to submit quarterly reports in which energy saving due to implementation of the DSM Programmes is also included.

69. Tariff Proposal not in accordance with law and incomplete formats

The tariff proposals submitted by the Petitioner is not in accordance with the Electricity Act, 2003, National Electricity Policy and other notifications. Further, the formats of the Petitions are not complete.

Reply of the petitioner:

The Petitioners have filed the petitions under the provisions of the GERC (MYT) Regulations, 2016 along with other guidelines and directions issued by the Commission from time to time and accordingly, all formats to the petition have been submitted.

Commission's view:

As provided in Tariff Policy, the Commission has to initiate tariff determination exercise suo-motu in the absence of filing by the licensee or incomplete filing so as to decide the tariff timely. Information gaps observed, if any, during processing of the petitions are sought to be made good from the Petitioners and these are placed on the Commission's website for the stakeholders to study.

70. Audit of Distribution Utilities

The objector requested for audit of distribution utilities

Response of the Petitioners:

The Petitioner being a State Government owner Distribution Company, financial accounts of the Company are always audited by CAG every year

Commission's view:

The accounts of the Petitioners, being Government owned undertakings, are audited by the Statutory Auditors appointed by the C & AG. Further, the accounts of the Petitioners are subject to supplementary audit by the C & AG. Moreover, the C & AG also conduct issue based performance/ propriety audit of the Petitioners. The Commission, therefore, does not find any merit in the objector's submission.

71. GUVNL's Audited Accounts

The Objector requested the Commission to ask GUVNL to submit its Annual Accounts.

Response of the Petitioners:

GUVNL's Annual Accounts are available on GUVNL website.

Commission's view:

The Commission noted the response of the Petitioners.

72. Tariff for Industrial Category Consumers

The tariff for Industrial Category Consumers is higher.

Response of the Petitioners:

The National Tariff Policy mentions the need to have a rationalization of tariff to various consumer categories such that it is more aligned to the cost of supply in the band of +/- 20% to the average cost of supply. It is further submitted that in order to ensure uniform tariff rates for all four State Owned DISCOMs, bulk supply tariff mechanism is in place. Further, average recovery from all categories remains within the band of +/- 20% to the average cost of supply.

Commission's view:

The response of the Petitioners is self-explanatory.

73. Minimize O & M expenses

The Objector stated that O & M expenses are high and should be minimized

Response of the Petitioners:

Commission's view:

O & M expenses are approved in accordance with relevant provisions of the GERC (MYT) Regulations, 2016 as detailed in Chapter 4 of this Order.

74. Rate of Delayed Payment Charges should be brought down to 7%

The Objector stated that as loan interest rate is reduced, banks have reduced deposit rates to make up the difference. Considering this fact, the DPC rate of 15% (other than agriculture consumers) and of 12% (for agriculture consumers) should be brought down to 7% per annum.

Response of the Petitioner:

Commission's view:

Delayed Payment Charges is a penalty and cannot be equated with Bank Interest Rates.

75. Metering of Distribution Transformers

Metering should be done at all Distribution Transformer Centres to ascertain losses and taking corrective action.

Response of the Petitioners:

Commission's view:

Necessary directive to meter all Distribution Transformer Centres has already been issued and the Commission has periodically reviewed progress made by the Petitioners in metering Distribution transformers.

76. Allow Bank Guarantee towards Security Deposit and not to levy Security Deposit from consumers who have pre-paid meters.

The Objector requested to allow Bank Guarantee towards Security Deposit for all the categories of consumers. It is also requested to refund Security Deposit collected from consumers when smart pre-paid meters are installed.

Response of the Petitioners:

Commission's view:

The said option to furnish Security Deposit in the form of irrevocable Bank Guarantee is available for the consumers whose Security Deposit exceeds Rs. 25 Lakhs. However, the Commission is of the view that the matter is related to Regulations on Security Deposit and may be dealt separately.

77. Cost of Supply at EHV level

The Objector stated that there is no need to work out Cost of Supply at EHV level.

Response of the Petitioners:

Commission's view:

Tariff determination is based on overall Average Cost to Serve. Consumers are being connected at different voltage level according to their load requirement and as per relevant provisions of the Electricity Supply Code. Therefore, the Commission is of the view that consumer being supplied at a certain voltage level by virtue of its load requirement, Cost of Supply at EHV level is necessary and accordingly directive to work out Cost of Supply at EHV level was given in past year's Tariff Order.

78. Disclosure of Expenditure incurred for the projects which were outsourced

The expenditure incurred for the projects which are outsourced should be shown separately.

Response of the Petitioners:

Commission's view:

The Commission is of the view that expenditure incurred for the projects whether outsourced or implemented through internal workforce, treatment is given same to CAPEX and capitalization and thus do not make any difference.

79. Consumers not to pay PGCIL charges

The consumers should not be made to pay PGCIL charges

Response of the Petitioners:

Commission's view:

PGCIL Charges are part of the total power purchase cost, considering distribution utilities as the beneficiaries of the State and National transmission system, and thus part of ARR to determine gap/ surplus of the truing up year.

80. Fixed cost of stranded generation capacity

The Objector objected the consumers being made to pay fixed cost for stranded generation capacity.

Response of the Petitioners:

Commission's view:

Petitioners, against one of the objections above, have submitted that with the existing fixed charges, DISCOMs are able to recover 36% of fixed cost. It is also to state here that even though generation capacity is stranded, DISCOMs are bound to provide 24*7 power supply to the consumers and are also bound to keep the capacity ready in case OA consumers need it. Considering these requirements, DISCOMs are paying fixed cost to generating stations based on their Plant Availability and not on Plant Load Factor and this is in line with the present Regulations.

81. To make last 5 years' Petitions as well as data of FPPPA available on website

The Petitioner should make available last 5 years' Petitions and FPPPA data on their websites

Response of the Petitioners:

Commission's view:

The Commission is of the view that Petitioner should examine the suggestion of the Respondent about uploading the last 5 years Petitions at the time of uploading tariff petitions for the truing up of last year and tariff determination of ensuing year so that consumers can have access to past data for comparison and take appropriate actions including upgradation of its IT system. Licensees/ GUVNL should also keep the FPPPA data for last 8 quarters on their websites.

3.3 Issues pertaining to PGVCL

1. To consider Vegetable Dehydration as Season consumer

The Objector requested to consider Vegetable Dehydration consumers as seasonal consumer.

Response of the Petitioner:

Inclusion of Dehydration plant into seasonal category is a suggestion to the Commission. Presently, it is not covered under seasonal category. But, the onion and other such vegetables can be stored and dehydration thereof is not a seasonal activity and, therefore, it can not be covered under Seasonal activity.

Commission's view:

In the absence of any authentic data and the likely impact on the revenue of DISCOMs,, the Commission does not find it appropriate to consider the suggestion at this stage. However, staff of the Commission is directed to initiate a study and report on the subject matter.

2. EHV Rebate

EHV rebate should be increased to 80 paisa per unit.

Response of the Petitioner:

As per Tariff Policy, tariff determination is based on overall Average Cost to Serve. Consumers are being connected at different voltage level according to their load requirement and as per relevant provisions of the Electricity Supply Code. Therefore, consumer being supplied at certain voltage level by virtue of its load requirement consuming power supply at that voltage class can not be considered to have made extra efforts in reducing the losses. Since the EHV rebate is given historically to the consumers consuming power supply at Extra High Voltage level, there is no need to increase the rebate of consumption. Moreover, the Commission has directed the Company to carry out detailed study to work out cost of supply at EHV level and reduction in technical loss for supplying electricity at higher voltages. Petitioner has engaged a consultant for such study as per above directive and report will be submitted upon successful completion of study.

Commission's view:

Rated voltage of the supply system has already been specified in Section 3 of the GERC (Electricity Supply Code and Related Matters) Regulations, 2015. The Commission is in agreement with the response of the Petitioner that merely using supply voltage as per the requirement of the consumers shall not entitle him to receive any rebate, as it does not make any efforts to reduce the losses. Further, considering contribution of EHT category consumers in maintaining the grid, Power factor rebate has already been introduced.

3. PF Rebate on total energy charges without deduction of rebate on night tariff charges

PF rebate should be given on total energy charges without deducting rebate on night charge.

Response of the Petitioner:

Power factor rebate rate of 0.5% of Energy Charges is fixed by the Commission in Review Petition no 1, 7 & 3 of 2007 filed by Western Railway after a lot of discussions & deliberations from both the sides. In the previous Tariff Orders also, the issue was deliberated at length by the Commission and the Commission has consciously taken decision not to alter the present rate of rebate. It was decided by the Commission that PF rebate is being given to incentivize the consumers to install and maintain the capacitor banks for maintaining power factor. The rebate offered through tariff schedule is for maintaining power factor within prescribed limit and incentivizing the prospective consumers for installation of capacitor banks for maintaining power factor above the threshold limit.

Commission's view:

The Objector has asked for non-consideration of night time concession while calculating PF rebate which is provided on total amount of electricity bill under the head of energy charges arrived at using tariff of respective HT tariff categories, while response of the Petitioner is regarding increase in the rate of PF rebate. Tariff Schedule is clear on PF rebate and Petitioner is to provide PF rebate accordingly.

4. Collection of peak hour charges and night hour rebate

The rate of peak hour charges and night hour rebate should be compensating and after considering both these charges, the rate should not be more than energy charge decided in tariff Order.

Response of the Petitioner:

The 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. Further, Time of Use Charges" are in place since very long, therefore, the consumption pattern has been set accordingly. It is natural that as the morning sets, the domestic load get added in the system along with "commercial", "industrial" loads etc. Consumers governed by the "Time Of Use Charges" and getting concession for use of electricity during night hours have also set their consumption pattern accordingly. Therefore, present "Load Curve" reflects the present consumption pattern and behaviour of the consumer. Thus, tariff structure is devised recognizing this fact and allows recovery at higher rates for peak hour use and concession for use of electricity during night hours.

Commission's view:

The response of the Petitioner is self-explanatory.

5. Non submission of report on segregation of HT and LT network losses

The Petitioner has not ubmitted the information as per the Commission's directives regarding segregation of HT and LT network losses

Response of the Petitioner:

In the tariff order dated 31.03.2017, the Commission has directed utilities to conduct a fresh evaluation study to work out exact losses in HT and LT side. GUVNL has submitted report for all four DISCOMS and a consolidated report of GUVNL as a whole.

Commission's view:

The Commission has noted the response of the Petitioner.

6. Non-submission of report of Cost of Supply

The petition should not be admitted as the Petitioner has never submitted the voltage level and category wise Cost of supply in spite of hiring the agency since many years

Response of the Petitioner:

Cost of Supply report is submitted to the Commission vide letter No: GUVNL/COM/CoS/2017-18/10 Dated 01.01.2019

Commission's view:

The Commission is of the view that Cost of Supply report has to be submitted along with the petition which is not being submitted with the Petition inspite of repeated directives of the Commission. Petitioner is directed to ensure submission of Cost of Supply report with Petition itself from next year onwards.

7. Non submission of calculation of Cross subsidy, Additional Surcharge and wheeling charge

The calculation of Cross subsidy, Additional Surcharge and wheeling charge should be provided along with petition.

Response of the Petitioner:

In the Tariff order for respective year, Cross Subsidy Surcharge is being determined by the Commission following the principle laid down in the "National Tariff Policy". Additional surcharge is determined by the Commission on six monthly basis in accordance with the Order in Petition No. 1302 of 2013. Wheeling charges are being determined by the Commission on the basis of approved ARR.

Commissions' view:

The response of the Petitioner is self-explanatory.

8. Rationalization of ToU Charges and cancellation of morning peak hour

The peak hour charges should be rationalized based on difference of Power Purchase rate for non peak hour and peak hour and also to cancel the morning peak hour as it is obsolete.

Response of the Petitioner:

Petitioner has not furnished any response in this regard.

Commission's view:

Since the present Load Curve is controlled due to defined peak hours, it does not reflect the unrestricted peak demand during these hours.

9. Demand Charges

The demand charges for excess demand should be in terms of percentage increase of the regular demand charges i.e. consumer should be charged for 20 % more than the regular demand charges for the excess demand recorded more than the contract demand.

Response of the Petitioner:

The suggestion to link the excess demand charges to the normal demand charges based on contract demand is not logical as any consumer using excess load than his 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.

Commission's view:

The response of the Petitioner is self-explanatory.

10. Revision in conditions of HTP IV Tariff

Revise the condition of switching over from HTP I tariff category to HTP IV tariff category and revise the time limit for giving notice of switching over from 15 days to 2 days. In HTP IV tariff, the word 15 days should be replaced by 2 days

Response of the Petitioner:

Ggenerally 11 KV onwards, system is designed and planned according to the actual load established on the existing system. Switching over from HTP-I to HTP- IV necessitates to analyze "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.

Commission's view:

The response of the Petitioner is self-explanatory.

11. Performance is not improving

The performance of the Petitioner is not improving since many years and empoyee cost and administrative expenses are more than the approved figures.

Response of the Petitioner:

The growth rate of the Petitioner in terms of numbers of consumers is 3.6%. The Petitioner has ambitious Capital Expenditure Plan. During the year 2017-18 the Petitioner spent Rs. 1708.68 Crores as a capital expenditure under various heads. The Petitioner has adopted HVDS (High Voltage Distribution System) for releasing new Agricultural connections since 2009-10 and during the year more than 85000 nos. of Agriculture connections were released. Naturally all these activities necessitate corresponding increase in employee and A&G expenses. Employee expenses comprise of salaries, dearness allowance, bonus, terminal benefits in the form of gratuity and leave encashment and staff welfare expenses etc. Expense incurred under this head by the Company is mainly following the guidelines issued by the Competent Authority like State Government. Hence, the entire expenditure is a legitimate expenditure and any variation is purely beyond its control.

Commission's view:

The Commission has taken into consideration financial performance while carrying out truing up and tariff determination exercise. The Commission in the true up orders of previous year did not consider provision made for 7th Pay Commission and decided to consider this impact only on actual pay out. Accordingly, the Commission has considered actual pay out of 7th Pay Commission. Further, the Commission has approved R & M and A & G expenses in accordance with the GERC (MYT) Regulations, 2016 after prudence check

12. Waiver of Cross Subsidy Surcharge (CSS) & Additional Surcharge (AS)

The objector requested the Commission for complete waiver of Cross Subsidy Surcharge (CSS) & Additional Surcharge (AS) to OA (Open Access) consumers on the power consumed from FRE generating projects for the useful life of the project or 25 years, whichever is lower.

Response of the Petitioner:

The issue is not relevant to the present petition.

Commission's view:

CSS is levied from OA consumers to subsidize subsidized category of consumers which OA consumer would have if he would have been taking power supply from Distribution Licensee. Additional Surcharge is levied from OA consumers to recover fixed cost to be paid to generating stations by Distribution Licensees to keep the power available for OA consumers in case they need it. The Commission, while determination of tariff, has to balance between Distribution Licensees and Consumers.

13. Non-submission of information on recovery for theft of power and malpractice

The Petitioner has not submitted all the forms/formats as prescribed under the Regulation. Recovery for theft of power and Malpractice are to be shown separately.

Response of the Petitioner:

The revenue accrued from the Theft and Malpractice is covered under the head "Other Income" and has been considered as a part of Revenue for FY 2017-18.

Commission's view:

Revenue from Theft and Malpractice is included in Other Income which is reduced while carrying out truing up exercise and determining Revenue Gap/ Surplus.

14. Increase in projection of HT sales and cross subsidization

The Power Purchase cost has increased by Rs. 1310 Crores by i.e. about 11.7% while the sale of energy has increased by (25692-23660) = 2032 MUs i.e. 8.5% and the sale of HT industrial category (10467- 7717) =2750 MUs i.e.35.6%. Such huge changes in projection and actuals for HT industrial category needs due justifications and cross subsidization amount gets increased as HT industrial is highest cross subsidizing category among all approved categories. Thus amount of cross subsidization is increased which is against the power policy of reduction of cross subsidization.

Response of the Petitioner:

The Petitioner has not furnished any response in this regard.

Commission's view:

HT sales have been approved considering the CAGR based on the past trends after prudence check. For the increase in cross subsidization, the Commission has always endeavoured to reduce the cross subsidy as provided under the Electricity Act, 2003 and the Tariff Policy.

15. No visible improvement in distribution loss

The total Distribution losses = (33464-25692) = 7772 MUs.is about 23.2%. The real picture of losses category wise and voltage level wise was to be submitted by the agency hired by GUVNL, the Co-petitioner on behalf of the Petitioner but nowhere it is mentioned in the petition. Erstwhile GE Board had given the stage wise cost of supply i.e at generator bus, at transmission bus and at Distribution system for total Gujarat. DISCOMs need more than a decade in the days of modern technology to give correct picture of losses. As such visible improvement in the loss reduction is not seen.

Response of the Petitioner:

Petitioner has furnished various steps taken for distribution loss reduction.

Commission's view:

The Commission has observed that the Petitioners have taken various actions and achieved loss reduction. However, loss reduction activity being continuous, the Commission is of the view that sustained and concerted efforts should be made to reduce the losses further in coming years also. It is also to note here that the Petitioner has proposed lower distribution losses for last two years of MYT Control Period in the Mid-Term Review than approved in the MYT Order.

16. New agriculture connections without meters

No new agricultural connections are to be released without meter, and the existing consumers are to be provided with meter as and when opportunity arises for any kind of his request. The power supply hours are also restricted, then the increase in consumption in unmetered category needs justification. From the table of CAGR it seems that the average sale of energy for Unmetered category has increased, while in respect of Metered category the sale of energy has reduced.

Response of the Petitioner:

Since 10.10.2000 all new connections are released with meter only. Increase in load of unmetered category consumers is mainly due to increase in the contract load by existing consumers and reconnection of permanently disconnected consumer from Unmetered category. Energy sale to Agriculture category consumers is worked out based on:

1. Units recorded in the meter in the billing period for metered category consumer
2. For the Unmetered category consumers, consumption is assessed based on the consumption norm of 1700 Units/HP/Annum approved by the GERC.

Consumption of metered category consumers cannot be compared with the consumption of unmetered category consumers for following reasons:

1. Nature of Tariff: Since the consumption is measured and billing is done based on the total units recorded, the metered consumers have an incentive in being careful about their consumption. On the other hand, such incentive is not there for un-metered consumers.
2. The consumption recorded in metered category is also lower because of considerable instances of theft as well as meter tampering seen in supply to this category which is difficult to curb due to geographical constraints and accessibility related issues.

Commission's view:

The response of the Petitioner is self-explanatory.

17. No loss reduction inspite of adoption of HVDS System.

Though a number of systems have been adopted for reduction of losses in agricultural category like HVDS, conversion of LT to HT line, small size of T.C etc., visible loss reduction is not achieved.

Response of the Petitioner:

HVDS scheme is meant to reduce losses and to enhance the reliability of power supply. Since implementation of the scheme is undertaken by PGVCL in phased manner. Being material and manpower intensive scheme the results of the scheme are yet realise. Once a major portion of the distribution network is converted to HVDS, it's fruits will be visible.

Commission's view:

The Commission is of the view that loss reduction is a continuous activity and the Petitioner should take further steps to achieve target set in Mid-Term Review for FY 2019-20 and FY 2020-21. The Petitioner is required to submit its report on implementation of HVDS Scheme in the next Tariff Petitions.

18. Higher OA rates

The present terms and rates applicable are such that the purpose of Open Access and competitive market as per power policy is badly hindered.

Response of the Petitioner:

In the Tariff order for respective year, Cross Subsidy Surcharge is being determined by the Commission following the principle laid down in the "National Tariff Policy". Additional Surcharge is determined by the Commission on six monthly basis in accordance with the Order in Petition No. 1302 of 2013.

Commission's view:

The Commission has determined Cross Subsidy Surcharge in accordance with the formula specified in the Tariff Policy, 2016 while Wheeling Charge is determined based on ARR determined for the year and wheeling matrix. Additional Surcharge is determined separately by the Commission on six monthly basis.

19. Higher GUVNL Cost

The trading cost of a power exchange as also in the power trading business/market is less than Rs. 4 Ps. per unit while GUVNL charges 4 Paise / Unit is also high and hence needs to be reviewed**.**

Petitioners' response:

This is a suggestion to the Commission.

Commission's view:

GUVNL also handles power procurement on behalf of four State Owned DISCOMs along with the finances of four State Owned DISCOMs. The profit of GUVNL is also passed on to the consumers through the reduction of ARR of four DISCOMs.

20. Treatment to Consumer Contribution, Grant and Security Deposit

Consumer Contribution, Grant and Security Deposit are not shown.

Response of the Petitioner:

The petition is filed as per the principles laid down by the Commission in applicable GERC (MYT) Regulations, 2016 and accordingly, treatment has been given to the Consumer Contribution, Grant, etc. received during the year and available Security Deposit amount with the Petitioner.

Commission's view:

Consumer Contribution, Grant and Security Deposit are shown in the Annual Accounts. Consumer Contribution and Grant are reduced from Capitalization as per the GERC (MYT) Regulations, 2016 while amount held as Security Deposit is considered while determining Interest on Working Capital as per the GERC (MYT) Regulations, 2016.

21. Non projection of Agriculture Subsidy in accordance with sales

The agricultural subsidy is not projected with respect to rise in sale of energy to Ag. consumers**.**

Response of the Petitioner:

The agriculture subsidy that was received by the erstwhile GEB from the State Government will continue to be received by four DISCOMs i.e. Rs. 1100 Crore every year. The share of agriculture subsidy for FY 2019-20 is considered pro-rata on the basis of consumption. Accordingly, the Petitioner has assessed its share of the agriculture subsidy.

Commission's view:

Providing subsidy is the subject matter of the State Government.

22. Proposed changes in the tariff structure:

In the changes proposed by the Petitioners some categories like (i) installations covered under LTP Lift irrigation category, (ii) Floriculture, (iii) Horticulture (iv) Sericulture (v) Fisheries (vi) Dairy (vii) Tissue Culture, (viii) Nursery are omitted as if they are industrial or commercial activity. These all activities are developed forms and technology of the agriculture sector and to be precisely defined and added in the applicability.

Response of the Petitioner:

This is a suggestion to the Commission.

Commission's view:

The Commission has dealt with this issue appropriately this Order.

23. Non submission of Category wise Cost for Serve Report and study report on cost of supply at EHV level, reduction in technical loss for supplying electricity at higher voltages

The Petitioner has not submitted Cost to Serve report and study report on cost of supply at EHV level, reduction in technical loss for supplying electricity at higher voltages with petition inspite of directive of the Commission.

Response of the Petitioner:

As per the directives of the Commission, the Petitioner has prepared the report on Cost to Serve for FY 2017-18 through independent consultant and the same is submitted to the Commission. The study on Cost of Supply at EHV level and reduction in technical loss for supplying electricity at higher voltages is under progress and the report will be submitted in due course of time upon completion of study.

Commission's view:

It is observed that Report on Cost of Supply is not being submitted with the Petition inspite of directives of the Commission. Petitioner is once again directed to submit Cost of Supply report with Petition itself from next year onwards.

24. Separate revenue from sale of power to NRGP and LTMD category of consumers

The tariff NRGP and LTMD are separate even though the income from sale of power is shown combined which needs to be given separately.

Response of the Petitioner:

Petitioner has not submitted any response in this regard.

Commission's view:

The Commission noted the objection of the Objector. The Commission has directed Petitioners to show revenue of LTMD and NRGP separately from the year of True Up Petition of FY 2018-19.

25. Non reduction in Cross Subsidy Surcharge and Additional Surcharge

Though the wheeling charge is reduced almost to 25% in 2017-18 as compared to 2016-17, even then the Cross subsidy and Additional Surcharge are not reduced substantially which needs justification**.**

Response of the Petitioner:

In the Tariff order for respective year, Cross Subsidy Surcharge is determined by the Commission following the principles laid down in the National Tariff Policy. Additional Surcharge is also determined by the Commission on six monthly basis in accordance with Order issued by the Commission in Petition No. 1302 of 2013 separately.

Commission's view:

The response of the Petitioner is self-explanatory.

4 Truing up of FY 2017-18

This Chapter deals with the truing up of FY 2017-18.

PGVCL, in its submission for True-up of FY 2017-18, has furnished details of the actual energy sales, expenditure and revenue for FY 2017-18, based on the audited annual accounts. The licensee has stated that the truing up for FY 2017-18 is based on the comparison of the actual performance for FY 2017-18 with the approved aggregate revenue requirement for FY 2017-18 in the MYT Order dated 31st March, 2017 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 2017-18.

4.1 Energy sales

Petitioner's submission

The Petitioner has submitted the category-wise actual energy sales for FY 2017-18asgiven in the Table below:

Table 4-1: Category-wise sales for FY 2017-18

(MUs)

	Particulars	Approved in the MYT Order	Actual Claimed in Truing up
A	**LT Consumers**		
1	RGP	4030	3608
2	GLP	122	117
3	Non-RGP & LTMD	3259	3415
4	Public Water Works	721	751
5	Agriculture- Unmetered	4437	4570
6	Agriculture-Metered	3270	2682
7	Public Lighting	104	81
	LT Total (A)	**15944**	**15225**
B	**HT Consumers**		
8	Industrial HT	7717	10467
9	Railway Traction	0	0
	HT Total (B)	**7717**	**10467**
	Grand Total (A+B)	**23661**	**25692**

Commission's Analysis

The Commission, in the MYT Order, dated 31st March 2017 had approved the energy sales of 23661 MUs for FY 2017-18, against which PGVCL has submitted the actual sales of 25692 MUs.

As can be observed from the Table above, the energy sales to LT Categories are lower than those approved by the Commission for FY 2017-18 in the MYT Order dated 31st March, 2017. However energy sales in Industrial HT category is higher by 35.63% than approved in the MYT Order dated 31st March 2017.

It can further be seen from the above Table that the overall actual energy sales is higher by 2031 MUs against the energy sales approved by the Commission for FY 2017-18 in the MYT Order. As energy sales depend upon factors, which are related to income level and overall growth of the economy, it remains largely uncontrollable in nature.

The Commission approves the energy sales of 25692 MUs as detailed in the Table below:

Table 4-2: Energy sales approved in truing up for FY 2017-18

(MUs)

Sr. No.	Particulars	Approved in the MYT Order	Actual Claimed in Truing up	Approved in Truing up
A	**LT Consumers**			
1	RGP	4030	3608	3608
2	GLP	122	117	117
3	Non-RGP & LTMD	3259	3415	3415
4	Public Water Works	721	751	751
5	Agriculture-Unmetered	4437	4570	4570
6	Agriculture-Metered	3270	2682	2682
7	Public Lighting	104	81	81
	LT Total (A)	**15944**	**15225**	**15225**
B	**HT Consumers**			
8	Industrial HT	7717	10467	10467
9	Railway Traction	0	0	0
	HT Total (B)	**7717**	**10467**	10467
	Grand Total (A+B)	**23661**	**25692**	**25692**

4.2 Distribution loss

Petitioner's submission

The Petitioner has submitted that the actual distribution losses for FY 2017-18 are 18.84%, as against the approved losses of 21% in the MYT Order dated 31st March, 2017 as given in the Table below:

Table 4-3: Distribution Loss

Sr. No.	Particulars	Approved in the MYT Order	Actual Claimed in Truing up
1	Distribution Losses	21.00%	18.84%

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 accordingly, as per the provisions of MYT Regulations.

The Petitioner has submitted that it has achieved a significant reduction in distribution losses during recent years and shall still continue its efforts to reduce the distribution losses further.

Commission's Analysis

PGVCL has contended that the actual distribution losses are 18.84% for FY 2017-18 as against 21.00% approved in MYT Order dated 31st March, 2017. The Commission appreciates the efforts of the Petitioner in reducing distribution losses. The Commission considers distribution losses as controllable, as per the GERC (MYT) Regulations, 2016. Accordingly, the Commission considers the distribution loss of 21.00% for the truing up of FY 2017-18, as shown in the Table below for computation of gain/(loss) due to variance in distribution losses.

Table 4-4: Distribution loss approved for truing up for FY 2017-18

(%)

Particulars	Approved in the MYT Order	Actual Claimed in Truing up	Approved in True-up
Distribution Losses	21.00%	18.84%	21.00%

4.3 Energy requirement

Petitioner's submission

Based on the energy sales and the actual distribution losses for FY 2017-18, the Petitioner has submitted the energy requirement for FY 2017-18, as given in the Table below:

Table 4-5: Energy requirement and Energy balance as submitted by PGVCL for FY 2017-18

Sr. No.	Particulars	Unit	Approved in the MYT Order	Actual Claimed in Truing up
1	Energy Sales	MUs	23660	25692
2	Distribution Losses	MUs	6289	5964
		%	21.00%	18.84%
3	**Energy Requirement**	**MUs**	**29949**	**31656**
4	Local Power Purchase by DICOMs	MUs	**0**	**131**
	Power sold to KPT	MUs	**0**	**14**
5	**Power Purchase at T<>D periphery from GUVNL**		**29949**	**31539**
6	Transmission Losses	MUs	1199	1227

Sr. No.	Particulars	Unit	Approved in the MYT Order	Actual Claimed in Truing up
7	**Total Energy to be input to Transmission System**	**MUs**	**31148**	**32766**
8	Pooled Losses in PGCIL System	MUs	530	581
9	**Total Energy Requirement**	**MUs**	**31678**	**33464**

Commission's Analysis

PGVCL has computed the energy requirement based on the actual distribution losses of 18.84%, actual energy sales of 25692 MUs and transmission losses of 3.75%.

The Commission had approved the distribution losses of 21.00% and the transmission losses of 3.85%, in the MYT Order dated 31st March, 2017.

Accordingly the Commission has worked out the energy requirement of 33464 MUs for truing up of FY 2017-18 as shown in the Table below:

Table 4-6: Energy requirement approved by the Commission for truing up for FY 2017-18

Sr. No.	Particulars	Unit	Approved in the MYT Order	Actual Claimed in Truing up	Approved in Truing up
1	Energy Sales	MUs	23661	25692	25692
2	Distribution Losses	MUs	6290	5964	5964
		%	21.00%	18.84%	18.84%
3	**Energy Requirement**	**MUs**	**29951**	**31656**	**31656**
4	Transmission Losses	MUs	1199	1227	1227
5	Total energy to be input to Transmission System	MUs	31150	32883	32883
6	Pooled Losses in PGCIL System	MUs	530	581	581
7	**Total Energy Requirement**	**MUs**	**31680**	**33464**	**33464**

4.4 Power Purchase cost

Petitioner's submission

The Petitioner has submitted that the company has been currently allotted share of generation capacities as per the scheme worked out by GUVNL. In order to minimize power purchase cost, GUVNL adopts the Merit Order Despatch 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 allocation because the demand for PGVCL is not constant and it varies from time to time.

PGVCL has submitted the actual power purchase cost incurred during FY 2017-18, as shown in the Table below:

Table 4-7: Power purchase cost claimed by PGVCL for FY 2017-18

(Rs. Crore)

Particulars	Approved in the MYT Order	Actual Claimed in Truing up
Total Power Purchase Cost	11,185.42	12,496.20

The total power purchase cost of PGVCL for FY 2017-18 consists of the basic power purchase cost, transmission charges payable to GETCO and PGCIL, SLDC charges and the Discom's share of GUVNL cost.

Based on the same the comparison between the power purchase cost approved in the MYT Order and the actual cost of power purchase is shown below:

Table 4-8: Power purchase cost submitted by PGVCL for FY 2017-18

(Rs. Crore)

Sr. No.	Particulars	Approved in the MYT Order	Actual Claimed in Truing up
A	**Cost**		
1	Power Purchase from GUVNL		12,611.28
2	Unscheduled Interchange Charges/ DSM Charges		12.51
3	Power Purchase from Wind Farm		37.00
4	Power Purchase from Solar		10.64
5	SLDC Charges		4.77
B	**Income**		
1	Sale of Power to GUVNL		93.67
2	Unscheduled Interchange		86.33
	Net Power Purchase Cost	**11,185.42**	**12,496.20**

PGVCL submitted that the variation in the power purchase cost approved by the Commission and the actual power purchase cost incurred is due to various reasons including change in the approved cost of power, change in quantum of power purchased allowed, consequent change in transmission charges and change in allocation of GUVNL cost.

The quantum of power purchase depends upon sales during the year, as well as the losses in the system. The actual distribution losses in PGVCL distribution network have been lower than the losses approved in the MYT Order. Further, though the sales were higher, as compared to that approved by the Commission, the quantum of power purchased was lower than the approved quantum of power required due to reduction in losses.

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 variation in the number or mix of consumers or quantity of electricity sold to consumers as an uncontrollable factor. Thus, the variation in these factors affects the power purchase expenses and results into either a loss or gain. 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 increase or reduction in quantum of power purchased and power purchase cost due to variation in distribution loss is a controllable factor, which would result in gains/losses under the GERC (MYT) Regulations, 2016 and is dealt with accordingly.

Commission's Analysis

The Commission has examined the actual quantum of power purchased and its cost during the FY 2017-18, based on the actual energy sales and the distribution losses submitted by PGVCL. The sales and the quantum of power purchase and the power purchase cost are as per the audited annual accounts for FY 2017-18. The Commission has observed that the Petitioner has, in the audited annual accounts, included the SLDC Charges of Rs. 4.77 Crore in A & G Expenses. Since the same is a part of Power Purchase Cost, it is reduced from A & G Expenses and included in the Power Purchase Cost. The power purchase cost, as per the audited annual accounts for FY 2017-18 is Rs.12671.43 Crore. After addition of SLDC Charges of Rs. 4.77 Crore, deduction of Income of Rs. 93.67 Crore towards Sale of Power to GUVNL and UI/DSM Charges (Income) of Rs. 86.33 Crore, the Power Purchase Cost works out to Rs. 12496.20 Crore as shown in the Table below:.

Table 4-9: Power purchase cost as per the audited accounts for FY 2017-18

(Rs. Crore)

Sr. No.	Particulars	Amount
1	Power Purchased from GUVNL	12611.28
2	Power Purchased from Wind Farms	37.00
3	Power Purchased from Solar	10.64
4	UI/DSM Charges Charges (Expenses)	12.51

Sr. No.	Particulars	Amount
5	SLDC Charges	4.77
6	**Total Power Purchase**	**12676.20**
7	Power sold to GUVNL (Income)	93.67
8	UI/DSM Charges (Income)	86.33
9	**Net Power Purchase Cost (6-7-8)**	**12496.20**

The Commission approves the power purchase cost of Rs. 12496.20 Crore for FY 2017-18 as per the audited annual accounts.

Table 4-10: Purchase cost approved by the Commission for truing up for FY 2017-18

(Rs. Crore)

Particulars	Approved in the MYT Order	Actual Claimed in Truing up	Approved in Truing up
Total Power Purlchase Cost	11,185.42	12,496.20	12,496.20

4.5 Gain / (loss) due to distribution losses

Petitioner's Submission

PGVCL has submitted that there is gain of Rs. 323.22 Crore in the power purchase cost due to lower distribution losses as compared to distribution losses approved in the MYT Order dated 31st March, 2017. The gain is considered as controllable variation. The calculation of gain/ (losses) on account of lower distribution losses as submitted by PGVCL is shown in the Table below:

Table 4-11: Gain/ (Loss) on account of distribution loss for FY 2017-18

Sr. No.	Particulars	Unit	With Approved Distribution Loss	With Actual Distribution Loss
1	Energy Sales	MUs	25691.93	25691.93
2	Distribution Losses	MUs	6829.50	5963.94
		%	21.00%	18.84%
3	**Energy Requirement**	MUs	**32521.43**	**31655.87**
4	Saving due to Distribution Loss	MUs		865.56
5	Average Cost of Power Purchase	Rs./kWh		3.73
6	**Gain/(Loss) Due to Dist. Losses**	Rs. Crore		**323.22**

Commission's Analysis

The Commission has approved losses at 21.00% for FY 2017-18 in the MYT Order dated 31st March, 2017, against which PGVCL has achieved distribution losses of

18.84%. However, as discussed in Section 4.2, the Commission approves 21.00% as the distribution losses for truing up of FY 2017-18.

The total gains/(losses) on account of lower distribution losses are computed in the Table below:

Table 4-12: Approved Gain/(loss) on account of distribution losses for FY 2017-18

(Rs. Crore)

Sr. No.	Particulars	Units	Submitted by PGVCL for true up	Approved for truing up
1	Energy Sales	MUs	25691.93	25691.93
2	Distribution Loss	MUs	5963.94	6289.50
		%	18.84%	21%
3	**Energy Requirement**	**MUs**	**31655.88**	**32521.43**
4	Saving due to Distribution Loss	MUs	865.56	865.56
5	Average Power Purchase Cost	Rs./Unit	3.73	3.73
6	**Gain/(Loss) due to Dist. Loss**		**323.22**	**323.22**

The total gain on account of lower distribution losses, as computed by the Commission, of Rs. 323.22 Crore is attributed to controllable factors.

While computing the Gains/(Losses) due to change in distribution losses, the Commission has considered the distribution losses at 21% of actual energy sales to arrive at change in energy requirement at the distribution periphery and did not consider the transmission losses to factor the efficiency of distribution activities only

The Commission considered change in power purchase cost as uncontrollable and attributable to the variation in cost and quantum of power due to variations in sales and transmission loss, while variations in quantum of power due to distribution loss are considered as controllable. Accordingly, gain/loss computed on account of power purchase are shown in the Table below.

Table 4-13: Approved gain / (loss) – power purchase expenses for truing up for FY 2017-18

(Rs. Crore)

Particulars	Approved in the MYT Order	Approved in Truing up	Deviation + (-)	Gain/(Loss) due to Controllable Factor	Gain/(Loss) due to Uncontrollable factor
Total Power Purchase Cost	11,185.42	12,496.20	(1,310.78)	323.22	(1,634.00)

4.6 Fixed charges

4.6.1 Operation and Maintenance (O&M) Expenses for FY 2017-18

PGVCL has claimed O&M Expenses of Rs. 954.85 Crore, which is inclusive of Employee Cost of Rs. 869.88 Crore, Repairs & Maintenance Expenses of Rs. 147.71 Crore, Administration & General Expenses of Rs. 158.68 Crore and Other Expenses Capitalized of Rs. (221.42) Crore, against the approved O&M expenses of Rs 536.17 Crore as per the details given in the Table below:

Table 4-14: O&M expenses claimed in the truing up for FY 2017-18

(Rs. Crore)

Sr. No.	Particulars	Approved in the MYT Order	Actual Claimed in Truing up	Deviation
1	Employee Cost	673.66	869.88	(196.22)
2	Repairs & Maintenance Expenses	105.53	147.71	(42.18)
3	Administration & General Expenses	125.55	158.68	(33.13)
4	Other Debits	-	-	-
5	Extraordinary Items	-	-	-
6	Net Prior Period Expenses /(Income)	-	-	-
7	Other Expenses Capitalised	(368.57)	(221.42)	(147.15)
8	**Operation & Maintenance Expenses**	**536.17**	**954.85**	**(418.68)**

Petitioner's submission

PGVCL has compared the O&M expenses actually incurred during FY 2017-18 with the expenses approved by the Commission in the MYT Order dated 31st March, 2017 for FY 2017-18 and arrived gain/loss, as detailed in the Table below:

Table 4-15: O&M expenses and gain / loss claimed in the truing up for FY 2017-18

(Rs. Crore)

Sr. No.	Particulars	Approved in the MYT Order	Actual Claimed in Truing up	Gain/(Loss) due to Controllable Factors	Gain/(Loss) due to Uncontrollable Factors
1	Employee Cost	673.66	869.88	(138.04)	(58.17)
2	Repairs & Maintenance Expenses	105.53	147.71	(42.18)	-
3	Administration & General Expenses	125.55	158.68	(33.13)	-
4	Other Debits	-	-	-	-
5	Extraordinary Items	-	-	-	-
6	Net Prior Period Expenses /(Income)	-	-	-	-
7	Other Expenses Capitalised	(368.57)	(221.42)	-	(147.15)
8	**Total O & M Expenses**	**536.17**	**954.85**	**(213.35)**	**(205.33)**

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

4.6.1.1 Employee cost

PGVCL has claimed Rs. 869.88 Crore towards the employee cost in the truing up for FY 2017-18. The employee cost approved for FY 2017-18 in the MYT Order dated of 31st March, 2017 and claimed by PGVCL in the truing up are given in the Table below:

Table 4-16: Employee cost claimed by PGVCL in the truing up for FY 2017-18

(Rs. Crore)

Sr. No.	Particulars	Approved in the MYT Order	Actual Claimed in Truing up	Gain/(Loss) due to Controllable Factors	Gain/(Loss) due to Uncontrollable Factors
1	Employee Cost	673.66	869.88	(138.04)	(58.17)

Petitioner's submission

PGVCL submitted that the actual employee cost for FY 2017-18 was Rs. 869.88 Crore which excludes the provision made towards 7th Pay Commission of Rs. 86.62 Crore but includes the actual amount paid towards 7th Pay Commission of Rs. 58.17 Crore and Rs. 82.48 Crore of Re-measurement of defined benefits plans. The Commission in the MYT Order dated 31st March, 2017 and True up Order of FY 2016-17 dated 31st March, 2018 had not approved the provision made for respective years towards the impact of 7th Pay Commission considering that actual payment is not made and had ruled 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 employee cost was incurred on the basis of the guidelines issued by the competent authorities like the State Government and that the entire expenditure estimated is a legitimate expenditure and any variation is purely beyond its control. Accordingly, PGVCL has estimated a loss of Rs. 138.04 Crores on account of controllable factors and a loss of Rs. 58.17 Crore on account of uncontrollable factors.

Commission's Analysis

PGVCL has compared the actual employee cost of Rs. 869.88 Crore incurred during FY 2017-18 with Rs. 673.66 Crore approved in the MYT Order dated 31st March, 2017. The actual employee cost, as per the audited annual accounts for FY 2017-18 is Rs. 874.02 Crore before capitalization of Rs. 180.23 Crore. Further, the Petitioner has submitted that the aforesaid employee cost includes of Rs. 86.62 Crore towards Provision for 7th Pay Commission and Rs. 58.17 Crore towards the actual payout on account of wage revision. The amount of Rs. 86.62 Crore towards provision has excluded while claming the empoyee cost. The Petitioner has added the Re-measurement of the Defined Benefit Plans of Rs. 82.48 Crore as appearing in the Statement of P&L for the year ended 31st March, 2018 being the component of employee cost to arrive at claimed figure of Rs. 869.88 Crore.

Therefore, the Commission considers Rs. 869.88 Crore as employee expenses for the purpose of true up of FY 2017-18. The Commission considers the employee cost as a controllable expense, which is in line with the MYT Regulations. Further, the actual payment towards 7th Pay Commission of Rs. 58.17 Crore has been considered as uncontrollable.

The Commission, accordingly, approves the employee cost at Rs. 869.88 Crore in the truing up for FY 2017-18.

Table 4-17: Approved Employee cost in the truing up for FY 2017-18

(Rs. Crore)

Sr. No.	Particulars	Approved in the MYT Order	Approved in Truing up	Gain/(Loss) due to Controllable Factors	Gain/(Loss) due to Uncontrollable Factors
1	Employee Cost	673.66	869.88	(138.04)	(58.17)

4.6.1.2 Repairs & Maintenance Expenses

PGVCL has claimed Rs.147.71 Crore towards R&M expenses in the truing up for FY 2017-18. The R&M expenses approved for FY 2017-18 in the MYT Order dated 31st March, 2017 and claimed by PGVCL in the truing up for FY 2017-18 are given in the Table below:

Table 4-18: R&M expenses claimed by PGVCL for the truing up for FY 2017-18

(Rs. Crore)

Sr. No.	Particulars	Approved in the MYT Order	Actual Claimed in Truing up	Gain/(Loss) due to Controllable Factors	Gain/(Loss) due to Uncontrollable Factors
1	Repairs & Maintenance Expenses	105.53	147.71	(42.18)	

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. PGVCL has worked out a loss of Rs. 42.18 Crore due to controllable factors as provided in the GERC (MYT) Regulations, 2016.

Commission's Analysis

The actual R&M expenses incurred during FY 2017-18 are Rs. 147.71 Crore, as per the audited annual accounts. The Commission has observed that R&M expenditure incurred by PGVCL is higher than the amount approved by the Commissionin the MYT Order dated 31st March, 2017. The Commission noted that the amount Rs.147.71 Crore includes cost incurred for restoration of the system damaged due to natural calamities like flood & cyclones. The R&M expense is a controllable item of expenditure under the GERC (MYT) Regulations, 2016.

The Commission accepts the contention of PGVCL and accordingly approves the R&M expenses at Rs. 147.71 Crore in the truing up for FY 2017-18.

Table 4-19: Approved R&M expenses for the truing up for FY 2017-18

(Rs. Crore)

Sr. No.	Particulars	Approved in the MYT Order	Approved in Truing up	Gain/(Loss) due to Controllable Factors	Gain/(Loss) due to Uncontrollable Factors
1	Repairs and Maintenance Expenses	105.53	147.71	(42.18)	

4.6.1.3 Administration& General (A&G) Expenses

PGVCL has claimed Rs. 158.68 Crore towards A&G expenses in the truing up for FY 2017-18. The A&G expenses approved for FY 2017-18 in the MYT Order dated 31st March, 2017, and claimed by PGVCL in the truing up are given in the Table below:

Table 4-20: A&G expenses claimed by PGVCL in the truing up for FY 2017-18

(Rs. Crore)

Sr. No.	Particulars	Approved in the MYT Order	Actual Claimed in Truing up	Gain/(Loss) due to Controllable Factors	Gain/(Loss) due to Uncontrollable Factors
1	Administration & General Expenses	125.55	158.68	(33.13)	

Petitioner's submission

PGVCL has submitted that the A&G expenses are categorised as controllable expenses in the GERC (MYT) Regulations, 2016 and the actual A&G expenses, when compared with the approved value, resulted in a loss of Rs. 33.13 Crore for FY 2017-18.

Commission's Analysis

It is observed that the A&G Expenses as per Audited Accounts is Rs. 349.49 Crore, before capitalization of expenses of Rs. 41.19 Crore. It is further observed that this amount includes Repairs and Maintenance Expenses of Rs. 147.71 Crore, SLDC charges of Rs. 4.77 Crore, Provision for Bad & Doubtful Debts of Rs. 38.05 Crore and CSR of Rs. 0.28 Crore. While the Commission has dealt with the R&M Expenses separately in **Para 4.6.1.2** above, the SLDC charges are included in Power Purchase Cost approved at **Table 4.9** of this Order. The Commission has also dealt with Bad Debts separately in this Order. Accordingly, the Commission has excluded these items of expenditure from A&G Expenses along with CSR Expenses in term of the GERC (MYT) Regulations, 2016 to arrive at the net A&G expenses of Rs. 158.68 Crore. The Commission observes that the actual A&G Expenses of Rs. 158.68 Crore, is higher than what was approved in the MYT Order dated 31st March, 2017 for FY 2016-17 by Rs. 33.13 Crore.

The parameters impacting A&G expenses are controllable in nature, as specified in the GERC (MYT) Regulations, 2016. The Commission, accordingly, considers Rs. 33.13 Crore as loss on account of controllable factors.

The Commission, accordingly, approves the A&G Expenses at Rs. 158.68 Crore in the truing up for FY 2017-18.

Table 4-21: Approved A&G expenses in the truing up for FY 2017-18

(Rs. Crore)

Sr. No.	Particulars	Approved in MYT Order	Approved in Truing up for	Gain/(Loss) due to Controllable Factors	Gain/(Loss) due to uncontrollable factors
1	Administration & General Expenses	125.55	158.68	(33.13)	

4.6.1.4 Other Expenses Capitalised

PGVCL has claimed the actual expenses capitalised at Rs. 221.42 Crore in the truing up for FY 2017-18, as against Rs. 368.57 Crore approved in the MYT Order dated 31st March, 2017 as shown in the Table below:

Table 4-22: Other expenses capitalized as claimed by PGVCL in the truing up for FY 2017-18

(Rs. Crore)

Sr. No.	Particulars	Approved in the MYT Order	Actual Claimed in Truing up	Gain/(Loss) due to Controllable Factors	Gain/(Loss) due to Uncontrollable Factors
1	Other Expenses Capitalized	(368.57)	(221.42)	-	(147.15)

Commission's Analysis

The Commission has observed that the other expenses capitalised represent the capitalisation of Employee Cost and A&G Expenses, as per the audited annual accounts for FY 2017-18. The Commission, accordingly, approves the Other Expenses Capitalised at Rs. 221.42 Crore for FY 2017-18. The Commission allows Rs. 147.15 Crore as loss due to uncontrollable factors as shown in the Table below:-

Table 4-23: Other Expenses capitalized approved for FY 2017-18

(Rs. Crore)

Sr. No.	Particulars	Approved in the MYT Order	Approved in Truing up	Gain/(Loss) due to Controllable Factors	Gain/(Loss) due to Uncontrollable Factors
1	Other Expenses Capitalized	(368.57)	(221.42)	-	(147.15)

The total O&M expenses approved in the truing up for FY 2017-18 and the gain / (loss) due to controllable and uncontrollable factors are detailed in the Table below:

Table 4-24: Approved O&M expenses and gains / (loss) in the truing up for FY 2017-18

(Rs. Crore)

Particulars	Approved in MYT Order	Actual Claimed in Truing up	Approved in Truing up	Deviation + (-) (2-4)	Gain/(Loss) due to Controllable Factors
1	2	3	4	5	6
Employee Cost	673.66	869.88	(196.22)	(138.04)	(58.17)
Repairs & Maintenance Expenses	105.53	147.71	(42.18)	(42.18)	-
Administration & General Expenses	125.55	158.68	(33.13)	(33.13)	-
Other Debits	-	-	-	-	-
Extraordinary Items	-	-	-	-	-
Net Prior Period Expenses /(Income)	-	-	-	-	-
Other Expenses Capitalized	(368.57)	(221.42)	(147.15)	-	(147.15)
Total O & M Expenses	**536.18**	**954.85**	**(418.68)**	**(213.35)**	**(205.32)**

4.6.2 Capital expenditure, Capitalization and funding of CAPEX

PGVCL has furnished actual capital expenditure of Rs. 1708.68 Crore in the truing up for FY 2017-18, as against Rs. 2041.35 Crore approved in the MYT Order dated 31st March, 2017 as given in the Table below:

Table 4-25: Capital expenditure claimed by PGVCL for FY 2017-18

(Rs. Crore)

Sr. No.	Particulars	Approved in the MYT Order	Actual Claimed in Truing up	Deviation
A	**Distribution Schemes**			
	Normal Development Scheme	326.00	330.29	(4.29)
	System Improvement Scheme	100.00	116.09	(16.09)
	Electrification of Hutments	7.00	4.47	2.53
	Scheme for meters including installation of SMART Meters	85.00	33.27	51.73
	Total	**518.00**	**484.13**	**33.87**
B	**Rural Electrification Schemes Plan**			
	REC Normal + Tatkal + Dark Zone	650.00	836.64	(186.64)
	Special Component Plan	1.50	1.67	(0.17)
	Total	**651.50**	**838.31**	**(186.81)**
C	**Non Plan Schemes**			
	SCADA / DMS	0.00	9.26	(9.26)
	Total	**0.00**	**9.26**	**(9.26)**
D	**Other New Schemes**			
	Civil Work / New Building	15.00	0.00	15.00
	Shunt Capacitor	10.00	0.00	10.00
	Fencing to Distribution Transformers	15.00	0.00	15.00
	Aireal Bunch Conducters	1.00	0.00	1.00
	HVDS	100.00	63.98	36.02
	Underground System at Pilgrim Places like Dwarka , Somnath , Bhavnath (Junagarh) etc and Imp. GIDC Area	100.00	1.70	98.30
	SKJY	0.00	34.61	(34.61)
	IPDS	275.80	74.96	200.84
	DDUGJY	213.05	128.75	84.30
	Solar AG Pump	102.00	0.00	102.00
	DISS	10.00	10.00	-
	Other Schemes (General Schemes)	0.00	20.18	(20.18)
	Smart Village	0.00	0.56	(0.56)
	Coastal Area Scheme	30.00	42.25	(12.25)
	Total	**871.85**	**376.98**	**494.87**
E	**Capital Expenditure Total**	**2041.35**	**1708.68**	**332.67**

Petitioner's submission

PGVCL has submitted that the actual capital expenditure incurred during FY 2017-18 Rs. 1708.68 Crore, which is lower by Rs. 332.67 Crore than what was approved for FY 2017-18 in the MYT Order dated 31st March, 2017.

PGVCL has explained the scheme wise deviation in the capital expenditure as under:-

Normal Development:

Under the head Normal Development Scheme, generally expenses are incurred to meet with the Supply Obligation which is mainly based on the numbers of applications received. Therefore, during the FY 2017-18, company has incurred Rs. 330.29 Crore against approved Rs. 326 Crores.

System Improvement:

Under the head System Improvement, PGVCL carries 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. 116.09 Crores against approved Rs. 100 Crores.

Rural Electrification Scheme:

Under the head RE Schemes, Company releases Agriculture Category connections. Following the directive of the Commission, Company has maximized targets for releasing the Connections of Agriculture category. Accordingly, during FY 2017-18 Company released more than 85000 Agriculture connections during the year at the cost of Rs. 836.64 Crores against approved Rs. 650 Crores.

Following the policy framed by State Government, Company has started releasing connection in the Dark Zone area too from the year 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).

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 to 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. 63.98 Crore as against approved Rs. 100 Crores.

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 depending on time to time requirement and exigency of work. Accordingly, Company has spent Rs. 42.25 Crores during FY 2017-18 against approved Rs. 30 Crores.

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 has been now implemented in the limited area like Pilgrim places etc. and accordingly Company spent Rs. 1.7 Crore under the scheme during FY 2017-18.

Integrated Power Development Scheme (IPDS): This 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 including Net metering, Metering of feeders / distribution transformers / consumers in urban areas and, IT enablement of distribution sector and strengthening of distribution network, etc. During the year, Company has incurred Rs. 74.96 Crores as against approved Rs. 275.80 Crores.

Deen Dayal Upadhyah Gram Jyoti Yojna (DDUGJY): This Scheme is applicable in the rural areas of the Company. Scheme involves strengthening and augmentation of sub-transmission & distribution to ensure reliable and quality power supply in rural areas, 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. During the year, Company has incurred Rs. 128.75 Crore as against approved Rs. 213.05 Crore.

Sardar Krushi Jyoti Yojna (SKJY): Under the head Sardar Krushi Jyot 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. 34.61 Crore.

Funding of CAPEX

The funding of actual capitalisation is done through various sources categorised under four headings namely: Consumer Contribution, Grants, Equity and Debt. The detailed break up of CAPEX, Capitalization and funding thereof during FY 2017-18 is given in the Table below.

Table 4-26: Capitalisation and sources of funding claimed by PGVCL for FY 2017-18

(Rs. Crore)

Sr. No.	Schemes	Approved in MYT Order	Claimed in truing up
1	**Capex**	**2041.35**	**1708.68**
2	Capitalization	**2041.35**	**1669.53**
3	Less: Consumer Contribution	179.39	198.23
4	Less: Grants	347.81	167.13
5	**Balance CAPEX**	**1514.15**	**1304.17**
6	Debt @ 70%	1059.91	912.92
7	Equity @ 30%	454.25	391.25

Commission's Analysis

The capital expenditure approved in the MYT Order dated 31st March, 2017 is Rs. 2041.35 Crore. The actual capital expenditure incurred is Rs. 1708.68 Crore, which is lower by Rs. 332.67 Crore than the CAPEX approved in the MYT Order dated 31st

March, 2017. The actual capitalization during FY2017-18 is Rs.1669.53 Crore, as per the audited annual accounts for FY 2017-18.

The Commission observes that PGVCL incurred Rs. 330.29 Crores as against the approved amount of Rs. 326 Crores under ‘normal development scheme’. PGVCL submitted that such expenses are incurred to meet with the Supply Obligation which is mainly based on the number of applications received. Since such expenditure is dependent upon number of new connections, as submitted by PGVCL, variation is expected to a certain extent.

The Commission observes that PGVCL has incurred Rs. 116.09 Crores against the approved amount of Rs. 100.00 Crores in the MYT Order dated 31st March, 2017 for FY 2017-18 under ‘system improvement’. PGVCL submitted that system Improvement is carried out on requirement basis with the objective to improve reliability of power supply and also to reduce distribution losses. The Commission noted that the actual distribution losses have been lower than the approved MYT figures for FY 2017-18. However, capital expenditure is continuous and ongoing in nature; therefore any positive impact of such investment might be contingent upon the implementation of the overall scheme.

Under RE scheme, PGVCL has released more than 85000 Agriculture connections during FY 2017-18 with total expenditure of Rs. 836.64 Crore against approved Rs. 650 Crore. Under the IPDS, DDUGJY and SKJY schems PGVCL has incurred the cost of Rs. 74.96 Crore, Rs. 128.75 Crore and Rs. 34.61 Crore respectively. 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. Generally, there are no pre-defined timelines as the schemes are further bifurcated into various works under the scheme. Nevertheless, the licensee shall be more realistic in projecting the capital expenditure.

The Commission, accordingly, approves the capital expenditure at Rs. 1708.68 Crore and capitalisation at Rs. 1669.53 Crore in the truing up for FY 2017-18.

The Commission noted that under Government Grants and Consumer Contribution, PGVCL has considered Rs 167.13 Crore and Rs. 198.23 Crore. The Commission has verified the annual accounts for 2017-18 and confirm the Government Grant of Rs. 167.13 Crore and Consumer Contribution of Rs. 198.23 Crore.

The CAPEX, capitalisation and funding thereof approved by the Commission is given in the Table below:

Table 4-27: Approved Capitalisation and sources of funding in the truing up for FY 2017-18

(Rs. Crore)

Sr. No.	Schemes	Approved in MYT Order	Claimed in Truing up	Approved for true up
1	**Capex**	**2041.35**	**1708.68**	**1708.68**
2	Capitalization	**2041.35**	**1669.53**	**1669.53**
3	Less: Consumer Contribution	179.39	198.23	198.23
4	Less: Grants	347.81	167.13	167.13
5	**Balance Capitalization**	**1514.15**	**1304.17**	**1304.17**
6	Debt @ 70%	1059.91	912.92	912.92
7	Equity @ 30%	454.25	391.25	391.25

4.6.3 Depreciation

PGVCL has claimed Rs. 671.44 Crore towards depreciation in the truing up for FY 2017-18 against the depreciation of Rs. 770.54 Crore approved in the MYT Order dated 31st March, 2017.

Petitioner’s submission

PGVCL submitted that it had been charging the Depreciation on the fixed assets of the Company, on the useful life of the assets at the rates prescribed under Schedule XIV to the Companies Act, 1956. The Company being engaged in the business of Electricity Distribution the provisions of the Electricity Act, 2003 would be applicable and would supersede the provisions of the Companies Act, 2013.

While claiming Depreciation PGVCL has quoted the provisions of the GERC (MYT) Regulations, 2016 and the directives given by the Commission in the MYT Order dated 31st March, 2017 as under:-

In case of Depreciation, the MYT Regulations, 2016 provides that-

“Depreciation shall be computed annually based on the straight line method at the rates specified in the Annexure I to these Regulations:

Provided that the remaining depreciable value as on 31st March of the year closing after a period of 12 years from date of commercial operation shall be spread over the balance useful life of the assets:

Provided further that for a Generating Company or a Transmission Licensee or SLDC or a Distribution Licensee formed as a result of a Transfer Scheme, the depreciation on assets transferred under the Transfer Scheme shall be charged as per rates specified in these Regulations for a period of 12 years from the date of Transfer Scheme, and thereafter depreciation will be spread over the balance useful life of the assets"

MYT Order dated 31st March, 2017:

"The petitioner came into existence through Transfer Scheme of the State Government effective from 1st April 2005 and the period of 12 years is getting completed on 31.03.2017. Accordingly, the petitioner is required to consider depreciation for the FY 2017-18 in accordance with the MYT Regulations, 2016 as stated above. At present the Commission has considered the depreciation charges as projected by the petitioner for the MYT Control Period, but the petitioner is required to book depreciation charges in accordance with the MYT Regulations. The Commission will consider and allow depreciation charges for FY 2017-18 in accordance with the MYT Regulations, 2016."

Accordingly, PGVCL has calculated depreciation for FY 2017-18 in accordance with the provisions of the GERC (MYT) Regulations, 2016 and the aforementioned directives of the Commission as given in the Table below:

Table 4-28: Fixed assets & depreciation computed by PGVCL for FY 2017-18

(Rs. Crore)

Sr. No.	Particulars	Approved in the MYT Order	Actual Claimed in Truing up	Deviation
1	Gross Block at the Beginning of the year	13609.54	10433.12	
2	Additions during the Year (Net)	2041.35	1,669.53	
3	**Depreciation for the Year**	**770.54**	**671.44**	**99.10**
4	Average Rate of Depreciation	5.27%	5.96%	

PGVCL has further submitted that actual depreciation for FY 2017-18, as against the value approved in the MYT Order, resulted in uncontrollable gain of Rs. 99.10 Crore as shown in the Table below:

Table 4-29: Gain / loss due to depreciation claimed in the truing up for FY 2017-18

(Rs. Crore)

Particulars	Approved in the MYT Order	Actual Claimed in Truing up	Gain/(Loss) due to Controllable Factors	Gain/(Loss) due to Uncontrollable Factors
Depreciation	770.54	671.44		99.10

Commission's Analysis

It is observed that the Opening GFA as per Audited accounts has been adjusted as per the requirement of IndAS, however, the Commission has considered the Opening Balance of GFA as per last true up for FY 2016-17, and accordingly the Closing Balance of GFA as on 31st March, 2017 has been considered as the Opening Balance of GFA as on 1.04.2017.

The net addition during the year of Rs. 1669.53 Crore is confirmed from the audited annual accounts for FY 2017-18. The depreciation as per P&L Account for FY 2017-18 is Rs. 671.44 Crore.

The Commission, accordingly, approves the Depreciation of Rs. 671.44 Crore in the truing up for FY 2017-18 as shown in the Table below:

Table 4-30: Approved fixed assets & Depreciation for FY 2017-18

(Rs. Crore)

Sr. No.	Particulars	Approved in the MYT Order	Approved in Truing up
1	Gross Block at the Beginning of the year	13609.54	13195.22
2	Additions during the Year (Net)	2041.36	1669.53
3	Gross Block at the end of the year	15650.90	14864.75
4	**Depreciation for the Year**	**770.54**	**671.44**
5	Average Rate of Depreciation	5.27%	4.79%

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 2017-18, as detailed in the Table below:

Table 4-31: Gain / loss due to depreciation approved in the truing up for FY 2017-18

(Rs. Crore)

Particulars	Approved in the MYT Order	Approved in Truing up	Gain/(Loss) due to Controllable Factors	Gain/(Loss) due to Uncontrollable Factors
Depreciation	770.54	671.44		99.10

4.6.4 Interest and Finance Charges

PGVCL has claimed Rs. 351.22 Crore towards interest and finance charges in the truing up for FY 2017-18, as against Rs. 378.48 Crore approved in the MYT Order dated 31st March, 2017 as shown in the Table below:

Table 4-32: Interest and Finance charges claimed by PGVCL in the truing up for FY 2017-18

(Rs. Crore)

Particulars	Approved in the MYT Order	Actual Claimed in Truing up
Interest and Finance Charges	378.48	351.22

Petitioners' submission

PGVCL has submitted that for assessing the actual interest charges on loans in FY 2017-18, they have considered Opening Balance of Loans for FY 2017-18 same as the Closing balance of Loans approved by the Commission for FY 2016-17 in the Tariff Order dated 31st March, 2018.

The loan addition is computed at Rs. 912.92 Crore towards funding of CAPEX for FY 2017-18. Repayment during the year has been considered equivalent to Depreciation as per the provisions of the GERC (MYT) Regulations, 2016. PGVCL has considered the weighted average rate of interest of 9.41%, as against 8.09% approved in the MYT Order dated 31st March, 2017 for FY 2017-18. In addition to the above, PGVCL has considered the guarantee charges payable on legacy loans allocated from the erstwhile GEB and 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 4-33: Interest and Finance charges claimed by PGVCL in the truing up for FY 2017-18

(Rs. Crore)

Sr. No.	Particulars	Approved in the MYT Order	Actual Claimed in Truing up
1	Opening Loans	2,829.20	2,485.76
2	Additions during the year	1,059.91	912.92
3	Repayments during the year	770.54	671.44
4	Closing Loans	3,118.57	2,727.24
5	Average Loans	2,973.89	2,606.50
6	Interest on Loan	240.59	245.27
7	Interest on Security Deposit	130.74	103.33
8	Guarantee Charges	7.14	2.62
9	**Total Interest & Finance Charges**	**378.48**	**351.22**
10	Weighted Average Rate of Interest	**8.09%**	**9.41%**

PGVCL has further submitted that interest and finance charges are categorised as uncontrollable as per the GERC (MYT) Regulations, 2016 and accordingly worked out deviation in the actual vis-à-vis the approved expenses under uncontrollable factors, as given in the Table below:

Table 4-34: Gain / (Loss) claimed due to Interest & Finance Charges for FY 2017-18

(Rs. Crore)

Particulars	Approved in the MYT Order	Actual Claimed in Truing up	Gain/(Loss) due to Controllable Factors	Gain/(Loss) due to Uncontrollable Factors
Interest and Finance charges	378.48	351.22		27.26

Commission's Analysis

The Commission observed that the Closing Balance of Loans approved in the true up for FY 2016-17is Rs. 2485.76 Crore and the same has to be taken as the Opening Loans Balance of FY 2017-18.

The capitalisation and funding of CAPEX have been taken as approved for FY 2017-18 at **Table 4.27** above of this Order. The normative addition of loans during FY 2017-18 has been considered at Rs. 912.92 Crore as approved in **Table 4.27** of this Order. The interest on security deposits of Rs. 103.33 Crore is as per audited accounts for FY 2017-18.

The repayment of loan is Rs. 671.44 Crore in the truing up for FY2017-18, which is equivalent to the depreciation, approved in **Table 4.30** of this Order. The guarantee charges and other finance charges, as per audited accounts for FY 2017-18 are Rs. 2.62 Crore. PGVCL has submitted the details of actual loan portfolio for FY 2017-18. The Commission has worked out the weighted average rate of interest as 9.69% in accordance with Regulation 38 of the GERC (MYT) Regulations, 2016.

Taking all these factors into consideration, the interest & finance charges have been computed as detailed in the Table below:

Table 4-35: Interest and Finance Charges approved by the Commission in the truing up for FY 2017-18

(Rs. Crore)

Sr. No.	Particulars	Approved in the MYT Order	Approved in Truing up
1	Opening Loans	2,829.20	2,485.76
2	Additions during the year	1,059.91	912.92
3	Repayments during the year	770.54	671.44
4	Closing Loans	3,118.57	2,727.24
5	Average Loans	2,973.89	2606.50
6	Interest on Loan	240.59	252.48
7	Interest on Security Deposit	130.74	103.33
8	Guarantee Charges	7.14	2.62
9	Total Interest & Finance Charges	378.48	358.43
10	Weighted Average Rate of Interest	**8.09%**	**9.69%**

The Commission, accordingly, approves the interest and finance charges at Rs. 358.43 Crore in the truing up for FY 2017-18

As per the GERC(MYT) Regulations, 2016, the Commission is of the view that the parameters which impact interest and finance charges should be treated as uncontrollable.The Commission, accordingly, approves the gain / loss on account of interest and finance charges in the truing up for FY 2017-18, as detailed in the Table below:

Table 4-36: Gain / loss approved in the truing up for FY 2017-18

(Rs. Crore)

Particulars	Approved in the MYT Order	Approved in Truing up	Deviation	Gain/(Loss) due to Uncontrollable Factors
Interest and Finance Charges	378.48	358.43		20.05

4.6.5 Interest on Working Capital

PGVCL has not claimed any interest on working capital in the truing up for FY 2017-18, against Nil provision approved in the MYT Order dated 31st March, 2017 as detailed in the Table below:

Table 4-37: Interest on Working Capital claimed by PGVCL in the truing up for FY 2017-18

(Rs. Crore)

Particulars	Approved in the MYT Order	Actual Claimed in Truing up
Interest on Working Capital	-	-

Petitioner's submission

PGVCL has submitted that the interest on working capital has been calculated based on the GERC (MYT) Regulations, 2016. The rate of interest considered is the weighted average of the 1 year MCLR of the State Bank of India during the year plus 250 basis points. This rate works out to 10.50%. The detailed computation of Working Capital requirement as per the provisions of the GERC (MYT) Regulations, 2016 and Interest on Working Capital is given in the Table below:

Table 4-38: Interest on Working Capital claimed by PGVCL in the truing up for FY 2017-18

(Rs. Crore)

Sr. No.	Particulars	Approved in the MYT Order	Actual Claimed in Truing up
1	O&M Expenses	44.68	79.57
2	Maintenance Spares	136.10	104.33
3	Receivables	1090.91	1,185.36
4	Less: Amount held as Security Deposit from Consumers	1,687.02	1,675.87
5	**Total Working Capital**	**(415.34)**	**(306.61)**
6	Rate of Interest on Working Capital	11.70%	10.50%
7	**Interest on Working Capital**		

Commission's Analysis

The Commission has examined the computation of normative working capital and interest thereon under the GERC (MYT) Regulations, 2016. The working capital requirement works out to be negative during FY 2017-18. 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 4-39: Interest on Working Capital approved in the truing up for FY 2017-18

(Rs. Crore)

Sr. No.	Particulars	Actual Claimed in Truing up	Approved in Truing up
1	O&M Expenses	44.68	79.57
2	Maintenance Spares	136.10	131.95
3	Receivables	1090.91	1179.82
4	Less: Amount held as Security Deposit from Consumers	1,687.02	1,675.87
5	**Total Working Capital**	**(415.34)**	**(284.53)**
6	Rate of Interest on Working Capital	11.70%	10.50%
7	Interest on Working Capital	-	-

The Commission, accordingly, approves the Interest on Working Capital as Nil in the truing up for FY 2017-18.

4.6.6 Bad Debts

PGVCL has claimed Rs. 2.15 Crore towards bad debts written off in the truing up for FY 2017-18, as against Rs. Nil approved in the MYT Order dated 31st March, 2017as given in the Table below:

Table 4-40: Bad debts claimed by PGVCL in the truing up for FY 2017-18

(Rs. Crore)

Sr. No.	Particulars	Approved in the MYT Order	Actual Claimed in Truing up
1	Bad Debts	-	2.15

Petitioner's submission

PGVCL has claimed Rs. 2.15 Crore towards Bad and doubtful Debts Written Off and submitted that comparison of the actual Bad Debts Written Off with the amount approved in the MYT Order resulted in a loss of Rs. 2.15 Crore on account of controllable factors, as shown in the Table below:

Table 4-41: Bad Debts for FY 2017-18

(Rs. Crore)

Sr. No.	Particulars	Approved in MYT Order	Actual Claimed in truing up	Gain/(Loss) due to Controllable Factors	Gain/(Loss) due to Uncontrollable Factors
1	Bad Debts	-	2.15	(2.15)	

Commission's Analysis

The Commission has observed that PGVCL has claimed Rs. 2.15 Crore towards Bad & Doubtful Debts Written Off during FY 2017-18.

The Commission verified from the audited annual accounts that PGVCL has made a provision for bad debts of Rs. 38.05 Crore and has also written off Rs. 2.15 Crore towards Bad & Doubtful Debts. Regulation 94.9 specifies that the Commission may allow bad debts written off as a pass through in the aggregate revenue requirement subject to prudence check**.** The Commission notes that the Provision for Bad & Doubtful Debts is towards the future write offs and accordingly the actual write offs only are considered as a pass through in the ARR as per the GERC (MYT) Regulations, 2016..

The Commission, therefore, approves Rs. 2.15 Crore towards bad & doubtful debts written off in the truing up for FY 2017-18.

The deviation on account of bad debts written off is Rs. 2.15 Crore and the Commission considers the same as loss due to controllable factors, as detailed in the Table below:

Table 4-42: Gain/ (Loss) due to Bad Debts Written Off approved in the Truing up for FY 2017-18

(Rs. Crore)

Sr. No.	Particulars	Approved in the MYT Order	Approved in Truing up	Gain/(Loss) due to Controllable Factors	Gain/(Loss) due to Uncontrollable Factors
1	Bad Debts Written Off	-	2.15	(2.15)	

4.6.7 Return on Equity

PGVCL has claimed Rs. 459.51 Crore towards return on equity in the truing up for FY 2017-18, as against Rs.485.56 Crore approved in the MYT Order dated 31st March, 2017, as given in the Table below:

Table 4-43: Return on Equity claimed by PGVCL in the truing up for FY 2017-18

(Rs. Crore)

Particulars	Approved in the MYT Order	Actual Claimed in Truing up
Return on Equity	485.56	459.51

Petitioner's submission

The Petitioner has submitted that return on equity is computed considering the rate of 14% on the average of opening and closing equity, taking into account the additions during the year FY 2017-18 as given in the Table below:

Table 4-44: Return on Equity claimed by PGVCL in the truing up for FY 2017-18

(Rs. Crore)

Sr. No.	Particulars	Approved in the MYT Order	Actual Claimed in Truing up
1	Opening Equity	3,240.46	3,086.59
2	Additions during the year	454.25	391.25
3	Closing Equity	3,694.70	3,477.84
4	Average Equity	3,467.58	3,282.22
5	Rate of Return on the Equity	14%	14%
6	**Return on Equity**	**485.46**	**459.51**

Commission's Analysis

PGVCL has claimed the Opening Equity of Rs. 3086.59 Crore for FY 2017-18 and it has submitted Equity addition of Rs. 391.25 Crore during the FY 2017-18. The actual Opening Equity, as on 1st April, 2017, was Rs. 3086.59 Crore, being the Closing Balance of Equity approved in the True-up for FY 2016-17. The Commission has approved the normative Equity Addition as Rs. 391.25 Crore in **Table 4.27 o**f this Order.

The Commission has computed the return on equity in the truing up for FY 2017-18 considering the rate of 14% as provided in the GERC (MYT) Regulations, 2016 as detailed in the Table below:

Table 4-45: Return on Equity approved for FY 2017-18

(Rs. Crore)

Sr. No.	Particulars	Actual Claimed in Truing up	Approved in Truing up
1	Opening Equity	3,086.59	3,086.59
2	Additions during the year	391.25	391.25
3	Closing Equity	3,477.84	3,477.84
4	Average Equity	3,282.22	3,282.22
5	Rate of Return on Equity	14.00%	14%
6	**Return on Equity**	**459.51**	**459.51**

The Commission approves the return on equity at Rs. 459.51 Crore in the truing up for FY 2017-18.

It is considered that the deviation is due to uncontrollable factors as the return on equity 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.

As mentioned in the GERC (MYT) Regulations, 2016 the factors impacting the Return on Equity are considered uncontrollable. The Commission, accordingly, approves the gains and losses, on account of Return on Equity, in the Truing up for FY 2017-18 as uncontrollable.

The Commission, accordingly, approves the gains / losses on account of Return on Equity in the truing up for FY 2017-18, as detailed in the Table below:

Table 4-46: Approved gain / loss due to Return on Equity in the truing up for FY 2017-18

(Rs. Crore)

Particulars	Approved in the MYT Order	Approved in Truing up	Gain/(Loss) due to Controllable Factors	Gain / (loss) due to Un controllable Factors
Return on Equity	485.46	459.51	0	25.95

4.6.8 Taxes

PGVCL has claimed Rs. 28.71 Crore towards income tax in the truing up for FY 2017-18, as against Rs. 18.96 Crore approved in the MYT Order dated 31st March, 2017 as given in the Table below:

Table 4-47: Taxes claimed by PGVCL in the truing up for FY 2017-18

(Rs. Crore)

Particulars	Approved in the MYT Order	Actual Claimed in Truing up
Income Tax (MAT)	18.96	28.71

Petitioner's submission

PGVCL has submitted that income tax being a statutory expense, any variation on this account is uncontrollable. PGVCL has submitted a loss of Rs. 9.75 Crore on this account, as given in the Table below:

Table 4-48: Gain / (Loss) claimed due to IncomeTax paid for FY 2017-18

(Rs. Crore)

Particulars	Approved in the MYT Order	Actual Claimed in Truing up	Gain /(loss) due to Controllable Factors	Gain / (loss) due to Un Uncontrollable Factors
Income Tax (MAT)	18.96	28.71		(9.75)

Commission's Analysis

The Commission has obtained the copies of the challans of Tax payer's counterfoil, 26 AS and also verified from the audited annual accounts of the company and found that the licensee has paid/provided income tax of Rs. 28.71 Crore.

The Commission, accordingly, approves the Income Tax of Rs. 28.71 Crore in the truing up for FY 2017-18.

With regard to the computation of Gains/(Losses), Regulation 22 of the GERC (MYT) Regulations, 2016 considers variation in taxes on income as uncontrollable.

The Commission, accordingly, approves the Gain/(Loss) on account of tax on income in the truing up for FY 2017-18, as detailed in the Table below:

Table 4-49: Approved gain / loss due to Tax in the truing up for FY 2017-18

(Rs. Crore)

Particulars	Approved for in the MYT Order	Approved in Truing up	Gain /(loss) due to Controllable Factors	Gain / (loss) due to Uncontrollable Factors
Tax on Income	18.96	28.71		(9.75)

4.6.9 Non- Tariff Income

PGVCL has claimed the actual Non-Tariff Income at Rs. 258.58 Crore in the truing up for FY 2017-18, as against Rs. 234.07 Crore approved in the MYT Order dated 31st March, 2017, as detailed in the Table below:

Table 4-50: Non-Tariff Income claimed by PGVCL in the truing up for FY 2017-18

(Rs. Crore)

Particulars	Approved in the MYT Order	Actual Claimed in Truing up
Non-Tariff Income	234.07	258.58

Petitioner's submission

The Petitioner has claimed the actual Non-Tariff Income of Rs. 258.58 Crore, as against Rs. 234.07 Crore approved in the MYT Order dated 31st March, 2017. This has resulted in uncontrollable gain of Rs. 24.51 Crore, as detailed in the Table below:

Table 4-51: Gains / (Loss) claimed due to Non-Tariff Income for FY 2017-18

(Rs. Crore)

Particulars	Approved in the MYT Order	Actual Claimed in Truing up	Gain /(loss) due to Controllable Factor	Gain / (loss) due to Uncontrollable Factors
Non-Tariff income	234.07	258.58		(24.51)

Commission's Analysis

It is observed that other income as per Audited Accounts is Rs. 262.15 Crore. The Petitioner has deducted the Interest on Staff advances of Rs. 3.57 Crore to arrive at claimed amount of Rs. 258.58 Crore.

The Commission, accordingly, approves the Non-Tariff Income at Rs. 258.58 Crore in the truing up for FY 2017-18.

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 2017-18, as detailed in the Table below:

Table 4-52: Approved gain / (loss) due to Non-Tariff Income in the truing up for FY 2017-18

(Rs. Crore)

Particulars	Approved in the MYT Order	Approved in Truing up	Gain /(loss) due to Controllable Factors	Gain / (loss) due to Uncontrollable Factors
Non-Tariff Income	234.07	258.58		(24.51)

4.7 Revenue from Sale of Power

PGVCL has claimed the total revenue of Rs. 14224.32 Crore in the truing up for FY 2017-18, as against Rs. 13090.86 Crore approved in the MYT Order dated 31st March, 2017, as detailed in the Table below:

Table 4-53: Revenue submitted in the truing up for FY 2017-18

(Rs. Crore)

Sr. No.	Particulars	Approved in MYT Order	Actual Claimed in Truing up
1	Revenue from Sale of Power	12179.35	13486.87
2	Other Income (Consumer related)	470.98	302.08
3	**Total Revenue excluding subsidy (1+2)**	**12650.33**	**13788.95**
4	Agriculture Subsidy	440.53	435.37
5	**Total Revenue including subsidy (3+4)**	**13090.86**	**14224.32**

Commission's Analysis

The Commission has verified the total revenue for FY 2017-18 from the audited accounts. The actual revenue from category-wise sales and as per audited accounts is Rs. 13666.87 Crore. This includes the revenue from sale of power to GUVNL of Rs. 93.67 Crore and DSM charges Income of Rs. 86.33 Crore for FY 2017-18. Since these have been adjusted against the power purchase cost for the FY 2017-18, as shown in the **Table 4.9** of this Order, the net revenue from sale of power works out to Rs. 13486.87 Crore.

It is further observed that other operating income along with the income of parallel operation charges as per audited annual accounts is Rs. 747.51 Crore which includes Agriculture Subsidy of Rs. 433.57 Crore and Delayed Payment Charges income of Rs. 76.58 Crore (Interest and Financial Income). After excluding these two elements, the Consumer related other income works out to Rs. 237.36 Crore.

The Commission has considered Agriculture Subsidy separately. While Delayed Payment Charges Income and Delayed Payment Charges Expenditure are not considered as per the GERC (MYT) Regulations, 2016.

Table 4-54: Revenue approved in the truing up for FY 2017-18

(Rs. Crore)

Sr. No.	Particulars	Actual Claimed in truing up	Approved in Truing up
1	Revenue from Sale of Power	13486.87	13486.87
2	Other Income (Consumer related0	302.08	235.56
3	**Total revenue excluding subsidy (1+2)**	**13788.95**	**13722.43**
4	Agriculture Subsidy	435.37	435.37
5	Total revenue including subsidy (3+4)	**14224.32**	**14157.80**

The Commission, accordingly, approves the total revenue of Rs. 14157.80 Crore, including consumer related income of Rs. 235.56 Crore and agriculture subsidy of Rs. 435.37 Crore in the truing up for FY 2017-18.

4.8 ARR approved in the truing up

The Commission reviewed the performance of PGVCL under Regulation 21 of the GERC (MYT) Regulations, 2016 with reference to the audited accounts for FY 2017-18. The Commission computed the gains/(losses) for FY 2017-18, based on the truing up for each of the component discussed in the above paragraphs.

The Aggregate Revenue Requirement (ARR) approved in the MYT Order dated 31st March, 2017, actual claimed in truing up and approved for truing up and Gain/(Loss) computed in accordance with the GERC (MYT) Regulations, 2016 are given in the Table below:

Table 4-55: ARR approved in truing up for FY 2017-18

(Rs. Crore)

Sr. No.	Annual Revenue Requirement	Approved in the MYT Order	Actual Claimed in Truing up	Approved in Truing up	Deviation +/(-)	Gain / (Loss) due to Controllable Factors	Gain / (Loss) due to Uncontrollable Factors
1	**2**	**3**	**4**	**5**	**6=(3-5)**	**7**	**8**
1	Cost of Power Purchase	11,185.42	12,496.20	12,496.20	(1,310.78)	323.22	(1,634.00)
2	O&M Expenses	536.17	954.85	954.85	(418.68)	(213.35)	(205.33)
2.1	Employee Cost	673.66	869.88	869.88	(196.22)	(138.04)	(58.17)
2.2	Repairs & Maintenance Expenses	105.53	147.71	147.71	(42.18)	(42.18)	
2.3	Administration & General Expenses	125.55	158.68	158.68	(33.13)	(33.13)	
2.4	Other Debits	-	-	-	-		-
2.5	Extra Ord Item	-	-	-	-	-	-
2.6	Other Exps Capitalised	(368.57)	(221.42)	(221.42)	(147.15)		(147.15)
3	Depreciation	770.54	671.44	671.44	99.10	-	99.10
4	Interest and Finance Charges	378.48	351.22	358.43	20.05	-	20.05
5	Interest on Working Capital	-	-	-	-	-	-
6	Bad Debts Written Off	-	2.15	2.15	(2.15)	(2.15)	
7	Return on Equity	485.46	459.51	459.51	25.95	-	25.95
8	Provision for Tax / Tax paid	18.96	28.71	28.71	(9.75)	-	(9.75)
9	**Total Expenditure (1 to 8)**	**13,375.04**	**14,964.08**	**14,971.28**	**(1,596.25)**	**107.72**	**(1,703.97)**
10	Less: Non -Tariff Income	234.07	258.58	258.58	(24.51)	-	(24.51)
11	**Aggregate Revenue Requirement**	**13,140.97**	**14,705.50**	**14,712.70**	**(1,571.73)**	**107.72**	**(1,679.46)**

4.9 Sharing of Gain / Loss for FY 2017-18

The Commission has analysed the gains / (losses) on account of controllable and uncontrollable factors. The relevant Regulations of the GERC (MYT) Regulations, 2016 are extracted below:

"**Regulation 23. Mechanism for pass-through of gain or loss on account of uncontrollable factors**

23.1 The approved aggregate gain or loss to the Generating Company or Transmission Licensee or SLDC or Distribution Licensee on account of uncontrollable factors shall be passed through as an adjustment in the tariff of the Generating Company or Transmission Licensee or SLDC or Distribution Licensee over such period as may be specified in the Order of the Commission passed under these Regulations.

23.2 The Generating Company or Transmission Licensee or SLDC or Distribution Licensee shall submit such details of the variation between expenses incurred and revenue earned and the figures approved by the Commission, in the prescribed format to the Commission, along with the detailed computations and supporting documents as may be required for verification by the Commission.

23.3 Nothing contained in this Regulation 23shall apply in respect of any gain or loss arising out of variations in the price of fuel and power purchase, which shall be dealt with as specified by the Commission from time to time.

Regulation 24. Mechanism for sharing of gai or loss on account of controllable factors

24.1The approved aggregate gain to the Generating Company or Transmission Licensee or SLDC or Distribution Licensee on account of controllable factors shall be dealt with in the following manner:

(a) One-third of the amount of such gain shall be passed on as a rebate in tariffs over such period as may be stipulated in the Order of the Commission under Regulation 21.6;

(b) The balance amount, which will amount to two-thirds of such gain, may be utilised at the discretion of the Generating Company or Transmission Licensee or SLDC or Distribution Licensee.

24.2 The approved aggregate loss to the Generating Company or Transmission Licensee or SLDC or Distribution Licensee on account of controllable factors shall be dealt with in the following manner:

(a) One-third of the amount of such loss may be passed on as an additional charge in tariffs over such period as may be stipulated in the Order of the Commission under Regulation 21.6; and

(b) The balance amount of loss, which will amount to two-thirds of such loss, shall be absorbed by the Generating Company or Transmission Licensee or SLDC or Distribution Licensee."

4.10 Revenue Gap / Surplus for FY 2017-18

As shown in the Table below, PGVCL has submitted a revenue GAP of Rs. 221.67 Crore in the truing up considering the treatment of Gains/(Losses) due to controllable and uncontrollable factors:

Table 4-56: Revenue Surplus/ (Gap) FY 2017-18

(Rs. Crore)

Sr. No.	Particulars	Amount
1	Aggregate Revenue Requirement approved for 2017-18 in MYT Order	13141.07
2	(Gap)/Surplus from true-up of FY 2015-16	288.34
3	Gain / (Loss) on account of Uncontrollable factors to be passed on to consumer	(1672.16)
4	Gain / (Loss) on account of Controllable factors to be passed on to consumer (1/3rd of Total Gain /Loss)	35.91
5	**Revised ARR for FY 2017-18 (1-2-3-4)**	**14488.98**
6	Revenue from Sale of Power	13486.87
7	Other Income (Consumer related)	302.08
8	Agriculture Subsidy	435.37
9	GUVNL Profit / (Loss) allocation	**42.99**
10	**Total Revenue including Subsidy (6+7+8+9)**	**14267.31**
11	**Revised Surplus/(Gap) after treating gain/(loss) due to Controllable and Uncontrollable Factors (10-5)**	**(221.67)**

Petitioner's Submission

The Commission in the MYT Order, dated 31st March 2017, has approved Aggregate Revenue Requirement of Rs. 13141.07 Crore for FY 2017-18.

As per the mechanism specified in the GERC (MYT) Regulation 2016, PGVCL proposes to pass on a sum of 1/3rd of total gain/(loss) on account of controllable factors i.e. Rs. 35.91 Crore out of Rs. 107.72 Crore and total gain/(loss) on account of uncontrollable factors i.e. Rs. (1672.16) Crore to the consumers. Additionally, the past revenue (gap) / surplus of Rs. 288.34 Crore for FY 2015-16 is also adjusted in the approved Aggregate Revenue Requirement. Accordingly, PGVCL has arrived at the Revised Aggregate Revenue Requirement for FY 2017-18 at Rs. **14,488.98** Crore as shown in the above Table.

This revised Aggregate Revenue Requirement is compared against the revised income under various heads including Revenue with Existing Tariff of Rs. 13486.87 Crore, Other Consumer related Income of Rs. 302.08 Crore and Agriculture Subsidy of Rs. 435.37 Crore. GUVNL's profit of Rs. 126.05 Crore for FY 2017-18 is allocated amongst four DISCOMs with PGVCL's share being Rs. 42.99 Crore. Accordingly, the Total Revenue considering all these elements works out to Rs. 14267.31 Crore. Comparison of Revised ARR of Rs. 14488.98 Crore against Total Revenue of Rs. 14267.31 Crore after considering all the above adjustments has resulted into a Gap of Rs. 221.67 Crore as shown in the above Table

Commission's Analysis

The Commission compared the actual performance of PGVCL with the values approved in the MYT Order dated 31st March, 2017

The Commission also verified the Tariff Order dated 31st March, 2017 in Petition No. 1625 of 2016 and observed that the Petitioner has claimed the Surplus of Rs. 288.34 Crore on true up of FY 2015-16 approved by the Commission in the said Order while determining tariff for FY 2017-18.

The Commission has arrived at the revised ARR and revenue gap, based on the expenses and the gains / losses approved in the truing up for FY 2017-18 and the earlier year's surplus. The revenue (gap)/surplus approved by the Commission for FY 2017-18 is summarised in the Table below:

Table 4-57: Revenue Surplus/(Gap) approved in the truing up for FY 2017-18

(Rs. Crore)

Sr. No.	Particulars	2017-18
1	Aggregate Revenue Requirement originally approved for 2017-18	13140.97
2	(Gap)/Surplus of FY 2015-16	288.34

Sr. No.	Particulars	2017-18
3	Gain / (Loss) on account of Uncontrollable factor to be passed on to consumer	(1679.46)
4	Gain / (Loss) on account of Controllable factor to be passed on to consumer (1/3rd of Total Gain /Loss)	35.91
5	**Revised ARR for FY 2016-17 (1-2-3-4)**	**14496.19**
6	Revenue from Sale of Power	13486.87
7	Other Income (Consumer related)	235.56
8	Agriculture subsidy	435.37
9	GUVNL Profit / (Loss) allocation	42.99
10	**Total Revenue including Subsidy (6+7+8+9)**	**14200.79**
11	**Revised Surplus/(Gap) after treating gains/(losses) due to Controllable/ Uncontrollable factors (10-5)**	**(295.40)**

5 Mid-Term Review for FY 2019-20 and FY 2020-21

5.1 Introduction

In terms of Regulation 16.2 (i) of the GERC (MYT) Regulations, 2016, a Mid-Term Review of the Annual Revenue Requirement shall be undertaken for the Generating Licensee, Transmission Licensee, SLDC and Distribution Licensee on an application that shall be filed by the utilities along with the petition for truing up for the second year of the control period and tariff determination for the fourth year of the control period.

5.2 Submission of PGVCL

In accordance with the above provisions Paschim Gujarat Vij Company (PGVCL) has filed the petition for Mid-Term Review of ARR for the remaining control period i.e. FY 2019-20 and FY 2020-21.

5.2.1 Summary of the Petition for Mid-Term review for the remaining control period, FY 2019-20 and FY 2020-21

PGVCL has projected its Revised Aggregate Revenue Requirement for FY 2019-20 and FY 2020-21 as part of Mid-Term Review process for the remaining years of the control period of the GERC (MYT) Regulations, 2016.

The comparison of revised projections for FY 2019-20 and FY 2020-21 vis-a-vis the figures approved by the Commission in the MYT Order dated 31st March, 2017 is given in the Table below:

Table 5-1: Mid-Term review for FY 2019-20 and FY 2020-21

(Rs. Crore)

Sr. No.	Particulars	2019-20		2020-21	
		Approved in MYT Order	Projected in MTR	Approved in MYT Order	Projected in MTR
1	Power Purchase Cost	12718.03	14543.26	13958.12	15526.83
2	Operations & Maintenance Expenses	599.27	1188.75	633.55	1342.17
2.1	Employee Cost	752.93	1177.94	796	1330.75
2.2	Repairs& Maintenance Expenses	117.95	117.95	124.7	124.7
2.3	Administration & General Expenses	140.33	140.33	148.35	148.35
2.4	Other Debits	0.00	0.00	0.00	0.00
2.5	Extraordinary Items	0.00	0.00	0.00	0.00

Sr. No.	Particulars	2019-20		2020-21	
		Approved in MYT Order	Projected in MTR	Approved in MYT Order	Projected in MTR
2.6	Net Prior Period Expenses / (Income)	0.00	0.00	0.00	0.00
2.7	Other Expenses Capitalized	(411.94)	(247.47)	(435.50)	(261.63)
3	Depreciation	945.39	712.43	1025.84	799.62
4	Interest & Finance Charges	420.05	465.85	429.27	508.99
5	Interest on Working Capital	0.00	0.00	0.00	0.00
6	Bad Debts Written Off	0.00	2.15	0.00	2.15
7	**Sub-Total [1 to 6]**	**14682.74**	**16912.43**	**16046.77**	**18179.76**
8	Return on Equity	599.29	577.65	653.53	640.56
9	Provision for Tax / Tax Paid	18.96	28.71	18.96	28.71
10	**Total Expenditure (7 to 9)**	**15300.99**	**17518.79**	**16719.26**	**18849.03**
11	Less: Non-Tariff Income	234.07	258.58	234.07	258.58
12	Add: DSM Expenses		2.50		2.50
13	**Aggregate Revenue Requirement (10 - 11)**	**15066.92**	**17262.72**	**16485.20**	**18592.95**

5.3 Estimation of ARR for the remaining years of control period, FY 2019-20 and FY 2020-21.

The Mid-Term Review covers the following components of ARR for the remaining years of control period i.e. FY 2019-20 and FY 2020-21:

- 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 the same hereunder:

5.4 Energy Sales

5.4.1. Projection of Energy sales for FY 2019-20 and FY 2020-21

PGVCL has projected the energy sales for FY 2019-20 and FY 2020-21 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 actul category-wise energy sales for the last 5 years (FY 20012-13 to FY 2017-18) and projected sales for FY 2019-20 and FY 2020-21 and also underlying CAGR (for 5 year, 3 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

(MUs)

Sr. No.	Category	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
	LOW TENSION						
1	RGP	2,796	2,970	3,291	3,474	3,492	3,608
2	GLP	83	85	94	105	113	117
3	Non-RGP & LTMD	2,743	2,727	2,975	3,042	3,227	3,415
4	Public Water Works	482	557	597	634	698	751
5	Agriculture-Unmetered	4,081	4,253	4,358	4,437	4,486	4,570
5	Agriculture-Metered	1,789	1,764	2,210	2,648	2,410	2,682
7	Street Light	80	84	89	93	97	81
	Sub-Total	**12,054**	**12,440**	**13,614**	**14,432**	**14,523**	**15,225**
	HIGH TENSION						
1	Industrial HT	5,167	5,002	6,322	6,757	8,176	10,467
2	Railway Traction	0	0	0	0	0	0
	Sub Total	**5,167**	**5,002**	**6,322**	**6,757**	**8,176**	**10,467**
	Total	**17,221**	**17,442**	**19,936**	**21,189**	**22,700**	**25,692**

Table 5-3: Category-wise Growth rate of Units Sold

Sr. No.	Category	5 year	4 year	3 year	2 year	1 year
	LOW TENSION					
1	RGP	5.23%	4.99%	3.11%	1.91%	3.32%
2	GLP	0.00%	0.00%	7.71%	5.74%	3.94%
3	Non-RGP & LTMD	0.00%	0.00%	4.70%	5.95%	5.82%
4	Public Water Works	9.28%	7.76%	7.96%	8.87%	7.68%
5	Agriculture-Unmetered	2.29%	0.00%	1.59%	1.49%	1.87%
6	Agriculture-Metered	8.44%	0.00%	6.68%	0.65%	11.31%
7	Street Light	0.18%	-0.99%	-3.09%	-6.98%	-17.19%
	Sub-Total	**4.78%**	**5.18%**	**3.80%**	**2.71%**	**4.83%**
	HIGH TENSION					

Sr. No.	Category	5 year	4 year	3 year	2 year	1 year
1	Industrial HT	15.16%	20.27%	18.30%	24.47%	28.02%
2	Railway Traction	-	-	-	-	-
	Sub Total	**15.16%**	**20.27%**	**18.30%**	**24.47%**	**28.02%**
	TOTAL	**8.33%**	**10.17%**	**8.82%**	**10.11%**	**13.18%**

5.4.2. Consumer Profile

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

Table 5-4: Category-wise number of Consumers

(Nos.)

Sr. No.	Category	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
	LOW TENSION						
1	RGP	3,072,070	3,169,624	3,246,802	3,336,538	3,432,067	3,518,261
2	GLP	22,552	23,440	24,656	26,776	28,317	29,218
3	Non-RGP & LTMD	568,821	583,364	599,066	616,537	633,975	642,631
4	Public Water Works	13,342	14,326	14,900	15,658	16,494	17,036
5	Agriculture-Unmetered	259,742	259,722	259,670	259,327	258,866	258,457
6	Agriculture-Metered	299,429	341,734	408,030	452,167	508,532	588,360
7	Street Light	5,647	6,008	6,292	6,659	7,055	7,616
	Sub-Total	**4,241,603**	**4,398,218**	**4,559,416**	**4,713,662**	**4,885,306**	**5,061,579**
	HIGH TENSION						
1	Industrial HT	3,403	3,748	4,134	4,451	4,740	5,229
2	Railway Traction	0	0	0	0	0	0
	Sub Total	**3,403**	**3,748**	**4,134**	**4,451**	**4,740**	**5,229**
	TOTAL	**4,245,006**	**4,401,966**	**4,563,550**	**4,718,113**	**4,890,046**	**5,066,808**

Table 5-5: Growth rate of Number of Consumers

Sr. No.	Category	5 year	4 year	3 year	2 year	1 year
	LOW TENSION					
1	RGP	2.75%	2.64%	2.71%	2.69%	2.51%
2	GLP	0.00%	0.00%	5.82%	4.46%	3.18%
3	Non-RGP & LTMD	0.00%	0.00%	2.37%	2.09%	1.37%
4	Public Water Works	5.01%	4.43%	4.57%	4.31%	3.29%
5	Agriculture-Unmetered	-0.10%	-0.12%	-0.16%	-0.17%	-0.16%
6	Agriculture-Metered	14.46%	14.55%	12.98%	14.07%	15.70%
7	Street Light	6.17%	6.11%	6.57%	6.94%	7.95%
	Sub-Total	**3.60%**	**3.57%**	**3.54%**	**3.62%**	**3.61%**
	HIGH TENSION					

Sr. No.	Category	5 year	4 year	3 year	2 year	1 year
1	Industrial HT	8.97%	8.68%	8.15%	8.39%	10.32%
2	Railway Traction	-	-	-	-	-
	Sub Total	**8.97%**	**8.68%**	**8.15%**	**8.39%**	**10.32%**
	TOTAL	**3.60%**	**3.58%**	**3.55%**	**3.63%**	**3.61%**

5.4.3. Category-wise Connected Load

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

Table 5-6: Category-wise Connected Load

(MW)

Sr. No.	Category	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
	LOW TENSION						
1	RGP	2,669	2,807	2,937	3,069	3,223	3,367
2	GLP	73	80	88	98	107	116
3	Non-RGP & LTMD	2,173	2,304	2,454	2,585	2,740	2,917
4	Public Water Works	128	140	147	157	168	177
5	Agriculture-Unmetered	1,816	1,888	1,931	1,957	1,974	2,017
6	Agriculture-Metered	1,876	2,222	2,690	3,072	3,485	4,042
7	Street Light	23	24	27	29	30	32
	Sub-Total	**8,758**	**9,465**	**10,272**	**10,966**	**11,727**	**12,669**
	HIGH TENSION						
1	Industrial HT	1,863	2,106	2,339	2,606	2,897	3,363
2	Railway Traction	0	0	0	0	0	0
	Sub Total	**1,863**	**2,106**	**2,339**	**2,606**	**2,897**	**3,363**
	TOTAL	**10,621**	**11,571**	**12,610**	**13,572**	**14,624**	**16,032**

Table 5-7: Growth Rate for Connected Load

Sr. No.	Category	5 year	4 year	3 year	2 year	1 year
	LOW TENSION					
1	RGP	4.76%	4.66%	4.66%	4.75%	4.48%
2	GLP	0.00%	9.81%	9.93%	9.01%	8.98%
3	Non-RGP & LTMD	0.00%	6.07%	5.94%	6.22%	6.46%
4	Public Water Works	6.66%	6.00%	6.38%	6.11%	5.06%
5	Agriculture-Unmetered	2.13%	1.67%	1.48%	1.54%	2.21%
6	Agriculture-Metered	16.59%	16.13%	14.54%	14.71%	15.97%
7	Street Light	7.15%	7.86%	6.93%	6.50%	7.80%
	Sub-Total	**7.66%**	**7.56%**	**7.24%**	**7.48%**	**8.03%**
	HIGH TENSION					
1	Industrial HT	12.54%	12.41%	12.87%	13.60%	16.06%
2	Railway Traction	0.00%	0.00%	0.00%	0.00%	0.00%
	Sub Total	**12.54%**	**12.41%**	**12.87%**	**13.60%**	**16.06%**
	TOTAL	**8.58%**	**8.49%**	**8.33%**	**8.68%**	**9.62%**

5.4.4. Category-wise Projected Growth rates of energy sales

The Petitioner has considered following growth rates for projection of energy sales for years FY 2019-20 and FY 2020-21:

Table 5-8: Projected Growth Rates of energy sales, Nos of Consumers & Connected Load

Sr. No.	Particulars	Sales	Consumers	Connected Load
	LOW TENSION			
1	RGP	5.23%	2.75%	4.76%
2	GLP	7.71%	5.82%	9.93%
3	Non-RGP & LTMD	4.70%	2.37%	5.94%
4	Public Water Works	7.96%	4.57%	6.38%
5	Agriculture-Unmetered	0.00%	0.00%	0.00%
6	Agriculture-Metered	0.00%	0.00%	0.00%
7	Street Light	0.18%	6.17%	7.15%
	HIGH TENSION			
1	Industrial HT	10.00%	8.15%	12.87%
2	Railway Traction	0.00%	0.00%	0.00%

5.4.5. Category-wise projected energy sales for FY 2019-20 and FY 2020-21

The Petitioner has projected the energy sales for FY 2019-20 and FY 2020-21, the balance period of the control period, by applying the growth rates shown in Table above on the energy sales of FY 2017-18:

Table 5-9: Projected Energy sales for FY 2018-19, 2019-20 and 2020-21

(MUs)

Sr. No	Sales	Projection		
		2018-19	**2019-20**	**2020-21**
	LOW TENSION			
1	RGP	3797	3,996	4,205
2	GLP	126	136	146
3	Non-RGP & LTMD	3576	3,744	3,920
4	Public Water Works	811	876	945
5	Agriculture-Unmetered	4570	4570	4,570
6	Agriculture-Metered	3142	3601	4,060
7	Street Light	81	81	81
	Sub-Total	**16102**	**17003**	**17927**
	HIGH TENSION			
1	Industrial HT	11514	12666	13932
2	Railway Traction	0	0	0
	Sub Total	**11514**	**12666**	**13932**
	TOTAL	**27616**	**29668**	**31859**

5.4.6. Detailed Analysis of Energy Sales projected

PGVCL has, in the Tables 5.3, 5.5 & 5.7, mentioned the growth rates as 5 year CAGR for the CAGR from FY 2012-13 to FY 2017-18 and 3 year CAGR for the CAGR from FY 2014-15 to FY 2017-18.

The category-wise sales given in Table-5.2 for the period from FY 2012-13 to FY 2017-18 are the actual. The energy sales for the FY 2019-20 and FY 2020-21 are projected based on 5 year and 3 year CAGR between FY 2012-13 and FY 2017-18 and year on year between FY 2017-18 over FY 2016-17. The projected sales for FY 2019-20 and FY 2020-21 are considered based on actuals for FY 2017-18.

Residential (RGP)

PGVCL has projected the energy sales to Residential category for the FY 2019-20 and FY 2020-21 as given below:

(MU)

Category	2019-20	2020-21
Residential (RGP)	3,996	4,205

Petitioner's submission:

PGVCL has submitted that the company has witnessed a remarkable growth in the units sold in the last five years in this category. The CAGR between FY 2012-13 and FY 2017-18 was 5.23%. The company expects this trend to continue in FY 2019-20 and FY 2020-21.

Commission's Analysis:

The Commission considered the growth rate of 7.71% which was the historical growth rate for 5 years in the MYT Order dated 31st March, 2017. The Petitioner expects the 5 year growth of 5.23% to continue during the rest of the control period, FY 2019-20 and FY 2020-21 which is considered reasonable and the Commission, therefore, approves the energy sales at 3996 MUs for FY 2019-20 and 4205 MUs for FY 2020-21 in the Mid-Term Review.

The Commission approves the energy sales to Residential category at 3996 MUs and 4205 MUs for FY 2019-20 and FY 2020-21 respectively at a growth rate of 5.23% against 4676 MUs and 5037 MUs approved in the MYT order for respective years.

Table 5-10: Sales approved for Residential category in the Mid-Term Review

(MUs)

Category	2019-20	2020-21
Residential (RGP)	3996	4205

GLP

Petitioner's submission:

PGVCL has submitted that the 3 year CAGR between FY 2014-15 and FY 2017-18 was 7.71% and the company expects this trend to continue in FY 2019-20 and FY 2020-21.

Commission's Analysis:

The Petitioner has worked out actual 3 year CAGR of 7.71% and expects this trend to continue. The rate 7.71% adopted by the Petitioner is considered reasonable by the Commission, and accordingly, the commission approves the energy sales at 136 MUs for FY 2019-20 and 146 MUs for FY 2020-21 in the Mid-Term Review.

The Commission approves the energy sales to GLP category at 136 MUs and 146 MUs for FY 2019-20 and FY 2020-21 respectively at a growth rate of 7.71% against 143 MUs and 154 MUs approved in the MYT order for respective years.

Table 5-11: Sales approved for GLP category in the Mid-Term Review

(MUs)

Category	2019-20	2020-21
GLP	136	146

Non-RGP and LTMD

Petitioner's submission:

For the purpose of projection of units sold, a 3 year CAGR of 4.70% between FY 2014-15 and FY 2017-18 has been considered by the Petitioner. The company expects this trend to continue in FY 2019-20 and FY 2020-21.

Commission's Analysis:

The Commission had considered the 3 year growth rate of 3.51% in the MYT for Non-RGP and LTMD category for FY 2019-20 and FY 2020-21. In the Mid-Term Review, PGVCL has adopted 4.70% growth rate (3 Years CAGR).

The Commission considers it reasonable to adopt the 3 year CAGR of 4.70%, over the sales of FY 2017-18 and has worked out the projected sales of these categories (Non-RGP & LTMD) as given in the Table below:

Table 5-12: Approved Sales for Non-RGP & LTMD category together in the Mid-Term Review

(MUs)

Category	2019-20	2020-21
Non-RGP & LTMD	3,744	3,920

The Commission approves the energy sales to Non-RGP & LTMD category at 3744 MUs and 3920 MUs for FY 2019-20 and FY 2020-21 respectively at growth rate of 4.70% as against 3492 MUs and 3615 MUs approved in the MYT Order for respective years.

Public Water Works

Petitioner's Submission:

PGVCL has submitted that the 2 Year CAGR for this category was coming out to be 8.87% which is on a higher side when compared to the 3 year CAGR of 7.96%. Therefore, a more realistic growth rate at 3 year CAGR has been considered. The company expects this trend to continue in FY 2019-20 and FY 2020-21. The Petitioner has projected the sales for FY 2019-20 and FY 2020-21 at 876 MUs and 945 MUs respectively.

Commission's Analysis:

The Commission had approved the sales of 820 MUs and 875 MUs for FY 2019-20 and FY 2020-21 respectively considering the growth rate of 6.67% in the MYT Order dated 31st March, 2017. However, considering the actual growth during the 3-year period, the Petitioner has projected higher sales. The growth rate of 7.96% adopted by PGVCL is considered reasonable for FY 2019-20 and FY 2020-21and accordingly, the Commission accepts the sales projection for FY 2019-20 and FY 2020-21 as given in the Table below:

Table 5-13: Sales approved for Public Water Works category in the Mid-Term Review

(MUs)

Category	2019-20	2020-21
Public Water Works	876	945

The Commission approves the energy sales to Public Water Works category at 876 MUs and 945 MUs for FY 2019-20 and FY 2020-21 respectively.

Agriculture

Petitioner's Submission:

PGVCL has submitted that based on Government & internal targets, the Company 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 and has accordingly assumed a growth rate of 0% to project the sales, no. of consumers and connected load during the control period.

In regard to the metered category the company has planned to add new connections under this category during the control period in the service area of the company has been presented in the Table below:

Sr. No.	Year	No. of new Connections
1	2018-19	85000
2	2019-20	85000
3	2020-21	85000

In order to estimate the consumption, PGVCL has gone with the same methodology as was 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 arrive at a more reasonable consumption estimate. This approach is same as adopted and approved by the Commission in the MYT Order. Thus, based on the figures arrived at as 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 2017-18 and the number of new connection to be added during each year. The year wise addition of new metered connections during the control period in the service area of the Company is given in the Table below:

Table 5-14: New metered connections and sales to Agricultural consumer

Agriculture Metered	No. of Connections	Average HP of Discom	HP Increase	MW Increase	Per HP Consumption	Additional Sale (MUs)
2018-19	85000	10	815630	608	563	459
2019-20	85000	10	815630	608	563	459
2020-21	85000	10	815630	608	563	459

The number of connections, unit sales and the load as estimated above have been added to the FY 2017-18 details to arrive at an estimate of the sales projections from this category for control period FY 2018-19 to FY 2020-21.

Commission's Analysis:

The Commission has approved the energy consumption of 4437 MUs for Unmetered Consumers for FY 2019-20 and FY 2020-21 in the MYT Order dated 31st March 2017. PGVCL has now projected 4570 MUs for FY 2017-18 and FY 2020-21. The Commission approves the sales for Unmetered Consumers at 4570 MUs for FY 2019-20 and FY 2020-21 at the same level of FY 2017-18.

As regardsthe Metered Consumers, PGVCL has projected the sales of 3601 MUs and 4060 MUs for FY 2019-20 and FY 2020-21 respectively at consumption of 563 kWh/HP/Annum as against 630 kWh/HP/Annum considered in the MYT Order dated 31st March, 2017 which is a weighted average consumption of Metered Consumers during FY 2010-11 and FY 2015-16. After detailed examination of the average consumption of the Metered Consumers submitted by PGVCL, the Commission considered the average consumption for Metered Consumers at 563 kWh/HP/Annum, being the weighted average consumption of Metered Consumers as given in the Table below:

2013-14	**Details**
Number of Consumers (Nos.)	341734
Connected Load (HP)	2979751
Consumption (MU)	1764
2014-15	
Number of Consumers (Nos.)	408030
Connected Load (HP)	3606678
Consumption (MU)	2210
2015-16	
Number of Consumers (Nos.)	452167
Connected Load (HP)	4119702
Consumption (MU)	2648
2016-17	
Number of Consumers (Nos.)	508,532
Connected Load (HP)	4673948
Consumption (MU)	2410
2017-18	
Number of Consumers (Nos.)	588360
Connected Load (HP)	5420396
Consumption (MU)	2682

From the above, the average connected load for 5 years works out to 4160075 HP [(2979751+3606678+4199702+4673948+5420396)/5] and average consumption works out to 2343 MUs [(1764+2210+2648 + 2410 + 2682)/5]. Based on this, the average consumption of Metered Consumers in PGVCL area from FY 2013-14 to FY 2017-18 works out to 563 kWh/HP/Annum.

The Commission, therefore, considers the consumption at 563 kWh/HP/annum for Metered Consumers for FY 2019-20 and FY 2020-21. Based on above, the sales to Metered category is as under:

Table 5-15: Consumption of Metered Consumers approved in the Mid-Term Review

(MUs)

Year	Consumption
2019-20	3601
2020-21	4060

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

Table 5-16: Approved Sales for Agriculture Consumers in the Mid-Term Review

(MUs)

Category	2019-20	2020-21
Un-Metered	4570	4570
Metered	3601	4060
Total	8171	8630

The Commission approves the sales to Agriculture Category at 8171 MUs and 8630 MUs for FY 2019-20 and FY 2020-21 respectively.

Public Lighting

Petitioner's Submission:

PGVCL has submitted that the 5 year CAGR observed between FY 2012-13 and FY 2017-18 was 0.18% and this trend will continue in FY 2019 -20 and FY 2020-21 also.

Commission's Analysis:

PGVCL has projected the sales at a growth rate of 0.18% (5 Year CAGR). The Commission had approved for this category at 116 MUs and 123 MUs for FY 2019-20 and FY 2020-21 respectively in the MYT Order. PGVCL projected the sales at 81 MUs for both FY 2019-20 and FY 2020-21at 5 year CAGR of 0.18%. The Commission considers the projected sales as reasonable and approves the sales for FY 2019-20 and FY 2020-21 as below:

Table 5-17: Energy Sales approved for Street Light category in the Mid-Term Review

(MUs)

Category	2019-20	2020-21
Public Lighting	81	81

Industrial HT

Petitioner's Submission:

PGVCL has submitted that this category has observed a constant variation in sales in the last five years due to presence of open access, slowdown in the economy, etc. The 5-year and 4-year CAGR are higher at 15.16% and 20.27% respectively whereas the y-o-y growth is the highest at 28.02%. Therefore, a more realistic subjective rate of 10.00% is considered. The company expects this trend to continue in FY 2019-20 and FY 2020-21.

Commission's Analysis:

It is observed that the growth in sales of this category was 15.16% during the 5 year period (FY 2012-13 to FY 2017-18), 18.13% during 3 year period (FY 2015-16 to FY 2017-18) and 28.02% during FY 2017-18 over FY 2016-17. It is also observed that there is an increasing trend in this category. The growth rate of number of consumers has been consistent (5 year CAGR at 8.97%, 3 year CAGR at 8.15% and FY 17-18 over FY 16-17 at 10.32%).

The actual sales for this category during FY 2017-18 was 10467 MUs. Sales projected by the Petitioner for FY 2019-20 and FY 2020-21 is 12666 MUs and 13932 MUs by taking the growth rate of 10.00% against the sales actually approved by Commission in the MYT Order dated 31st March, 2017. The Commission considered the subjective rate of 10.00% as reasonable and adopts the same for the purpose of Mid-Term Review.

Accordingly, the energy sales approved in respect of industrial HT category for FY 2019-20 and FY 2020-21 applying the growth rate of 10.00% over the sales of FY 2017-18 as against 8815 MUs and 9421 MUs approved for these years in the MYT Order is given in the Table below:

Table 5-18: Approved Sales for Industrial HT category in the Mid-Term Review

(MUs)

Particulars	2019-20	2020-21
Industrial HT	12666	13932

Railway Traction

There is no Railway Traction load in PGVCL.

5.4.7. Total Energy Sales

Total Energy sales for FY 2019-20 and FY 2020-21 approved by the Commission based on the above analysis is summarised in the Table below:

Table 5-19: Energy Sales approved in the Mid-Term Review

(MUs)

Sr. No	Category	2019-20	2020-21
	LOW TENSION		
1	Residential (RGP)	3,996	4,205
2	GLP	136	146
3	Non-RGP & LTMD	3,744	3,920
4	Public Water Works	876	945
5	Agriculture Unmetered	4570	4570
6	Agriculture Metered	3601	4060
7	Public Lighting	81	81
8	**Total LT**	**17003**	**17927**
	HIGH TENSION		
9	Industrial HT	12666	13932
10	Railway Traction	0	0
11	**Total HT**	**12666**	**13932**
	TOTAL (LT+ HT) (8 + 11)	**29668**	**31859**

5.5 Distribution Losses

PGVCL has projected distribution losses for FY 2019-20 and FY 2020-21 in the Mid-Term Review as given in the Table below:

Table 5-20: Projected Distribution Losses for FY 2019-20 and FY 2020-21

Sl. No.	Particulars	2019-20	2020-21
1	Distribution Losses	17.00%	16.00%

Petitioner's Submission:

PGVCL has submitted that it has achieved a significant reduction in distribution losses, during recent years. The effort shall continue and will be enhanced. In view of this, the distribution losses in FY 2019-20 and FY 2020-21 will reduce but at a slow rate. Loss reduction is a slow process and becomes increasingly difficult as the loss levels come down.

Commission's Analysis:

The Commission in the MYT Order dated 31st March, 2017 considered distribution losses at 19.50% during FY 2019-20 and 19.00% during FY 2020-21 and the distribution losses is projected by PGVCL is 17.00% for FY 2019-20 and 16.00% for FY 2020-21. Thus, there is significant reduction in the distribution losses approved by the Commission in the MYT Order and the losses projected by PGVCL in Mid-Term Review for FY 2019-20 and FY 2020-21. The Commission approves the distribution losses of 17.00% for FY 2019-20 and 16.00% for FY 2020-21, as sought by the Petitioner in the MTR.

Accordingly, the Commission approves the distribution losses as given in the Table below:

Table 5-21: Approved Distribution Losses in the Mid-Term Review

Sr. No.	Particulars	FY 2019-20	FY 2020-21
1	Distribution Loss	17.00%	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 losses) approved by the Commission.

Petitioner's Submission:

PGVCL has submitted that to arrive at the total energy requirement, total sales in MUs as projected above have been grossed up by factoring in transmission and distribution losses. Intra-State transmission losses are assumed as per the projection by GETCO in its MTR petition for FY 2019-20 to 2020-21. The inter-state transmission losses viz. PGCIL pooled losses are assumed at same level as in FY 2017-18 for the entire control period. Further, the distribution losses are taken as per the projections above. Based on the information provided above, Energy Balance of the Company for FY 2019-20 to 2020-21 is as shown below:

Table 5-22: Projected Energy Requirement and Energy Balance

Particulars	Unit	2019-20	2020-21
Energy Sales	MUs	29,668.17	31,859.39
Distribution Losses	MUs	6,076.61	6,068.46

Particulars	Unit	2019-20	2020-21
	%	17.00%	16.00%
Energy Requirement	MUs	35744.78	37927.85
Transmission Losses	MUs	1431.00	1519.00
	%	3.85%	3.85%
Total Energy input to Transmission System	MUs	37175.78	39446.85
Pooled Losses in PGCIL System	MUs	581.10	581.10
Total Energy Requirement	MUs	37756.88	40027.95

Commission's Analysis:

Based on the energy sales and the distribution losses approved by the commission in Paragraphs 5.4 and 5.5 above, the Energy Requirement is arrived at as given in the Table below:

Table 5-23: Total approved Energy Requirement in the Mid-Term Review

Sr. No.	Particulars	Unit	2019-20	2020-21
1	Estimated Energy Sales	MUs	29,668.17	31,859.39
2	Distribution Loss	MUs	6076.61	6068.46
		%	17.00%	16.00%
3	Energy requirement at the Distribution periphery	MUs	35744.78	37927.85

5.7 Energy Balance

Commission's Analysis:

Energy Balance projected by PGVCL is given in Table 5.22 above. PGVCL has considered Transmission loss at 3.85% which is the same as approved by the Commission in the MYT Order dated 31st March 2017. The pooled losses in PGCIL system are considered by PGVCL at 581.10 MUs for FY 2019-20 and FY 2020-21 same as the actual for FY 2017-18. The Commission considers the Transmission loss at 3.85% and pooled losses in PGCIL system as projected by PGVCL to arrive at the Energy Balance in the Table below:

Table 5-24: Approved Energy Balance for in the Mid-Term Review

Particulars	Unit	2019-20	2020-21
Energy Sales	MUs	29668.17	31859.39
Distribution Losses	MUs	6076.61	6068.46
	%	17.00%	16.00%
Energy Requirement`	MUs	35744.78	37927.85
Transmission Losses	MUs	1431.00	1519.00
Total Energy input to Transmission System	%	3.85%	3.85%
Total Energy input to Transmission System	MUs	37175.78	39446.85
Pooled Losses in PGCIL System	MUs	581.10	581.10
Total Energy Requirement	MUs	37756.88	40027.95

5.8 Power Purchase Cost- Petitioner's Submission

5.8.1 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 2018 is 22616 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 2017-18:

Table 5-25: 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	9.00%	78.49%	23	3.50
2	GSECL Wanakbori – 7	210	9.00%	80.11%	62	3.21
3	GSECL UtranExpan	375	3.00%	7.85%	250	5.35
4	GSECL Dhuvaran – 7	107	3.00%	21.08%	61	1.49
5	GSECL Dhuvaran – 8	112	3.00%	37.78%	86	1.28
6	GSECL Ukai	610	9.00%	85.00%	262	3.39
7	GSECL UkaiExpan	500	6.00%	85.00%	447	3.04
8	GSECL Gandhinagar 1-4	420	10.00%	61.97%	204	3.74
9	GSECL Wanakbori 1-6	1,260	9.00%	85.00%	448	3.29
10	GSECL Sikka Expansion	500	9.00%	70.00%	629	3.65
11	GSECL Kutch Lignite 1-3	215	12.00%	52.31%	207	2.16
12	GSECL Kutch Lignite 4	75	12.00%	42.72%	62	1.98
13	GSECL Ukai Hydro	305	0.60%	11.71%	42	-
14	GSECL Kadana Hydro	242	1.00%	13.72%	73	-
15	BECL	500	6.50%	85.00%	879	2.15
16	Dhuvaran CCPP III	376	3.00%	0.94%	159	5.77
	Sub Total	**6,017**			**3894**	
	IPP's					
1	Gujarat State Energy Generation	156	3.00%	0.15%	49	6.11
2	Gujarat State Energy Generation Expansion	351	0.00%	6.08%	180	5.19

Sr. No.	Name of the Station	Capacity allocated to GUVNL (MW)	Auxiliary Consumption (%)	Plant Load Factor (%)	Fixed Cost (Rs. Crore)	Variable Cost (Rs./kWh)
3	Gujarat Industries Power Co Ltd (165 MW)	165	3.00%	0.00%	-	4.5
4	Gujarat Industries Power Co Ltd (SLPP)	250	10.00%	71.59%	129	1.71
5	Gujarat Mineral Development Corp.	250	10.00%	57.38%	124	1.26
6	Gujarat Industries Power Co Ltd (145 MW)	42	3.00%	29.42%	5	2.27
7	Gujarat Industries Power Co Ltd (SLPP - Exp)	250	10.00%	75.29%	273	1.88
8	GPPC Pipavav	702	3.00%	2.80%	325	4.37
	Sub Total	**2,166**			**1085**	
	Central Sector					
1	NPC-Tarapur (1 & 2)	160	10.00%	42.73%	-	2.08
2	NPC-Tarapur (3 & 4)	274	10.00%	59.81%	-	3.1
3	NPC-Kakrapar	125	12.50%	52.60%	-	2.39
4	NTPC-Vindhyachal – I	230	9.00%	87.98%	23	1.62
5	NTPC-Vindhyachal – II	239	6.50%	91.75%	128	1.52
6	NTPC-Vindhyachal – III	266	6.50%	95.29%	212	1.52
7	NTPC-Korba	360	6.50%	89.91%	23	1.46
8	NTPC-Korba –II	96	6.50%	91.19%	98	1.43
9	NTPC-Kawas	187	3.00%	43.80%	113	2.56
10	NTPC-Jhanor	237	3.00%	55.42%	132	2.39
11	NTPC-Sipat-I	540	6.50%	89.04%	519	1.3
12	NTPC-Sipat – II	273	6.50%	90.03%	250	1.35
13	NTPC-Kahlagaon	141	6.50%	78.80%	106	2.31
14	NTPC-Vindhyachal – IV	240	6.50%	90.40%	280	1.51
15	NTPC-Mauda	240	6.50%	85.00%	320	2.79
16	NTPC-Vindhyachal – V	93	6.50%	100.00%	118	1.57
17	NTPC-Mauda II	294	5.75%	85.05%	380	2.5
18	SSNL	232	0.00%	7.18%	-	2.03
19	Mundra UMPP CGPL	1,805	0.00%	73.93%	1,129	1.66
	Sub Total	**6,032**			**3831**	
	Others					
1	Captive Power	8	0.00%	2.85%	-	2.13
-	**Renewable**					
1	Wind Farms	3,695	0.00%	20.61%	-	3.78
2	Solar	1,116	0.00%	17.84%	-	11.45
3	Small/Mini Hydal	10	0.00%	65.00%	-	3.39
4	Biomass	30	0.00%	80.00%	40	4.17
	Competitive Bidding					
1	Adani Power Ltd	2,000	0.00%	45.79%	975	1.81
2	Essar Power Bid 2	1,000	0.00%	28.13%	354	1.92
3	ACB India Ltd	200	0.00%	80.48%	201	0.82
4	Power Exchange	342	0.00%	100.00%	-	4.5
5	Short term power purchase	342	0.00%	100.00%	-	3.5
	Sub Total	**8,401**			**1570**	
	Total	**22,616**			**10380**	

(ii) **Capacity additions during FY 2019-20 and FY 2020-21**

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 2019-20 to FY 2020-21.

The capacity addition envisaged against these stations during FY 2019-20 to FY 2020-21 is around 1,995 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 2019-20 to FY 2020-21 have been considered on pro-rata basis depending upon the tentative date of commissioning:

Table 5-26: Capacity Addition during the remaining control Period

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	Small/Mini Hydal (New)	12	-	-	-	3.29	Apr-19
2	NTPC- Lara U#1	79	5.75%	85%	110	1.50	Oct-18
3	NTPC-Gadarwara Stage-1 U#1	152	5.75%	85%	152	1.50	Dec-18
4	NTPC-Gadarwara Stage-1 U#2	152	5.75%	85%	152	1.50	Sep-19
5	NTPC- Lara U#2	79	5.75%	85%	110	1.50	Sep-19
6	NPC Kakrapar Ext U#1	238	5.75%	85%	120	2.38	Mar-21
7	NPC Kakrapar Ext U#2	238	5.75%	85%	120	2.38	Mar-21
8	GSECL Wanakbori Ext U#8	800	5.75%	85%	905	2.94	Dec-18
9	NTPC- Khargone U#1	123	5.75%	85%	172	1.50	Jul-19
10	NTPC- Khargone U#2	123	5.75%	85%	172	1.50	Nov-19
11	**Total Capcity Addition**	**1995**					

(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 2017-18 is 1.75% from Solar, 7.75% from Wind and 0.5% from other 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 5-27: Procurement from RE for Meeting Projected RPO

Particulars	**2019-20**				**2020-21**			
	Solar	**Wind**	**Others**	**Total**	**Solar**	**Wind**	**Others**	**Total**
Available Capacity upto FY 2017-18 (MUs)	1,744	6671	309	8,724	1744	6671	309	8724
Total Requirement (MUs)	99680	99680	99680	99680	105652	105652	105652	105652
RPO Obligation fulfilled	1.75%	6.69%	0.31%	8.75%	1.65%	6.31%	0.29%	8.25%
RPO Target	5.50%	8.05%	0.75%	14.30%	6.75%	8.15%	0.75%	15.65%
RPO Target (MUs)	5482	8024	748	14254	7132	8611	792	16535
Unmet Target (MUs)	3738	1353	439	5530	5388	1940	483	7810
Additional Capacity based on PPA executed								

Particulars	2019-20				2020-21			
	Solar	Wind	Others	Total	Solar	Wind	Others	Total
Additional Power Purchase (MUs)	950	589	14	1554	2161	1058	177	3397
Power Purchase Cost (Rs./kwh)	2.66	2.44	6.66	2.62	2.54	2.44	6.90	2.73
Power Purchase Cost (Rs. Crore)	**253**	**144**	**10**	**407**	**549**	**258**	**122**	**929**
Unmet Capacity (MUs)	**2788**	**764**	**424**	**3976**	**3226**	**881**	**306**	**4414**

5.8.2 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 5-28: Projected Power Purchase cost for FY 2019-20

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	1,314	1,314	23	3.50	460	483
2	GSECL Wanakbori – 7	1,341	1,341	62	3.21	430	492
3	GSECL UtranExpan	250	159	250	5.35	85	335
4	GSECL Dhuvaran – 7	191	191	61	1.49	28	89
5	GSECL Dhuvaran – 8	361	361	86	1.28	46	132
6	GSECL Ukai	4,133	4,133	262	3.39	1401	1663
7	GSECL UkaiExpan	3,500	3,500	447	3.04	1064	1511
8	GSECL Gandhinagar 3-4	2,052	166	204	3.74	62	266
9	GSECL Wanakbori 1-6	8,538	8,538	448	3.29	2809	3257
10	GSECL Sikka Expansion	2,790	199	629	3.65	73	702
11	GSECL Kutch Lignite 1-3	867	867	207	2.16	187	394
12	GSECL Kutch Lignite 4	247	247	62	1.98	49	111
13	GSECL Ukai Hydro	311	311	42	-	-	42
14	GSECL Kadana Hydro	288	288	73	-	-	73
15	BECL	3,481	3,481	879	2.15	748	1627
16	Dhuvaran CCPP III	30	30	159	5.77	17	176
17	GSECL Wanakbori Ext U#8	5,614	5,614	905	2.94	1651	2556
	Sub Total	**35,308**	**30,740**	**4,798**		**9,113**	**13,910**
				.			
	IPP's						
1	Gujarat State Energy Generation	2	2	49	6.11	1	50
2	Gujarat State Energy Generation Expansion	187	154	180	5.19	80	260
3	Gujarat Industries Power Co Ltd (165 MW)	-	-	-	4.50	-	-
4	Gujarat Industries Power Co Ltd (SLPP)	1,411	1,411	129	1.71	241	370
5	Gujarat Mineral Development Corp.	1,131	1,131	124	1.26	143	267
6	Gujarat Industries Power Co Ltd (145 MW)	105	105	5	2.27	24	29
7	Gujarat Industries Power Co Ltd (SLPP - Exp)	1,484	1,484	273	1.88	279	552
8	GPPC Pipavav	167	167	325	4.37	73	398
9	Mundra UMPP CGPL	11,689	11,689	1,129	1.66	1940	3069
10	Adani Power Ltd	8,023	8,023	975	1.81	1452	2427
11	Essar Power Bid 2	2,464	2,464	354	1.92	473	827
12	ACB India Ltd	1,410	1,410	201	0.82	116	317
13	Power Exchange	3,000	150	-	4.5	68	68
14	Short Term Power Purchase	3,000	1,187	-	3.5	415	415
	Sub Total	**34,073**	**29,377**	**3,744**		**5,304**	**9,048**
	Central Sector						
1	NPC-Tarapur (1 & 2)	539	539	-	2.08	112	112
2	NPC-Tarapur (3 & 4)	1,292	1,292	-	3.10	401	401

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.)
3	NPC-Kakrapar	504	504	-	2.39	120	120
4	NTPC-Vindhyachal – I	1,613	1,613	23	1.62	261	284
5	NTPC-Vindhyachal – II	1,796	1,796	128	1.52	273	401
6	NTPC-Vindhyachal – III	2,076	2,076	212	1.52	316	528
7	NTPC-Korba	2,651	2,651	23	1.46	387	410
8	NTPC-Korba –II	717	717	98	1.43	103	201
9	NTPC-Kawas	696	696	113	2.56	178	291
10	NTPC-Jhanor	1,116	1,116	132	2.39	267	399
11	NTPC-Sipat-I	3,938	3,938	519	1.30	512	1031
12	NTPC-Sipat – II	1,445	1,445	250	1.35	195	445
13	NTPC-Kahlagaon	910	910	106	2.31	210	316
14	NTPC-Vindhyachal – IV	1,777	1,777	280	1.51	268	548
15	NTPC-Mauda	1,671	1,671	320	2.79	466	786
16	NTPC-Vindhyachal – V	765	765	118	1.57	120	238
17	NTPC-Mauda II	2,063	2,063	380	2.50	516	896
18	SSNNL	146	146	-	2.03	30	30
19	NTPC-Lara U#1	551	551	110	1.50	83	193
20	NTPC-Gadarwara Stage-I U#1	1,067	1,067	152	1.50	160	312
21	NTPC-Gadarwara Stage-I U#2	622	622	89	1.50	93	182
22	NTPC-Lara U#2	321	321	64	1.50	48	112
23	NPC Kakrapar Ext U#1	-	-	-	2.38	-	-
24	NPC Kakrapar Ext U#2	-	-	-	2.38	-	-
25	NTPC-Khargone U#1	647	647	129	1.50	97	226
26	NTPC-Khargone U#2	360	360	72	1.50	54	126
	Sub Total	**29,283**	**29,283**	**3,318**		**5,271**	**8,589**
	Others						
1	Captive Power	2	2	-	2.13	-	-
	Renewable						
1	Wind Farms	6,671	6,671	-	3.78	2522	2522
2	Solar	1,744	1,744	-	11.45	1997	1997
3	Small/Mini Hydal	55	55	-	3.39	19	19
4	Small/Mini Hydal (New)	44	44	-	3.29	14	14
5	Biomass	210	210	40	4.17	88	128
6	Solar New)	950	950	-	2.66	253	253
7	Wind (New)	589	589	-	2.44	144	144
8	Others (New)	14	14	-	6.66	9	9
	Sub Total	10,280	10,280	40		5,045	5,085
	TOTAL	**108944**	**99680**	**11900**		**24734**	**36634**

Table 5-29: Projected Power Purchase cost for FY 2020-21

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	1,314	1,314	23	3.50	460	483
2	GSECL Wanakbori – 7	1,341	1,341	62	3.21	430	492
3	GSECL UtranExpan	250	159	-	5.35	85	85
4	GSECL Dhuvaran – 7	191	191	61	1.49	28	89
5	GSECL Dhuvaran – 8	361	361	86	1.28	46	132
6	GSECL Ukai	4,133	4,133	262	3.39	1401	1663
7	GSECL UkaiExpan	3,500	3,500	447	3.04	1065	1512
8	GSECL Gandhinagar 3-4	2,052	166	204	3.74	62	266
9	GSECL Wanakbori 1-6	8,538	8,538	448	3.29	2809	3257
10	GSECL Sikka Expansion	2,790	844	629	3.65	308	937
11	GSECL Kutch Lignite 1-3	867	867	207	2.16	187	394
12	GSECL Kutch Lignite 4	247	247	62	1.98	49	111
13	GSECL Ukai Hydro	311	311	42	-	-	42
14	GSECL Kadana Hydro	288	288	73	-	-	73
15	BECL	3,481	3,481	879	2.15	748	1627
16	Dhuvaran CCPP III	30	30	159	5.77	17	176
17	GSECL Wanakbori Ext U#8	5,614	5,614	905	2.94	1651	2555
	Sub Total	**35,308**	**31,384**	**4,548**		**9,349**	**13,897**
	IPPs						
1	Gujarat State Energy Generation	2	2	49	6.11	1	50
2	Gujarat State Energy Generation Expansion	187	154	180	5.19	80	260
3	Gujarat Industries Power Co Ltd (165 MW)	-	-	-	4.5	-	-
4	Gujarat Industries Power Co Ltd (SLPP)	1,411	1,411	129	1.71	241	370
5	Gujarat Mineral Development Corp.	1,131	1,131	124	1.26	143	267
6	Gujarat Industries Power Co Ltd (145 MW)	105	105	5	2.27	24	29
7	Gujarat Industries Power Co Ltd (SLPP - Exp)	1,484	1,484	273	1.88	279	552
8	GPPC Pipavav	167	167	325	4.37	73	398
9	Mundra UMPP CGPL	11,689	11,689	1,129	1.66	1943	3072
10	Adani Power Ltd	8,023	8,023	975	1.81	1450	2425
11	Essar Power Bid 2	2,464	2,464	354	1.92	473	827
12	ACB India Ltd	1,410	1,410	201	0.82	116	317
13	Power Exchange	3,000	150	-	4.50	68	68
14	Short Term Power Purchase	3,000	3,000	-	3.50	1050	1050
	Sub Total	**34,073**	**31,190**	**3,744**		**5,939**	**9,683**
	Central Sector						
1	NPC-Tarapur (1 & 2)	539	539	-	2.08	112	112
2	NPC-Tarapur (3 & 4)	1,292	1,292	-	3.10	401	401

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.)
3	NPC-Kakrapar	504	504	-	2.39	121	121
4	NTPC-Vindhyachal – I	1,613	1,613	23	1.62	262	285
5	NTPC-Vindhyachal – II	1,796	1,796	128	1.52	273	401
6	NTPC-Vindhyachal – III	2,076	2,076	212	1.52	316	528
7	NTPC-Korba	2,651	2,651	23	1.46	387	410
8	NTPC-Korba –II	717	717	98	1.43	103	201
9	NTPC-Kawas	696	696	113	2.56	178	291
10	NTPC-Jhanor	1,116	1,116	132	2.39	267	399
11	NTPC-Sipat-I	3,938	3,938	519	1.30	512	1031
12	NTPC-Sipat – II	1,445	1,445	250	1.35	194	444
13	NTPC-Kahlagaon	910	910	106	2.31	210	316
14	NTPC-Vindhyachal – IV	1,777	1,777	280	1.51	269	549
15	NTPC-Mauda	1,671	1,671	320	2.79	466	786
16	NTPC-Vindhyachal – V	765	765	118	1.57	120	238
17	NTPC-Mauda II	2,063	2,063	380	2.50	516	896
18	SSNNL	146	146	-	2.03	30	30
19	NTPC-Lara U#1	551	551	110	1.50	83	193
20	NTPC-Gadarwara Stage-I U#1	1,067	1,067	152	1.50	160	312
21	NTPC-Gadarwara Stage-I U#2	1,067	1,067	152	1.50	160	312
22	NTPC-Lara U#2	551	551	110	1.50	83	193
23	NPC Kakrapar Ext U#1	139	139	10	2.38	33	43
24	NPC Kakrapar Ext U#2	139	139	10	2.38	33	43
25	NTPC-Khargone U#1	863	863	172	1.50	129	301
26	NTPC-Khargone U#2	863	863	172	1.50	129	301
	Sub Total	**30,955**	**30,955**	**3,590**		**5,547**	**9,137**
	Others						
1	Captive Power	2	2	-	2.13	-	-
	Renewable						
1	Wind Farms	6,671	6,671	-	3.78	2522	2522
2	Solar	1,744	1,744	-	11.45	1997	1997
3	Small/Mini Hydal	55	55	-	3.39	19	19
4	Small/Mini Hydal (New)	44	44	-	3.29	14	14
5	Biomass	210	210	40	4.17	88	128
6	Solar(New)	2,161	2,161	-	2.54	549	549
7	Wind (New)	1,058	1,058	-	2.44	258	258
8	Others (New)	177	177	-	6.9	122	122
	Sub Total	12,123	12,123	40		5,567	5,607
	TOTAL	**1,12,459**	**1,05,652**	**11,923**		**26,401**	**38,323**

5.8.3 Transmission and other Cost

Petitioner's submission:

PGVCL has submitted that the total power purchase cost for the company for the remaining control period, FY 2019-20 to FY 2020-21 in addtion to above mentioned fixed and variable cost consists of Transmission Charges, GUVNL Cost and SLDC fees and Charges.

5.8.3.1 Transmission Charges

Transmission charges to GETCO have been considered as per the approved charges for GETCO in the MYT Order for the remaining control period FY 2019-20 to FY 2020-21.

PGCIL charges of FY 2017-18 are escalated at 5% y-o-y to derive PGCIL charges for FY 2019-20 to FY 2020-21.

SLDC Fees & Charges also have been considered as per the MYT Order of SLDC for FY 2019-20 & FY 2020-21.

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 5-30: Projected Transmission charges for FY 2019-20 and FY 2020-21

(Rs. Crore)

Sr. No.	Particulars	2019-20	2020-21
1	PGCIL Charges	2077	2181
2	Annual Transmission Charges of GETCO	4115	4502
3	SLDC Charges	16	15

5.8.3.2 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 2019-20 to FY 2020-21 as shown below:

Table 5-31: GUVNL Cost for FY 2019-20 and FY 2020-21

(Rs. Crore)

Sr. No.	Particulars	2019-20	2020-21
1	GUVNL Cost at 4.00 Paisa per Unit	399	423

5.8.4 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 5-32: Projected Fixed cost for DISCOMs for FY 2019-20 and FY 2020-21

(Rs. Crore)

Year	Fixed Cost	GETCO Cost	PGCIL Charges	SLDC Charges	Total Fixed Cost	Discom Fixed Cost
FY 2019-20	11,900	4115	2077	16	18108	18108
FY 2020-21	11,923	4502	2181	15	18621	18621

The Table below shows the total variable cost for FY 2019-20 to FY 2020-21:

Table 5-33: Projected Variable cost for DISCOMs and trading of energy from FY 2019-20 and FY 2020-21

(Rs. Crore)

Year	Variable Cost	GUVNL Cost	Total Variable Cost	Dispatched (MU)	Variable Cost Rs/ kWh	Discom (MU)	Variable Cost
FY 2019-20	24,734	399	25132	99,680	2.52	99680	25132
FY 2020-21	26,401	423	26824	105,652	2.54	105652	26824

5.8.5 Net Power Purchase Cost

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

Table 5-34: Projected Net Power Purchase cost for FY 2019-20 and FY 2020-21

(Rs. Crore)

Year	Discom Fixed Cost	Discom Variable Cost	Total Power Purchase Cost
2019-20	18108	25132	43241
2020-21	18621	26824	45445

5.8.6 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.

5.9 Power Purchase Cost– Commission’s Analysis

5.9.1 Power Purchase Sources

As mentioned in Para 5.8.1, PGVCL has submitted that GUVNL has entered in to 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 5.25. GUVNL has also entered into contract for additional capacity likely to be commissioned during FY 2019-20 and FY 2020-21. The details of additional plants likely to be commissioned during FY 2019-20 and FY 2020-21 are given in Table 5.26.

The capacity approved by the Commission in the MYT Order dated 31st March, 2017 and projected by the Petitioner in Mid-Term Review from each of the sources are summarised in the Table below:

Table 5-35: Capacity Contracted Source – Wise by GUVNL in the MYT Order and Now Submitted by PGVCL for the period FY 2019-20 and FY 2020-21

(MW)

Sr. No.	Partculars	2019-20		2020-21	
		Approved in MYT Order	Projected in MTR	Approved in MYT Order	Projected in MTR
1	GSECL	6817	6817	8417	6817
2	IPPs	2001	2166	2001	2166
3	Central Generating Stations	5577	6740	5654	7216
4	Renewable	3409	4863	3409	4863

5	Competitive Bidding & PX	5005	3884	5005	3884
6	Others – CPP	8	8	8	8
7	**Total**	**22817**	**24478**	**24494**	**24954**

5.9.2 Power Purchase during FY 2019-20 and FY 2020-21

The power purchase for the period FY 2019-20 and FY 2020-21 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 in the MYT Order and as projected in Mid-Term Review for FY 2019-20 and FY 2020-21 are given in the Table below:

Table 5-36: Energy Available & Dispatchable as approved in MYT order and projected in MTR for FY 2019-20

Sr. No.	Particulars	Approved in MYT Order		Projected in MTR	
		Available MUs	Dispatch MUs	Available MUs	Dispatch MUs
	GSECL				
1	GSECL Gandhinagar – 5	1339	84	1,314	1,314
2	GSECL Wanakbori – 7	1339	84	1,341	1,341
3	GSECL UtranExpan	1910	32	250	159
4	GSECL Dhuvaran – 7	362	45	191	191
5	GSECL Dhuvaran – 8	382	48	361	361
6	GSECL Ukai	3890	243	4,133	4,133
7	GSECL UkaiExpan	3294	395	3,500	3,500
8	GSECL Gandhinagar 3-4	2649	166	2,052	166
9	GSECL Wanakbori 1-6	8035	502	8,538	8,538
10	GSECL Sikka Expansion	3189	3189	2,790	199
11	GSECL Kutch Lignite 1-3	1243	1243	867	867
12	GSECL Kutch Lignite 4	463	463	247	247
13	GSECL Ukai Hydro	478	478	311	311
14	GSECL Kadana Hydro	287	287	288	288
15	BECL	3084	3084	3,481	3,481
16	Dhuvaran CCPP III	1917	32	30	30
17	GSECL Wanakbori Ext U#8	5608	330	5,614	5,614
	Sub Total	**39471**	**10704**	**35308**	**30740**
	IPPs				
1	Gujarat State Energy Generation	795	13	2	2
2	Gujarat State Energy Generation Expansion	1845	31	187	154
3	Gujarat Industries Power Co Ltd (165 MW)			-	-
4	Gujarat Industries Power Co Ltd (SLPP)	1433	1433	1,411	1,411
5	Gujarat Mineral Development Corp.	1577	1577	1,131	1,131
6	Gujarat Industries Power Co Ltd (145 MW)	214	4	105	105

Sr. No.	Particulars	Approved in MYT Order		Projected in MTR	
		Available MUs	Dispatch MUs	Available MUs	Dispatch MUs
7	Gujarat Industries Power Co Ltd (SLPP - Exp)	1265	1265	1,484	1,484
8	GPPC Pipavav	472	60	167	167
9	Mundra UMPP CGPL	12649	12649	11,689	11,689
10	Adani Power Ltd	14892	14892	8,023	8,023
11	Essar Power Bid 2	7446	7446	2,464	2,464
12	ACB India Ltd	1489	1489	1,410	1,410
13	Power Exchange			3,000	150
14	Short term power purchase			3,000	1,187
	Sub Total	**44077**	**40859**	**34073**	**29377**
	Central Sector				
1	NPC-Tarapur (1 & 2)	1072	1072	539	539
2	NPC-Tarapur (3 & 4)	1836	1836	1,292	1,292
3	NPC-Kakrapar	814	814	504	504
4	NTPC-Vindhyachal – I	1467	1467	1,613	1,613
5	NTPC-Vindhyachal – II	1566	1566	1,796	1,796
6	NTPC-Vindhyachal – III	1859	1852	2,076	2,076
7	NTPC-Korba	2506	2506	2,651	2,651
8	NTPC-Korba –II	668	668	717	717
9	NTPC-Kawas	636	79	696	696
10	NTPC-Jhanor	806	101	1,116	1,116
11	NTPC-Sipat-I	3759	3759	3,938	3,938
12	NTPC-Sipat – II	1901	1901	1,445	1,445
13	NTPC-Kahlagaon	924	924	910	910
14	NTPC-Vindhyachal – IV	1573	1573	1,777	1,777
15	NTPC-Mauda	1573	98	1,671	1,671
16	NTPC-Vindhyachal – V	612	612	765	765
17	NTPC-MaudaII U#1 & U#2	2064	2064	2,063	2,063
18	SSNNL	335	335	146	146
19	NTPC-Lara U#1	982	982	551	551
20	NTPC-Gadarwara Stage-I U#1	772	772	1,067	1,067
21	NTPC-Gadarwara Stage-I U#2	772	772	622	622
22	NTPC-Lara U#2	982	982	321	321
23	NPC Kakrapar Ext U#1	1542	1542	-	-
24	NPC Kakrapar Ext U#2	1542	1542	-	-
25	NTPC-Khargone U#1	515	515	647	647
26	NTPC-Khargone U#2	193	193	360	360
27	NTPC-North Karanpura U#1	540	540	-	-
28	NTPC-North Karanpura U#2	270	270	-	-
	Sub Total	**34081**	**31337**	**29283**	**29283**
	Others				
1	Captive Power	6	6	2	2
	Renewable				
1	Wind Farms	4280	4280	6,671	6,671
2	Solar	1368	1368	1,744	1,744
3	Small/Mini Hydal	45	45	55	55

Sr. No.	Particulars	Approved in MYT Order		Projected in MTR	
		Available MUs	Dispatch MUs	Available MUs	Dispatch MUs
4	Small/Mini Hydal (New)	-	-	44	44
5	Biomass	1	1	210	210
6	Solar(New)	3832	3832	950	950
7	Wind (New)	3331	3331	589	589
8	Others (New)	663	663	14	14
	Sub Total	**13526**	**13526**	**10280**	**10280**
	TOTAL	**131154**	**96426**	**108944**	**99680**

Table 5-37: Energy Available & Dispatchable as approved in MYT order and projected in MTR for FY 2020-21

Sr. No.	Particulars	Approved in MYT Order		Projected in MTR	
		Available MUs	Dispatch MUs	Availabl e MUs	Dispatch MUs
	GSECL				
1	GSECL Gandhinagar – 5	1339	84	1,314	1,314
2	GSECL Wanakbori – 7	1339	84	1,341	1,341
3	GSECL UtranExpan	1910	32	250	159
4	GSECL Dhuvaran – 7	362	45	191	191
5	GSECL Dhuvaran – 8	382	48	361	361
6	GSECL Ukai	3890	243	4,133	4,133
7	GSECL UkaiExpan	3294	854	3,500	3,500
8	GSECL Gandhinagar 3-4	2649	166	2,052	166
9	GSECL Wanakbori 1-6	8035	502	8,538	8,538
10	GSECL Sikka Expansion	3189	3189	2,790	844
11	GSECL Kutch Lignite 1-3	1243	1243	867	867
12	GSECL Kutch Lignite 4	463	463	247	247
13	GSECL Ukai Hydro	478	478	311	311
14	GSECL Kadana Hydro	287	287	288	288
15	BECL	3084	3084	3,481	3,481
16	Dhuvaran CCPP III	1917	32	30	30
17	GSECL Wanakbori Ext U#8	5608	330	5,614	5,614
18	Dhuvaran STPS	11217	660	-	-
	Sub Total	**50688**	**11824**	**35308**	**31384**
	IPP's				
1	Gujarat State Energy Generation	795	13	2	2
2	Gujarat State Energy Generation Expansion	1845	31	187	154
3	Gujarat Industries Power Co Ltd (SLPP)	1433	1433	1,411	1,411
4	Gujarat Mineral Development Corp.	1577	1577	1,131	1,131
5	Gujarat Industries Power Co Ltd (145 MW)	214	4	105	105
6	Gujarat Industries Power Co Ltd (SLPP - Exp)	1265	1265	1,484	1,484
7	GPPC Pipavav	472	60	167	167
8	Mundra UMPP CGPL	12649	12649	11,689	11,689
9	Adani Power Ltd	14892	14892	8,023	8,023
10	Essar Power Bid 2	7446	7446	2,464	2,464
11	ACB India Ltd	1489	1489	1,410	1,410

Sr. No.	Particulars	Approved in MYT Order		Projected in MTR	
		Available MUs	Dispatch MUs	Availabl e MUs	Dispatch MUs
12	Power Exchange	-	-	3,000	150
13	Short Term Power Purchase	-	-	3,000	3,000
	Sub Total	**44077**	**40859**	**34073**	**31190**
	Central Sector				
1	NPC-Tarapur (1 & 2)	1072	1072	539	539
2	NPC-Tarapur (3 & 4)	1836	1836	1,292	1,292
3	NPC-Kakrapar	814	814	504	504
4	NTPC-Vindhyachal – I	1467	1467	1,613	1,613
5	NTPC-Vindhyachal – II	1566	1566	1,796	1,796
6	NTPC-Vindhyachal – III	1859	1852	2,076	2,076
7	NTPC-Korba	2506	2506	2,651	2,651
8	NTPC-Korba –II	668	668	717	717
9	NTPC-Kawas	636	79	696	696
10	NTPC-Jhanor	806	101	1,116	1,116
11	NTPC-Sipat-I	3759	3759	3,938	3,938
12	NTPC-Sipat – II	1901	1901	1,445	1,445
13	NTPC-Kahlagaon	924	924	910	910
14	NTPC-Vindhyachal – IV	1573	1573	1,777	1,777
15	NTPC-Mauda	1573	98	1,671	1,671
16	NTPC-Vindhyachal – V	612	612	765	765
17	NTPC-Mauda II U#1 & U#2	2064	2064	2,063	2,063
18	SSNNL	335	335	146	146
19	NTPC-Lara U#1	982	982	551	551
20	NTPC-Gadarwara Stage-I U#1	772	772	1,067	1,067
21	NTPC-Gadarwara Stage-I U#2	772	772	1,067	1,067
22	NTPC-Lara U#2	982	982	551	551
23	NPC Kakrapar Ext U#1	1542	1542	139	139
24	NPC Kakrapar Ext U#2	1542	1542	139	139
25	NTPC-Khargone U#1	772	772	863	863
26	NTPC-Khargone U#2	772	772	863	863
27	NTPC-North Karanpura U#1	540	540	-	-
28	NTPC-North Karanpura U#2	540	540	-	-
29	NTPC-North Karanpura U#3	540	540	-	-
	Sub Total	**35727**	**32986**	**30,955**	**30,955**
	Others				
1	Captive Power	6	6	2	2
	Renewable				
1	Wind Farms	4280	4280	6,671	6,671
2	Solar	1368	1368	1,744	1,744
3	Small/Mini Hydal	45	45	55	55
4	Small/Mini Hydal (New)	-	-	44	44
5	Biomass	1	1	210	210
6	Solar(New)	5332	5332	2,161	2,161
7	Wind (New)	3809	3809	1,058	1,058
8	Others (New)	699	699	177	177
	Sub Total	**15540**	**15540**	**12123**	**12123**
	TOTAL	**146031**	**101205**	**112459**	**105652**

The available and dispatchable energy from all sources projected by PGVCL in the Mid-Term Review for FY 2019-20 and FY 2020-21 and as approved by the Commission in the MYT Order dated 31st March, 2017 are summarised below:

Table 5-38: Availability and Dispatchable as approved in MYT Order and as Projected in MTR for FY 2019-20 and FY 2020-21

(MUs)

Sr. No.	Particulars	Approved in MYT Order		Projected in MTR	
		2019-20	2020-21	2019-20	2020-21
1	Available	131154	146031	108944	112459
2	Dispatchable	96426	101205	99680	105652

The availability projected in the Mid-Term Review of FY 2019-20 and FY 2020-21 is less by 22210 MUs during FY 2019-20 and 33572 MUs during FY 2020-21 compared to availability approved in the MYT order. The reduced availability is due to delay in commissioning of some of the generating stations.

5.9.3 Merit Order despatch and Total Energy requirement including tradable energy

As discussed in para 5.8.1, 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 5.25.

GUVNL has also entered into contract for new capacity that is likely to be commissioned during FY 2019-20 and FY 2020-21. The details of new plants likely to be commissioned during FY 2019-20 and FY 2020-21 are given in Table 5.26.

The details of capacity contracted by GUVNL, from the existing plant and the additional plants envisaged during FY 2019-20 and FY 2020-21 with operational parameters, fixed and variable costs are given in Tables 5.28 and 5.29.

Power Purchase in merit order

As discussed in Para 5.8.2 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 5-39: Energy requirement and Energy dispatchable as projected by the DISCOMs

Sr. No.	DISCOM	Energy Requirement (MUs)	
		2019-20	2020-21
1	DGVCL	22552	23688
2	MGVCL	12523	13256
3	UGVCL	26849	28680
4	PGVCL	37757	40028
5	**Total requirement at four DISCOMs**	**99680**	**105652**
6	Tradable energy projected by GUVNL	0.00	0.00
7	**Total Despatch units**	**99680**	**105652**

Though the availability is in the order of 108944 MUs and 112459 MUs during FY 2019-20 and FY 2020-21, the despatch is limited to 99680 MUs and 105652 MUs as above to meet the total requirement of the four DISCOMs.

The projected dispatchable energy is about 91.49% of the projected available energy during FY 2019-20 (the available energy being 108944 MUs and dispatchable energy 99680 MUs) and 93.95% during FY 2020-21 (the available energy being 112459 MUs and dispatchable energy 105652 MUs) as shown in Tables 5.38.

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 5-40: Energy requirement projected and approved for each DISCOM

(MUs)

Sr. No.	DISCOM	Energy Requirement			
		2019-20		2020-21	
		Projected	Approved	Projected	Approved
1	DGVCL	22552	22552	23688	23688
2	MGVCL	12523	12523	13256	13256
3	PGVCL	37757	37757	40028	40028
4	UGVCL	26849	26849	28680	28680
5	**Total requirement of four DISCOMs**	**99680**	**99680**	**105652**	**105652**
6	Tradable energy projected by GUVNL	0.00	0.00	0.00	0.00
7	**Total Dispatch units**	**99680**	**99680**	**105652**	**105652**

5.9.4 Power Purchase Cost for the period FY 2019-20 and FY 2020-21

PGVCL has submitted the power purchase costs as given in Tables 5.28 & 5.29.

It is observed that the Petitioner has not projected the purchase of power in accordance with the RPO requirement. The Commission has therefore, worked out the purchase of power from renewable sources in accordance with the RPO Regulations. Further, while considering the power purchase requirement, the merit order dispatch has been applied as specified in para 5.8.2 above. It is also observed by the Commission that the Petitioner inadvertently not considered fixed cost of Utran Expansion for FY 2020-21. The Commission has considered the same.

Also, the fixed cost and variable cost for GSECL stations, IPPs, renewable and Central Plants are taken as per actuals of FY 2017-18 as base power purchase cost. The approved requirement of power for all the DISCOMs put together, the Trading Units and revised dispatchable units for FY 2019-20 and FY 2020-21 as discussed above are given in the Tables below:

Table 5-41: Approved Power Purchase Cost for FY 2019-20

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	1,314	84	23	3.50	29	52
2	GSECL Wanakbori – 7	1,341	1,341	62	3.21	430	492
3	GSECL UtranExpan	250	159	250	5.35	85	335
4	GSECL Dhuvaran – 7	191	191	61	1.49	28	89
5	GSECL Dhuvaran – 8	361	361	86	1.28	46	132
6	GSECL Ukai	4,133	2,424	262	3.39	822	1084
7	GSECL UkaiExpan	3,500	3,500	447	3.04	1065	1512
8	GSECL Gandhinagar 3-4	2,052	166	204	3.74	62	266
9	GSECL Wanakbori 1-6	8,538	8,538	448	3.29	2809	3257
10	GSECL Sikka Expansion	2,790	199	629	3.65	73	702
11	GSECL Kutch Lignite 1-3	867	867	207	2.16	187	394
12	GSECL Kutch Lignite 4	247	247	62	1.98	49	111
13	GSECL Ukai Hydro	311	311	42	0.00	0	42
14	GSECL Kadana Hydro	288	288	73	0.00	0	73
15	BECL	3,481	3,481	879	2.15	748	1627
16	Dhuvaran CCPP III	30	30	159	5.77	17	176
17	GSECL Wanakbori Ext U#8	5,614	5,614	905	2.94	1651	2555
	Sub Total	**35,308**	**27,800**	**4,798**		**8103**	**12,901**
	IPPs						
1	Gujarat State Energy Generation	2	2	49	6.11	1	50
2	Gujarat State Energy Generation Expansion	187	154	180	5.19	80	260
3	Gujarat Industries Power Co Ltd (165 MW)	0	0	0	4.50	0	0

Sr. No.	Particulars	Available (MUs)	Dispatch (MUs)	Fixed Cost (Rs. Crore)	Variable Cost (Rs. /Unit)	Variable Cost (Rs. Crore)	Total Cost (Rs. Crore)
4	Gujarat Industries Power Co Ltd (SLPP)	1,411	1,411	129	1.71	241	370
5	Gujarat Mineral Development Corp.	1,131	1,131	124	1.26	142	266
6	Gujarat Industries Power Co Ltd (145 MW)	105	105	5	2.27	24	29
7	Gujarat Industries Power Co Ltd (SLPP - Exp)	1,484	1,484	273	1.88	279	552
8	GPPC Pipavav	167	167	325	4.37	73	398
9	Mundra UMPP CGPL	11,689	11,689	1,129	1.66	1943	3072
10	Adani Power Ltd	8,023	8,023	975	1.81	1450	2425
11	Essar Power Bid 2	2,464	2,464	354	1.92	473	827
12	ACB India Ltd	1,410	1,410	201	0.82	115	316
13	Power Exchange	3,000	150	0	4.50	68	68
14	Short Term Power Purchase / Power Exchange	3,000	150	0	3.50	52	52
	Sub Total	**34,073**	**28,340**	**3,744**		**4941**	**8,685**
	Central Sector						
1	NPC-Tarapur (1 & 2)	539	539	0	2.08	112	112
2	NPC-Tarapur (3 & 4)	1,292	1,292	0	3.10	400	400
3	NPC-Kakrapar	504	504	0	2.39	121	121
4	NTPC-Vindhyachal – I	1,613	1,613	23	1.62	262	285
5	NTPC-Vindhyachal – II	1,796	1,796	128	1.52	273	401
6	NTPC-Vindhyachal – III	2,076	2,076	212	1.52	316	528
7	NTPC-Korba	2,651	2,651	23	1.46	387	410
8	NTPC-Korba –II	717	717	98	1.43	103	201
9	NTPC-Kawas	696	696	113	2.56	178	291
10	NTPC-Jhanor	1,116	1,116	132	2.39	267	399
11	NTPC-Sipat-I	3,938	3,938	519	1.30	513	1032
12	NTPC-Sipat – II	1,445	1,445	250	1.35	194	444
13	NTPC-Kahlagaon	910	910	106	2.31	210	316
14	NTPC-Vindhyachal – IV	1,777	1,777	280	1.51	269	549
15	NTPC-Mauda	1,671	1,671	320	2.79	466	786
16	NTPC-Vindhyachal – V	765	765	118	1.57	120	238
17	NTPC-Mauda II	2,063	2,063	380	2.50	516	896
18	SSNNL	146	146	0	2.03	30	30
19	NTPC-Lara U#1	551	551	110	1.50	83	193
20	NTPC-Gadarwara Stage-I U#1	1,067	1,067	152	1.50	160	312
21	NTPC-Gadarwara Stage-I U#2	622	622	89	1.50	93	182
22	NTPC-Lara U#2	321	321	64	1.50	48	112
23	NPC Kakrapar Ext U#1	0	0	0	2.38	0	0
24	NPC Kakrapar Ext U#2	0	0	0	2.38	0	0
25	NTPC-Khargone U#1	647	647	129	1.50	97	226
26	NTPC-Khargone U#2	360	360	72	1.50	54	126
	Sub Total	**29,283**	**29,283**	**3,318**		**5271**	**8,589**
	Others						
1	Captive Power	2	2	0	2.13	0	0
	Renewable	0	0	0	0.00		
1	Wind Farms	6,671	6,671	0	3.78	2520	2520

Sr. No.	Particulars	Available (MUs)	Dispatch (MUs)	Fixed Cost (Rs. Crore)	Variable Cost (Rs. /Unit)	Variable Cost (Rs. Crore)	Total Cost (Rs. Crore)
2	Solar	1,744	1,744	0	11.45	1997	1997
3	Small/Mini Hydal	55	55	0	3.39	19	19
4	Small/Mini Hydal (New)	44	44	0	3.29	15	15
5	Biomass	210	210	40	4.17	88	128
6	Solar(New)	3,738	3,738	0	2.66	996	996
7	Wind (New)	1,353	1,353	0	2.44	330	330
8	Others (New)	438	438	0	6.66	292	292
	Sub Total	**14256**	**14,256**	**40**		**6256**	**6,296**
	TOTAL	**112920**	**99,680**	**11,900**		**24572**	**36,472**

Table 5-42: Approved Power Purchase Cost for FY 2020-21

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	1,314	84	23	3.50	29	52
2	GSECL Wanakbori – 7	1,341	1,341	62	3.21	430	492
3	GSECL UtranExpan	250	159	250	5.35	85	335
4	GSECL Dhuvaran – 7	191	191	61	1.49	28	89
5	GSECL Dhuvaran – 8	361	361	86	1.28	46	132
6	GSECL Ukai	4,133	3,800	262	3.39	1289	1551
7	GSECL UkaiExpan	3,500	3,500	447	3.04	1065	1512
8	GSECL Gandhinagar 3-4	2,052	166	204	3.74	62	266
9	GSECL Wanakbori 1-6	8,538	8,538	448	3.29	2809	3257
10	GSECL Sikka Expansion	2,790	844	629	3.65	308	937
11	GSECL Kutch Lignite	867	867	207	2.16	187	394
12	GSECL Kutch Lignite 4	247	247	62	1.98	49	111
13	GSECL Ukai Hydro	311	311	42	0.00	0	42
14	GSECL Kadana Hydro	288	288	73	0.00	0	73
15	BECL	3,481	3,481	879	2.15	748	1627
16	Dhuvaran CCPP III	30	30	159	5.77	17	176
17	GSECL Wanakbori Ext U#8	5,614	5,614	905	2.94	1651	2555
	Sub Total	**35,308**	**29,821**	**4,798**		**8,805**	**13,603**
	IPP's						
1	Gujarat State Energy Generation	2	2	49	6.11	1	50
2	Gujarat State Energy Generation Expansion	187	154	180	5.19	80	260
3	Gujarat Industries Power Co Ltd (165 MW)	0	0	0	4.50	0	0
4	Gujarat Industries Power Co Ltd (SLPP)	1,411	1,411	129	1.71	241	370
5	Gujarat Mineral Development Corp.	1,131	1,131	124	1.26	142	266
6	Gujarat Industries Power Co Ltd (145 MW)	105	105	5	2.27	24	29

Sr. No.	Particulars	Availabe (MUs)	Dispatch (MUs)	Fixed Cost (Rs. Crore)	Variable Cost (Rs. /Unit)	Variable Cost (Rs. Crore)	Total Cost (Rs. Crore)
7	Gujarat Industries Power Co Ltd (SLPP - Exp)	1,484	1,484	273	1.88	279	552
8	GPPC Pipavav	167	167	325	4.37	73	398
9	Mundra UMPP CGPL	11,689	11,689	1,129	1.66	1943	3072
10	Adani Power Ltd	8,023	8,023	975	1.81	1450	2425
11	Essar Power Bid 2	2,464	2,464	354	1.92	473	827
12	ACB India Ltd	1,410	1,410	201	0.82	115	316
13	Power Exchange	3,000	150	0	4.50	68	68
14	Short Term Power Purchase / Power Exchange	3,000	150	0	3.50	53	53
	Sub Total	**34,073**	**28,340**	**3,744**		**4,941**	**8,685**
	Central Sector						
1	NPC-Tarapur (1 & 2)	539	539	0	2.08	112	112
2	NPC-Tarapur (3 & 4)	1,292	1,292	0	3.10	400	400
3	NPC-Kakrapar	504	504	0	2.39	121	121
4	NTPC-Vindhyachal – I	1,613	1,613	23	1.62	262	285
5	NTPC-Vindhyachal – II	1,796	1,796	128	1.52	273	401
6	NTPC-Vindhyachal – III	2,076	2,076	212	1.52	316	528
7	NTPC-Korba	2,651	2,651	23	1.46	387	410
8	NTPC-Korba –II	717	717	98	1.43	103	201
9	NTPC-Kawas	696	696	113	2.56	178	291
10	NTPC-Jhanor	1,116	1,116	132	2.39	267	399
11	NTPC-Sipat-I	3,938	3,938	519	1.30	513	1032
12	NTPC-Sipat – II	1,445	1,445	250	1.35	194	444
13	NTPC-Kahlagaon	910	910	106	2.31	210	316
14	NTPC-Vindhyachal – IV	1,777	1,777	280	1.51	269	549
15	NTPC-Mauda	1,671	1,671	320	2.79	466	786
16	NTPC-Vindhyachal – V	765	765	118	1.57	120	238
17	NTPC-Mauda II	2,063	2,063	380	2.50	516	896
18	SSNNL	146	146	0	2.03	30	30
19	NTPC-Lara U#1	551	551	110	1.50	83	193
20	NTPC-Gadarwara Stage-I U#1	1,067	1,067	152	1.50	160	312
21	NTPC-Gadarwara Stage-I U#2	1,067	1,067	152	1.50	160	312
22	NTPC-Lara U#2	551	551	110	1.50	83	193
23	NPC Kakrapar Ext U#1	139	139	10	2.38	33	43
24	NPC Kakrapar Ext U#2	139	139	10	2.38	33	43
25	NTPC-Khargone U#1	863	863	172	1.50	129	301
26	NTPC-Khargone U#2	863	863	172	1.50	129	301
	Sub Total	**30,955**	**30,955**	**3,590**		**5,547**	**9,137**
	Others						
1	Captive Power	2	2	0	2.13	0.43	0.43
	Renewable	0	0				
1	Wind Farms	6,671	6,671	0	3.78	2520	2,520
2	Solar	1,744	1,744	0	11.45	1997	1,997
3	Small/Mini Hydal	55	55	0	3.39	19	19
4	Small/Mini Hydal (New)	44	44	0	3.29	15	15
5	Biomass	210	210	40	4.17	88	128

Sr. No.	Particulars	Availabe (MUs)	Dispatch (MUs)	Fixed Cost (Rs. Crore)	Variable Cost (Rs. /Unit)	Variable Cost (Rs. Crore)	Total Cost (Rs. Crore)
6	Solar(New)	5,387	5,387	0	2.54	1368	1,368
7	Wind (New)	1,939	1,939	0	2.44	473	473
8	Others (New)	483	483	0	6.90	333	333
	Sub Total	**16,536**	**16,536**	**40**		**6,812**	**6,852**
	TOTAL	**116872**	**105,652**	**12,173**		**26,105**	**38,277**

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 2019-20 and FY 2020-21, however, the Petitioner shall follow the Merit Order Principles and Prudence Practices while availing power from different sources.

5.9.5 Transmission and Other Cost

5.9.5.1 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 escalated @ 5% YoY considering the actual charges of FY 2017-18 as the base.

The Petitioner has submitted that the Transmission charges of GETCO have been considered as per the MYT Order of GETCO for FY 2019-20 and FY 2020-21. The Commission has considered the Transmission charges of GETCO as approved in the MYT Order dated 31st March, 2017. The Commission accordingly approves the Transmission Charges payable to PGCIL and GETCO as given in the Table below:

Table 5-43: Transmission charges approved by the Commission for period FY 2019-20 and FY 2020-21

(Rs. Crore)

Sr. No.	Particulars	2019-20	2020-21
1	PGCIL Charges	2077	2181
2	Annual Transmission charges of GETCO	4115	4502

5.9.5.2 GUVNL Cost

PGVCL has submitted in **Para 5.8.3** 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 accoringly approves the GUVNL costs as given below, based on energy to be handled during FY 2019-20 and FY 2020-21:

Table 5-44: GUVNL Costs approved by the Commission for the period FY 2019-20 and FY 2020-21

Sr. No.	Particulars	Unit	2019-20	2020-21
1	Energy	MUs	99680	105652
2	GUVNL Cost at 4.00 Paise/unit	Rs. Crore	399	423

5.9.5.3 SLDC Fees and Charges

PGVCL has submitted that SLDC fees and charges have been taken as approved by the Commission in the SLDC MYT Order dated 31st March, 2017.

The Commission approves the SLDC charges as approved in the Mid-Term Review Order in respect to SLDC for FY 2019-20 and FY 2020-21 as shown in the Table below:

Table 5-45: SLDC charges approved by the Commission for FY 2019-20 and FY 2020-21

(Rs. Crore)

Sr. No.	Particulars	2019-20	2020-21
1	SLDC Charges	29	33

5.9.6 Total Power Purchase Cost

5.9.6.1 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 5-46: Fixed cost of DISCOMs for the period FY 2019-20 and FY 2020-21

(Rs. Crore)

Year	Fixed Cost	GETCO Cost	PGCIL Charges	SLDC Charges	Total Fixed Cost	DISCOMS Fixed Cost
2019-20	11,900	4115	2077	29	18121	18121
2020-21	12,173	4,502	2,181	33	18888	18888

5.9.6.2 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 5-47: Variable cost for DISCOMs for the period FY 2019-20 and FY 2020-21

Year	Variable Cost (Rs. Crore	GUVNL Cost (Rs. Crore	Total Variable Cost (Rs. Crore)	Total MUs Despatched	Variable Cost (Rs. /Unit
2019-20	24,572	399	24971	99680	2.51
2020-21	26,105	423	26528	105652	2.51

Table 5-48:Total Cost of Power for DISCOMs for the period FY 2019-20 and FY 2020-21

(Rs. Crore)

Year	Fixed Cost	Variable Cost	Total Cost
2019-20	18121	24970	43092
2020-21	18888	26528	45416

5.10 Allocation of Power Purchase Cost

Power Purchase cost worked out as above for FY 2019-20 and FY 2020-21 is allocated amongst four DISCOMs based on the methodology adopted by the Commission in the MYT Order dated 31st March, 2017 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 5-49: Category Wise sales approved and existing average tariff in Rs./kWh

Sr. No.	Category	DGVCL				MGVCL				PGVCL				UGVCL			
		2019-20 Sales (MU)	2020-21 Sales (MU)	Average Tariff Rs./kWh (2019-20)	Average Tariff Rs./kWh (2020-21)	2019-20 Sales (MU)	2020-21 Sales (MU)	Average Tariff Rs./kWh (2019-20)	Average Tariff Rs./kWh (2020-21)	2019-20 Sales (MU)	2020-21 Sales (MU)	Average Tariff Rs./kWh (2019-20)	Average Tariff Rs./kWh (2020-21)	2019-20 Sales (MU)	2020-21 Sales (MU)	Average Tariff Rs./kWh (2019-20)	Average Tariff Rs./kWh (2020-21)
1	RGP	3400	3690	3.88	3.89	2801	2979	3.73	3.74	3996	4205	3.64	3.65	2418	2594	3.56	3.57
2	GLP	68	77	4.13	4.12	66	70	4.23	4.23	136	146	4.10	4.10	51	54	4.33	4.32
3	Non-RGP and LTMD	5927	6350	5.09	5.11	1628	1716	5.42	5.44	3744	3920	5.30	5.31	2025	2170	5.53	5.55
4	Public Water Works	268	295	3.66	3.66	363	409	3.38	3.38	876	945	3.44	3.43	816	877	3.62	3.62
5	Agriculture Unmetered	417	417	1.41	1.41	475	475	1.41	1.41	4570	4570	1.42	1.42	6313	6313	1.41	1.41
6	Agriculture metered	461	499	1.19	1.19	933	1023	0.96	0.96	3601	4060	1.09	1.08	3119	3301	0.89	0.89
7	Street Light	70	76	4.25	4.25	63	64	4.07	4.07	81	81	4.07	4.07	56	58	4.09	4.09
8	Industrial HT	8687	8901	5.40	5.45	4116	4339	5.35	5.39	12666	13932	5.11	5.15	8170	9218	5.08	5.06
9	Railway Traction	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10	**Total**	**19297**	**20304**			**10446**	**11076**			**29668**	**31859**			**22968**	**24,584**		

Table 5-50: Revenue with existing Tariffs for FY 2019-20 and FY 2020-21 with approved sales

(Rs. Crore)

Sr. No.	DISCOM	DGVCL		MGVCL		PGVCL		UGVCL		TOTAL	
		2019-20	2020-21	2019-20	2020-21	2019-20	2020-21	2019-20	2020-21	2019-20	2020-21
1	RGP	1318	1434	1044	1114	1456	1536	862	927	4680	5010
2	GLP	28	32	28	29	56	60	22	23	134	144
3	Non-RGP and LTMD	3019	3242	883	933	1983	2082	1119	1205	7003	7462
4	Public Water Works	98	108	123	138	301	325	296	318	817	889
	Agriculture Unmetered	59	59	67	67	649	649	889	889	1664	1664
5	Agriculture Metered	55	59	90	99	392	439	278	295	815	892
6	Public Lighting	30	32	26	26	33	33	23	24	111	115
7	Industrial HT	4690	4852	2202	2338	6477	7174	4152	4662	17521	19026
8	Railway Traction	0	0	0	0	0	0	0	0	0	0
9	**Total**	**9296**	**9817**	**4462**	**4745**	**11346**	**12299**	**7641**	**8343**	**32745**	**35204**
	Approved Sales										
10	FPPPA @ 1.61 Rs/kWh for FY 2019-20 and @ 1.58 Rs/kWh for FY 2020-21	3107	3208	1682	1750	4777	5034	3698	3884	13263	13876
11	Other Income	235	235	109	109	215	215	203	203	763	763
12	Agriculture Subsidy	49	49	78	80	452	460	522	512	1100	1100
13	**Grand Total**	**12687**	**13309**	**6331**	**6684**	**16790**	**18008**	**12063**	**12942**	**47871**	**50943**

Table 5-51: Aggregate Revenue Requirement for Power Purchase for FY 2019-20 and FY 2020-21

(Rs. Crore)

Sr. No.	Particulars	2019-20	2020-21
A	**Total Revenue of DISCOMS (A)**	**47871**	**50943**
1	DGVCL	12687	13309
2	MGVCL	6331	6684
3	PGVCL	16790	18008
4	UGVCL	12063	12942
B	**Expenditure Other than Power Purchase (B)**	**5816**	**6296**
5	DGVCL	991	1069
6	MGVCL	1001	1057
7	PGVCL	2609	2863
8	UGVCL	1214	1307
C	**Amount available with the DISCOM for Power Purchase (A-B)**	**42055**	**44647**
9	DGVCL	11695	12240
10	MGVCL	5330	5627
11	PGVCL	14180	15144
12	UGVCL	10849	11635

Table 5-52: Total Revenue Gap for FY 2019-20 and FY 2020-21

(Rs. Crore)

Sr. No.	Particulars	2019-20	2020-21
1	Total Power Purchase Cost (A) (As per Table 5.48)	43092	45416
2	Aggregate Amount available for Power Purchase (B) (As per Table 5.51 (c))	42055	44647
3	**Surplus/(Gap)[B-A]**	**(1037)**	**(769)**

Table 5-53: Energy Requirement and Percentage Energy required for FY 2019-20 and FY 2020-21

Sr. No.	DISCOM	2019-20		2020-21	
		Energy Required (MUs)	Percentage	Energy Required (MUs)	Percentage
1	DGVCL	22552	23%	23688	22%
2	MGVCL	12523	13%	13256	13%
3	PGVCL	37757	38%	40028	38%
4	UGVCL	26849	27%	28680	27%
	Total	**99680**	**100%**	**105652**	**100%**

Table 5-54: Allocation of (Gap)/Surplus for FY 2019-20

Sr. No.	Details	DGVCL	MGVCL	PGVCL	UGVCL
1	Total surplus for the year (Rs. Cr.)	(1037)			
2	Ratio of allocation of Gap	23%	13%	38%	27%
3	Gap allocation (Rs. Cr.)	(235)	(130)	(393)	(279)

Table 5-55: Allocation of Gap for FY 2020-21

Sr. No.	Details	DGVCL	MGVCL	PGVCL	UGVCL
1	Total surplus for the year (Rs. Cr.)	(769)			
2	Ratio of allocation of Gap	22%	13%	38%	27%
3	Gap allocation (Rs. Cr.)	(172)	(97)	(291)	(209)

Table 5-56: Bulk Supply Tariff for FY 2019-20

Sr. No.	Details	DGVCL	MGVCL	PGVCL	UGVCL
1	Amount available for power purchase (Rs. Cr.)	11695	5330	14180	10849
2	Gap allocated (Rs. Cr.)	(235)	(130)	(393)	(279)
3	Power purchase cost for DISCOM (1-2) (Rs. Cr.)	11930	5460	14573	11129
4	Energy Purchase in DISCOM (MU)	22552	12523	37757	26849
5	**Bulk Supply Tariff (Rs./kWh)**	**5.29**	**4.36**	**3.86**	**4.14**

Table 5-57: Bulk Supply Tariff for FY 2020-21

Sr. No.	Details	DGVCL	MGVCL	PGVCL	UGVCL
1	Amount available for power purchase (Rs. Cr.)	12240	5627	15144	11635
2	Gap allocated (Rs. Cr.)	(172)	(97)	(291)	(209)
3	Power purchase cost for DISCOM (1-2) (Rs. Cr.)	12413	5724	15436	11844
4	Energy Purchase in DISCOM (MU)	23688	13256	40028	28680
5	**Bulk Supply Tariff (Rs./kWh)**	**5.24**	**4.32**	**3.86**	**4.13**

5.11 Capital Expenditure

Petitioner's submission

PGVCL has projected capital expenditure of Rs. 1784.10 Crore for FY 2019-20 and Rs. 1850.68 Crore for FY 2020-21 in the Mid-Term Review against Rs. 1527.50 Crore and Rs. 1533.50 Crore approved in the MYT Order dated 31st March 2017 as detailed in the Table below:

Table 5-58: Capital Expenditure Plan in the Mid-Term Review for FY 2019-20 and FY 2020-21

(Rs. Crore)

		2019-20		2020-21	
	Particulars	**As per MYT Order**	**Projected in MTR**	**As per MYT Order**	**Projected in MTR**
A	**Distribution Schemes**				
	Normal Development Scheme	338.00	348.60	344.00	358.18
	System Improvement Scheme	150.00	100.00	150.00	100.00
	Electrification of hutments	7.00	7.00	7.00	7.00
	Scheme for meters including installation of SMART Meters	55.00	80.00	55.00	80.00
	Total	**550.00**	**535.60**	**556.00**	**545.18**
B	**Rural Electrification Schemes**		-		-
	Special Component plan	1.50	1.50	1.50	1.50
	RE Normal + Tatkal + Dark Zone	650.00	935.00	650.00	935.00
	Total	**651.50**	**936.50**	**651.50**	**936.50**
C	**Non Plan Schemes**		-		-
	SCADA/DMS	-	-	-	-

		2019-20		2020-21	
	Particulars	**As per MYT Order**	**Projected in MTR**	**As per MYT Order**	**Projected in MTR**
	Total	**-**	**-**	**-**	**-**
D	**Other New Schemes**		-		-
	Civil work	8.00	10.00	8.00	10.00
	Shunt Capacitor	10.00	10.00	10.00	10.00
	Fencing to Distribution Transformer	15.00	15.00	15.00	15.00
	Aerial Bunch Conductors	1.00	1.00	1.00	1.00
	HVDS	100.00	100.00	100.00	100.00
	Under Ground System at Pilgim Places like Dwarka, Somnath, Bhavnath (Junagadh) etc. and important GIDC area	50.00	75.00	50.00	132.00
	SKJY	-	50.00	-	50.00
	Marine Cable for Shiyalbet	-	-	-	-
	IPDS	-	-	-	-
	DDUGJY	-	-	-	-
	Solar Ag Pump	102.00	-	102.00	-
	FPI	-	1.00	-	1.00
	DISS	10.00	10.00	10.00	10.00
	Others schemes (General Schemes)	-	-	-	-
	Smart Village	-	-	-	-
	Coastal area scheme	30.00	40.00	30.00	40.00
	Total	**326.00**	**312.00**	**326.00**	**369.00**
	Capital Expenditure Total	**1,527.50**	**1,784.10**	**1,533.50**	**1,850.68**

Commission's Analysis

PGVCL has furnished detailed justification for scheme wise justification for revision in capital expenditureas 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 the remaining years of third control period.

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 the remaining years of third control period.

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 Hon'ble Commission, Company has maximised the targets for releasing the Connections of Agriculture category. Company has proposed 85000 nos. of connections during each year of the Control Period 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) Shunt Capacitor:

Company operates HT, LT and Distribution Transformer network for supplying electricity to more than 50 Lacs consumers. Majority consumers are residential followed by Agriculture and remaining are from other categories. Because of nature of load used by consumer and also the characteristic of the network, Power factor of the system gets poor which ultimately affects to "Voltage Profile" "Network Capacity Utilisation factor", higher technical losses etc. For improving the profile, Company has proposed to install shunt capacitor over the HT line to improve the System Power factor.

h) Costal Area Scheme:

PGVCL covers largest costal 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.

i) Aerial Bunched Conductors:

The Aerial Bunched Conductors (A.B.C.) are insulated conductors and are better replacement of overhead HT and LT lines in theft-prone, fault-prone areas and also increases the overall safety of the HT LT Network.

j) Civil Work:

Under this scheme, provision is proposed for Civil Works for new office buildings for various Circle Offices/ Division Offices and Sub division offices under Company’s area.

k) 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.

l) Underground System:

Under this scheme, Company 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.

m) 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 including Net-metering, Metering of feeders / distribution transformers / consumers in urban areas and, IT enablement of distribution sector and strengthening of distribution network, etc.

n) DeenDayal Upadhyay Gram Jyoti Yojna (DDUGJY):

Scheme is applicable in the Rural areas of the Company. Scheme involves strengthening and augmentation of sub-transmission & distribution to ensure reliable and quality power supply in rural areas, 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.

o) 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 the remaining years of current control period.

p) Fencing to Distribution Transformers:

In order to protect the human and animal lives and to prevent the access to Distribution Transformer, Company has proposed to provided fencing to the Distribution Transformers.

q) 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.

Company has projected CAPEX for each year of review considering all relevant aspects. The Commission is requested to approve the same.

Commission's Analysis

The Commission accepts the justification given by PGVCL for the projected capital expenditure in the Mid-Term Review and approves the Capital expenditure of Rs. 1784.10 Crore and Rs. 1850.68 Crore for FY 2019-20 and FY 2020-21 respectively. The Commission has approved the scheme wise CAPEX as proposed by the Petitioner for FY 2019-20 and FY 2020-21. 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.

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 Consumer Contribution is the major source of funding the Normal Distribution Schemes while Grant is received from State Govt for funding various governmental schemes like DDUGY, IPDS and others. The balance 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 2018-19 to FY 2020-21 as furnished by PGVCL is given in the Table below:

Table 5-59: Funding of capitalisation projected in Mid-Term Review

(Rs. Crore)

Sr. No.	Particulars	2019-20		2020-21	
		Approved in MYT Order	Projected in MTR	Approved in MYT Order	Projected in MTR
1	Capitalisation	1527.50	1784.10	1533.50	1850.68
2	Less : Consumer Contribution	181.59	209.27	182.70	215.03
3	Less: Grants	56.50	107.50	57.50	107.50
4	**Balance CAPEX**	**1289.41**	**1467.33**	**1293.30**	**1528.15**
5	Debt @ 70%	902.58	1027.13	905.31	1069.70
6	Equity @ 30%	386.82	440.20	387.99	458.44

Commission's Analysis

The Commission has observed that PGVCL has proposed capitalization of the entire capital expenditure proposed to be incurred during FY 2019-20 and FY 2020-21. The Commission has verified the actual capitalization against capital expenditure incurred during the first two financial years of the control period of MYT and has observed that the Petitioner has achieved more than 97% capitalization during these two years as can be seen from the Table below:

Table 5-60: Approved CAPEX vs. Actual CAPEX and Capitalisation for FY 2016-17 and FY 2017-18

(Rs. Crore)

Particulars	2016-17	2017-18
CAPEX Approved in the MYT Order	1794.41	2041.35
Actual CAPEX	1388.88	1708.68
Actual Capitalization	1380.08	1669.53

In view of above, the Commission approves the CAPEX, capitalization and funding thereof, as proposed by PGVCL as given in the Table below:

Table 5-61: Approved CAPEX, Capitalization and Funding for the FY 2019-20 and FY 2020-21

(Rs. Crore)

Particulars	2019-20	2020-21
CAPEX	1784.10	1850.68
Capitalization	1784.10	1850.68
Less: Consumer contribution	209.27	215.03
Less: Grants	107.50	107.50
Balance Capitalisation	**1467.33**	**1528.15**
Debt @ 70%	1027.13	1069.70
Equity @ 30%	440.20	458.44

5.12 Fixed Charges

5.12.1 Operations and Maintenance (O&M) Expenses

PGVCL has projected the O&M expenses at Rs. 1188.75 Crore for FY 2019-20 and Rs. 1342.17 Crore for FY 2020-21 in the Mid-Term Review petition. The O&M expenses approved for these years in the MYT Order dated 31st March 2017 and the revised projection submitted by PGVCL are given in the Table below:

Table 5-62: O&M expenses projected for the FY 2019-20 and FY 2020-21

(Rs. Crore)

Sr. No.	Particulars	2019-20		2020-21	
		Approved in MYT Order	Projected in MTR	Approved in MYT Order	Projected in MTR
1	Employee Cost	752.93	1,177.94	796.00	1,330.75
2	Repairs & Maintenance Expenses	117.95	117.95	124.70	124.70
3	Administration & General Expenses	140.33	140.33	148.30	148.35
4	Other Debits	-	-	-	-
5	Extraordinary Items	-	-	-	-
6	Net Prior Period Expenses / (Income)	-	-	-	-
7	Other Expenses Capitalised	(411.94)	(247.47)	(435.50)	(261.63)
8	**Operation & Maintenance Expenses**	**599.27**	**1,188.75**	**633.55**	**1,342.17**

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."

The increase in O&M expenses is on two counts (i) inflationary increase and (ii) increase in the scale of distribution network operation due to increase in network length, load handling capacity and number of consumers being served, etc. as compared to base years. The escalation factor of 5.72% per annum takes care of only the change in O&M expenses on account of inflationary increase. However, it is not addressing the issue of escalation in O&M expenses due to increased scale of distribution operations which is beyond the control of the distribution licensee

The growth in the Employee expenses at 3-year CAGR for the period from FY 2014-15 to FY 2017-18 excluding the impact of 7th Pay Commission is shown in the following Table:

Table 5-63: Consolidated Employee Cost of all DISCOMs

(Rs. Crore)

2014-15	2015-16	2016-17	2017-18	3 Year CAGR
Rs. Crore				
1531.19	1699.62	1945.96	2175.23	12.42%

PGVCL submitted that considering the above, the actual Employee expenses of FY 2017-18 excluding the impact of 7th Pay Commission is escalated at 12.42% for FY 2019-20 and FY 2020-21. Further, the actual impact of 7th Pay Commission in FY 2017-18 was there only for the part of the year and that too for only a part of the employees and is therefore expected to be substantially higher in subsequent years when the impact is considered for full year for all employees. Considering this, the impact of 7th Pay Commission is considered at 20% of salary component for FY 2019-20 and FY 2020-21.

A&G and R&M expenses for FY 2019-20 and FY 2020-21 are computed as per the GERC (MYT) Regulations, 2016 according to which 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 31st March, 2015. The average of such Operation and Maintenance expenses shall be considered as Operations and Maintenance expenses for the financial year ended 31st March, 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. Accordingly, the A&G and R&M expenses for FY 2019-20 and FY 2020-21 have been computed. The expenses capitalised for FY 2017-18 have been escalated at 5.72% to derive the expenses capitalised for FY 2019-20 and FY 2020-21.

Other Debits, Extraordinary Items and Net Prior Period Expense/ (Income) are not considered for projection.

Commission's Analysis

The Commission examined the O&M expenses incurred by PGVCL during FY 2017-18 component wise. The GERC (MYT) Regulations, 2016, provided for escalation of O&M Expenses viz, Employee Cost, Repairs and Maintenance Expenses, Administration and General Expenses and Expenses Capitalized @ 5.72% p.a. for FY 2017-18 onwards.

The Commission, accordingly, approves the R&M Expenses, A&G Expenses and Expenses Capitalized with 5.72% escalation p.a for FY 2019-20 and FY 2020-21 over the actuals incurred under these heads during FY 2017-18 as trued up in this Order. The Other expenses are not projected by Petitioner and therefore, not considered by the Commission in this Order.

The Commission noted that there is a revision in the Pay Scale of employees of the Petitioner on account of 7th Pay Commission. It is also noted by the Commission that only a part of the employees availed the revised salary and that too for a part of the year during FY 2017-18. On a query from the Commission, the Petitioner vide e-mail dated 15.04.2019 confirmed that during FY 2017-18, Technical category employees did not opt the revised salary. It is clarified by the Petitioner that the revised salary was paid from 1st August, 2017. It is also clarified that no arrears was paid to the employees during FY 2017-18 on account of revision of salary.

In view of above, the Commission has considered eight months actual paid out amount due to revision in salary annualised for twelve months plus the pre-revised annual salary for FY 2017-18 to escalate @ 5.72% Y-o-Y to arrive at employee expenses for FY 2019-20 and FY 2020-21. The Commission shall consider actual employee expenses as uncontrollable to the extent of actual pay out on account of revision in salaries and allowances while truing up of FY 2019-20 and FY 2020-21.

The approved O&M expenses are given in the Table below:

Table 5-64: O&M expenses approved in the Mid-Term Review

(Rs. Crore)

Sr. No.	Particulars	2019-20	2020-21
1	Employee Cost	1004.74	1062.21
2	Repairs & Maintenance Expenses	165.09	174.53
3	Administration & General Expenses	177.35	187.50
4	Other Debits	0.00	0.00
5	Extraordinary Items	0.00	0.00
6	Net Prior Period Expenses / (Income)	0.00	0.00
7	Other Expenses Capitalised	(247.47)	(261.63)
8	**Operations & Maintenance Expenses**	**1099.71**	**1162.62**

5.12.2 Depreciation

PGVCL has projected Depreciation at Rs. 712.43 Crore for FY 2019-20 and Rs. 799.62 Crore for FY 2020-21 based on the revised capital expenditure projected in the Mid-Term Review for these years. The depreciation approved for these years in the MYT order dated 31st March 2017, and revised projections submitted by PGVCL are given in the Table below:

Table 5-65: Depreciation projected for the Control Period

(Rs. Crore)

Sr. No.	Particulars	2019-20		2020-21	
		Approved in MYT Order	Projected in MTR	Approved in MYT Order	Projected in MTR
1	Gross Block at Beginning of the year	17195.40	14115.64	18722.90	15899.73
2	Additions during the Year (Net)	1527.50	1784.10	1533.50	1850.68
3	**Depreciation for the Year**	**945.39**	**712.43**	**1025.84**	**799.62**
4	**Average Rate of Depreciation**	**5.26%**	**4.75%**	**5.26%**	**4.75%**

Petitioner's Submission

PGVCL has submitted that it has considered the Closing Gross Block of fixed assets of FY 2017-18 as the Opening Gross Block of fixed assets of FY 2018-19. The addition during 2018-19 to 2020-21 has been projected considering projected capitalisation for the same for each year. Depreciation has been calculated taking into consideration the Opening Balance of assets at the beginning of the year and the projected capitalisation. The depreciation for assets which have completed 12 years from the Transfer Scheme of the State Government effective from 1st April 2005, has been computed considering the balance depreciation (difference of GFA as on 1st April, 2017 less accumulated depreciation) spread equally over the remaining useful life of these assets (23 years considering useful life of 35 years). This methodology is in line with the GERC (MYT) Regulations, 2016 and the directives of the Commission. 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 provisio to Regulation 39(b) of the GERC (MYT) Regulations, 2016. However, the Petitioner inadvertently considered Opening GFA as on 01.04.2019 as per Balance Sheet which is adjusted as per the requirement of IndAS. The Commission accordingly taken the Opening GFA as on 01.04.2018 as the Closing GFA approved in this Order at Table 4.30 and considered the additions as proposed by PGVCL to arrive at the Closing GFA for 2018-19 which in turn is considered as the Opening GFA as on 01.04.2019. The additions during 2019-20 and 2020-21 are also considered as projected by PGVCL. Accordingly, the Commission has approved the Depreciation as given in the Table below:

Table 5-66: Depreciation approved in the Mid-Term Review

(Rs. Crore)

Sr. No.	Particulars	2018-19	2019-20	2020-21
1	Gross Block in Beginning of the year	14864.75	16877.44	18661.54
2	Additions during the Year (Net)	2012.69	1784.10	1850.68
3	Closing GFA	16877.44	18661.54	20512.22
4	Avg. GFA	15871.10	17769.49	19586.88
5	Avg. Rate of Depriciation		4.01%	4.08%
6	**Depriciation For the year**		**712.43**	**799.62**

The Commission approves the Depreciation at Rs. 712.43 Crore for FY 2019-20 and Rs. 799.62 Crore for FY 2020-21 in the Mid-Term Review.

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. 465.85 Crore for FY 2019-20 and Rs. 508.99 Crore for FY 2020-21 in the Mid-Term Review petition. The interest charges approved for these years in the MYT Order dated 31st March, 2017 and the revised projections submitted in the Mid-Term Review are given in the Table below

Table 5-67: Interest & Guarantee Charges projected in the Mid-Term Review

(Rs. Crore)

Sr. No.	Particulars	2019-20		2020-21	
		Approved in MYT Order	Projected in MTR	Approved in MYT Order	Projected in MTR
1	Opening Loans	3169.84	3104.83	3127.04	3419.53
2	Additions during the Year	902.58	1,027.13	905.31	1,069.70
3	Repayment during the Year	945.39	712.43	1025.84	799.62
4	Closing Loans	3127.04	3419.53	3006.51	3689.61
5	**Average Loans**	**3148.44**	**3262.18**	**3066.71**	**3554.57**
6	Weighted Average Rate of Interest	8.09%	9.41%	8.09%	9.41%
7	Interest on Loans	254.71	306.97	248.10	334.48
8	Interest in Security Deposit	158.20	156.26	174.02	171.89
9	Guarantee Charges	7.14	2.62	7.14	2.62
10	**Total Interest & Financial Charges**	**420.05**	**465.85**	**429.27**	**508.99**

Petitioner's submission

PGVCL has submitted that it has considered the Closing Balance of loans for FY 2017-18 as the Opening Balance of FY 2018-19. The normative loan addition in FY 2018-19 to FY 2020-21 is computed as per the Capex funding plan. Repayment of loan 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 being 9.41%. The interest on security deposit has been considered at 7.75% prevailing RBI bank rate Security Deposit is projected based on year on year growth rate of 10% over the actuals for FY 2017-18 for the remaining control period. Other finance charges comprising guarantee and bank charges are proposed same as actuals of FY 2017-18.

Commission's Analysis

The Opening Balance of loans for FY 2018-19 is taken as per actual normative Closing Balance for FY 2017-18. The Commission has approved the capitalisation and funding of capital expenditure in Table 5.61 above. The Commission has considered the weighted average rate of interest of 9.69% based on the actual loan portfolio submitted by PGVCL vide e-mail dated 24th January, 2019 for FY 2017-18, as per the GERC (MYT) Regulations, 2016.

In respect of Interest on Security Deposit, PGVCL has considered the bank rate of 7.75%. The bank rate was 6.25% as on 07.02.2019 and the Commission applied this rate on the average balance of security deposit to arrive at the interest on security deposit. The growth in deposit is considered at 10.00% p.a. as proposed by PGVCL. The repayment of loan is considered equivalent to depreciation approved in Table 5.66 above in accordance with the GERC (MYT) Regulations, 2016. The guarantee and other bank charges are considered at the level of actuals for FY 2017-18. 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 5-68: Approved Interest & Guarantee Charges in the Mid-Term Review

(Rs. Crore)

Sr. No.	Particulars	2018-19	2019-20	2020-21
1	Opening Loans	2727.24	3104.83	3419.53
2	Additions during the year	999.02	1027.13	1069.70
3	Repayments during the year	621.43	712.43	799.62
4	Closing Loans	3104.83	3419.53	3689.61
5	Average Loans	2916.04	3262.18	3554.57
6	Rate of Interest	9.69%	9.69%	9.69%
7	**Interest Charges**	**282.46**	**315.99**	**344.31**
8	Opening Security Deposit	1745.68	1920.25	2112.27
9	Additions during the year	174.57	192.02	211.23
10	Closing Security Deposit	1920.25	2112.27	2,323.50
11	Average Security Deposit	1832.96	2016.26	2217.89
12	Rate of Interest on Security Deposit		6.25%	6.25%
13	**Interest on Security Deposit**		**126.02**	**138.62**
14	**Guarantee and Other Charges**		**2.62**	**2.62**
15	**Interest and Guarantee Charges (7+13+14)**		**444.62**	**485.55**

The Commission approves the Interest and Finance Charges at Rs. 444.62 Crore for FY 2019-20 and Rs. 485.55 Crore for FY 2020-21 in the Mid-Term Review.

5.12.4 Interest on Working Capital

PGVCL has not claimed any interest on working capital as detailed in the Table below:

Table 5-69: Interest on Working Capital projected in the Mid-Term Review

(Rs. Crore)

Sr. No.	Particulars	2019-20		2020-21	
		Approved in MYT Order	Projected in MTR	Approved in MYT Order	Projected in MTR
1	O & M expenses	49.94	99.06	52.80	111.85
2	Maintenance Spares	171.95	141.16	187.23	159.00
3	Receivables	1226.02	1404.08	1300.70	1500.64
4	Less : Security Deposit	2041.30	2016.26	2245.43	2217.89
5	**Total Working Capital**	**(593.39)**	**(371.96)**	**(704.70)**	**(446.40)**

Sr. No.	Particulars	2019-20		2020-21	
		Approved in MYT Order	Projected in MTR	Approved in MYT Order	Projected in MTR
6	Rate of Interest on Working Capital	11.70%	10.65%	11.70%	10.65%
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 5-70: Interest on Working Capital Approved in the Mid-Term Review

(Rs. Crore)

Sl. No.	Particulars	2019-20		2020-21	
		Approved in MYT Order	Approved in MTR	Approved in MYT Order	Approved in MTR
1	O&M expenses	49.94	91.64	52.80	96.88
2	Maintenance Spares	171.95	168.77	187.23	186.62
3	Receivables	1226.02	1399.14	1300.70	1500.64
4	Less: Amount held as Security Deposit from Consumers	2041.30	2016.26	2245.43	2217.89
5	Total Working Capital	**(593.39)**	**(356.71)**	**(704.70)**	**(433.75)**
6	Rate of Interest on Working Capital	11.70%	10.65%	11.70%	10.65%
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. 2.15 Crore for the FY 2019-20 and 2020-21 in the Mid-Term Review petition. The provision approved for these years in the MYT order dated 31st March, 2017 and the revised provision submitted in the Mid-Term Review are given in the Table below:

Table 5-71: Provision for Bad and Doubtful debts projected for the FY 2019-20 and FY 2020-21

(Rs. Crore)

Sr. No	Particulars	2019-20		2020-21	
		Approved in MYT Order	Projected in MTR	Approved in MYT Order	Projected in MTR
1	Provision for Bad Debts	-	2.15	-	2.15

Petitioner's Submission

PGVCL has submitted that it has considered the Provision for bad and doubtful debts for the remaining control period FY 2019-20 and FY 2020-21 as actuals of FY 2017-18. 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. 2.15 Crore as per the audited annual accounts for FY 2017-18.

The Commission approves the provision for bad and doubtful debts written off at the level of actual bad debts written off in FY 2017-18 for FY 2019-20 and FY 2020-21 in the Mid-Term Review. However, actual bad debts written off shall be allowed by the Commission after prudence check at the time of truing up for FY 2019-20 and FY 2020-21.

The approved provision for bad and doubtful debts in the Mid-Term Review is given in the Table below:

Table 5-72: Provision for Bad and Doubtful Debts Written off approved in the Mid-term Review

(Rs. Crore)

Sl. No.	Particulars	2019-20	2020-21
1	Bad and Doubtful Debts Written off	2.15	2.15

5.12.6 Return on Equity

PGVCL has projected the Return on Equity at Rs. 577.65 Crore for FY 2019-20 and Rs. 640.56 Crore for FY 2020-21 @ 14% in the Mid-Term Review petition. The Return on Equity approved for these years in the MYT Order dated 31st March, 2017 and the revised projection submitted in the Mid-Term Review are given in the Table below:

Table 5-73: Return on Equity projected for the Mid-Term Review

(Rs. Crore)

Sl. No.	Particulars	2019-20		2020-21	
		Approved in MYT Order	Projected in MTR	Approved in MYT Order	Projected in MTR
1	Opening Equity Capital	4087.26	3905.99	4474.08	4346.19
2	Equity Additions during the Year	386.82	440.20	387.99	458.44
3	Closing Equity	4474.08	4346.19	4862.07	4804.64
4	Average Equity	4280.67	4126.09	4668.07	4575.41
5	Rate of Return on the Equity	14%	14%	14%	14%
6	**Return on Equity**	**599.29**	**577.65**	**653.53**	**640.56**

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 5.61 above as given in the Table below:

Table 5-74: Approved Return on Equity for the Mid-Term Review

(Rs. Crore)

Sr. No.	Particulars	2018-19	2019-20	2020-21
1	Opening Equity	3477.84	3905.99	4346.19
2	Additions during the year	428.15	440.20	458.44
3	Closing Equity	3905.99	4346.19	4804.64
4	Average Equity	3691.92	4126.09	4575.41
5	Rate of Return on Equity		14%	14%
6	**Return on Equity**		**577.65**	**640.56**

The Commission approves Return on Equity at Rs. 577.65 Crore for FY 2019-20 and Rs. 640.56 Crore for FY 2020-21 in the Mid-Term Review.

5.12.7 Income Tax

PGVCL has considered Income Tax at Rs. 28.71 Crore for FY 2019-20 and Rs. 28.71 Crore for FY 2020-21 in the Mid-Term Review against Rs. 18.96 Crore for each year approved in the MYT Order dated 31st March, 2017 as detailed in the Table below:

Table 5-75: Income Tax projected in the Mid-Term Review

(Rs. Crore)

Sl. No.	Particulars	2019-20		2020-21	
		Approved in MYT Order	Projected in MTR	Approved in MYT Order	Projected in MTR
1	Income Tax	18.96	28.71	18.96	28.71

Petitioner's Submission

PGVCL has submitted that it has considered Income Tax as per the actual Income Tax paid in FY 2017-18 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 2017-18 and the Income Tax for FY 2017-18 is Rs. 28.71 Crore.

The Commission, accordingly approves the Income Tax as per the actual Income Tax for FY 2017-18 in the Mid-Term Review for these years as given in the Table below:

Table 5-76: Income Tax approved in the Mid-Term Review

(Rs. Crore)

Sl. No.	Particulars	FY 2019-20	FY 2020-21
1	Income Tax	28.71	28.71

5.12.8 Non-Tariff Income

PGVCL has projected the Non-Tariff Income at Rs. 258.58 Crore for FY 2019-20 and FY 2020-21 in the Mid-Term Review against Rs. 234.07 Crore approved for these years of the control period in the MYT Order dated 31st March, 2017 as detailed in the Table below:

Table 5-77: Non-Tariff Income projected in the Mid-Term Review

(Rs. Crore)

Sr. No.	Particulars	2019-20		2020-21	
		Approved in MYT Order	Projected in MTR	Approved in MYT Order	Projected in MTR
1	Total Non-Tariff Income	234.07	258.58	234.07	258.58

Petitioner's Submission

PGVCL submitted that it has considered Non-Tariff Income for the remaining control period i.e. FY 2019-20 and FY 2020-21 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 2017-18.

Commission's Analysis

The Commission has approved the actual Non-Tariff Income of Rs. 258.58 Crore at Table 4.50 of this Order in the True up of FY 2017-18 which excludes the Delayed Payment Charges. Accordingly, the Commission approves Non-Tariff Income in the Mid-Term Review as given in the Table below:

Table 5-78: Non-Tariff income approved for the FY 2019-20 and FY 2020-21

(Rs. Crore)

Sr. No.	Particulars	2019-20	2020-21
1	Non-Tariff Income	258.58	258.58

5.12.9 DSM Expense

Petitioner's Submission

PGVCL has considered DSM expense as Rs. 2.50 Crore for FY 2019-20 and 2020-21.

Commission's Analysis

The Commission approves DSM expense as Rs. 2.50 Crore for FY 2019-20 and 2020-21 as projected by the Petitioner as shown in the Table below:

Table 5-79: DSM Expense approved for the FY 2019-20 and FY 2020-21

(Rs. Crore)

Sr. No.	Particulars	2019-20	2020-21
1	DSM Expense	2.50	2.50

5.13 Aggregate revenue Requirement (ARR)

As discussed in the above paragraphs, the approved revised Annual Revenue Requirement for FY 2019-20 and FY 2020-21 is summarised as given in the Table below:

Table 5-80: Aggregate Revenue Requirement for the FY 2019-20 and FY 2020-21

(Rs. Crore)

Sr. No.	Particulars	Approved for Mid Term Review	
		2019-20	2020-21
1	Cost of Power Purchase	14573.28	15435.93
2	Operations & Maintenance Expenses	1099.71	1162.62
2.1	Employee Cost	1004.74	1062.21
2.2	Repairs & Maintenance	165.09	174.53
2.3	Administration & General Expenses	177.35	187.50
2.4	Other Debits	0.00	0.00
2.5	Extraordinary Items	0.00	0.00
2.6	Net Prior Period Expenses / (Income)	0.00	0.00
2.7	Other Expenses Capitalised	(247.47)	(261.63)
3	Depreciation	712.43	799.62
4	Interest & Finance Charges	444.62	485.55
5	Interest on Working Capital	0.00	0.00
6	Bad Debts Written Off	2.15	2.15
7	**Sub-Total [1 to 6]**	**16832.19**	**17885.86**
8	Return on Equity	577.65	640.56
9	Provision for Tax / Tax Paid	28.71	28.71
10	**Total Expenditure (7 to 9)**	**17438.55**	**18555.13**
11	Less: Non-Tariff Income	258.58	258.58
12	Add: DSM Expenses	2.50	2.50
13	**Aggregate Revenue Requirement (10-11+12)**	**17182.47**	**18299.05**

The Commission approves the revised ARR at Rs. 17182.47 Crore for FY 2019-20 and Rs. 18299.05 Crore for FY 2020-21 in the Mid-Term Review.

6 ARR and Gap for FY 2019-20

6.1 Revenue from existing Tariff

PGVCL has estimated the category-wise revenue based on existing tariff at Rs. 11345.75 Crore in respect of category-wise sale projected in term of MUs for FY 2019-20, as detailed in the Table below:

Table 6-1: Sales (MUs) and Revenue (Cr.) from existing tariff projected for FY 2019-20

Sr. No.	Particulars	MUs	Amount in Rs. Crore
A	**LT Consumers**		
1	RGP	3995.53	1456.04
2	GLP	135.79	55.71
3	Non-RGP & LTMD	3743.75	1982.52
4	Public Water Works	875.55	300.76
5	Agriculture-Metered	3600.83	391.54
6	Agriculture-Unmetered	4570.16	649.26
7	Street Light	81.00	32.98
	LT Total (A)	**17002.60**	**4868.81**
B	**HT Consumers**		
1	Industrial HT	12665.56	6476.92
2	Railway Traction	0.00	0.00
	HT Total (B)	**12665.56**	**6476.92**
	Grand Total (A + B)	**29668.17**	**11345.75**

Petitioner's submission

PGVCL submitted that it has considered sale of 29668.17 MUs to different categories of consumers as per MTR petition as shown in the Table above and the existing retail tariff to work out the revenue from sale of power at Rs. 11345.75 Crore for FY 2019-20.

Commission's Analysis

The Commission observed that PGVCL has considered the category-wise sales for FY 2019-20, as approved in Table 5.19 of this Order. Taking into consideration the same and the exiting tariff for each category, the Commission has computed the revenue from sale of power for FY 2019-20 as detailed in the Table below:

Table 6-2: Approved revenue from existing tariff for FY 2019-20

(Rs. Crore)

Sr. No.	Particulars	MUs	Amount
A	**LT Consumers**		
1	RGP	3995.53	1456.04

Sr. No.	Particulars	MUs	Amount
2	GLP	135.79	55.71
3	Non-RGP & LTMD	3743.75	1982.52
4	Public Water Works	875.55	300.76
5	Agriculture-Metered	3600.83	391.54
6	Agriculture-Unmetered	4570.16	649.26
7	Street Light	81.00	32.98
	LT Total (A)	**17002.60**	**4868.81**
B	**HT Consumers**		
1	Industrial HT	12,665.56	6,476.92
2	Railway Traction	0.00	0.00
	HT Total (B)	**12665.56**	**6476.92**
	Grand Total (A + B)	**29668.17**	**11345.75**

6.2 Revenue from FPPPA charges

PGVCL has estimated revenue from FPPA charges for FY 2019-20, as detailed in the Table below:

Table 6-3: Revenue from FPPPA Charges for the FY 2019-20

(Rs. Crore)

Particulars	Amount
Rate of FPPPA (Rs/.kWh)	1.63
Sales (MUs)	29668.17
FPPPA charges in Rs. Crore	4835.91

Petitioner's submission

PGVCL has submitted that in the True up Order for FY 2016-17 dated 31st March, 2018, the Commission has considered the base power purchase cost at Rs. 4.22/unit and base FPPPA at Rs. 1.49/unit. As per the approved FPPPA formula, any increase in power purchase cost during the year over and above base power purchase cost of Rs. 4.22/unit is to be recovered through FPPPA over and above base FPPPA of Rs. 1.49/unit on quarterly basis. As per projected ARR for FY 2019-20, the weighted average power purchase cost is worked out to Rs. 4.34/unit as against base power purchase cost of Rs. 4.22/unit. Thus, the incremental power purchase cost of Rs. 0.12/unit for FY 2019-20 (i.e. Rs. 4.34 - 4.22) will be recovered through FPPPA over and above base FPPPA of Rs. 1.49/unit. Therefore, estimated revenue from FPPPA for FY 2019-20 is considered at Rs. 1.63/unit for FY 2019-20 (i.e. grossing up by approved losses), as shown below:

Table 6-4: FPPPA Charges for the FY 2019-20

Sr. No.	Particulars	2018-19	2019-20
1	Fixed Cost	13520	11900

Sr. No.	Particulars	2018-19	2019-20
2	Variable Cost	19523	24734
3	GETCO Cost	3749	4115
4	GUVNL Cost	368	399
5	PGCIL Charge	1670	2077
6	SLDC Charge	8	16
7	**Total Power Purchase Cost**	**38,838**	**43,240**
8	**Total Energy Requirements**	**91973**	99680
9	**Power purchase Cost (Rs./kWh)**	**4.22**	**4.34**
10	Increase in Power Purchase Cost		0.12
11	Additional FPPPA Charges (Grossed up by Loss @17.36%)		0.14
12	Existing FPPPA Charges (Rs./kWh)		1.49
13	**Revised FPPPA Charges (Rs./kWh)**		**1.63**

Commission's Analysis

The Commission allows FPPPA charges FY 2019-20 at 1.61 Rs. per kWh considering the Fixed Cost and variable Cost as approved at Table 5.46 and 5.47 of this Order as shown in Table below:

Table 6-5: FPPPA Charges for the FY 2019-20

Sr. No.	Particulars	As per MYT Order for 2018-19	Projected in MTR	Approved in MTR
1	Fixed Cost in Rs. Crore	13520	11900	11900
2	Variable Cost in Rs. Crore	19523	24734	24572
3	GETCO Cost in Rs. Crore	3749	4115	4115
4	GUVNL Cost in Rs. Crore	368	399	399
5	PGCIL Charge in Rs. Crore	1670	2077	2077
6	SLDC Charge in Rs. Crore	8	16	29
7	**Total Power Purchase Cost** in Rs. Crore	**38838**	**43240**	**43092**
8	**Total Energy Requirements in MUs**	**91973**	**99680**	**99680**
9	**Power purchase Cost (Rs./kWh)**	**4.22**	**4.34**	**4.32**
10	Increase in Power Purchase Cost in Paise/Unit		0.12	0.10
11	Additional FPPPA Charges (Grossed up by Loss @17.36%) in Paise/Unit		0.14	0.12
12	Existing FPPPA Charges (Rs./kWh)		1.49	1.49
13	**Revised FPPPA Charges (Rs./kWh)**		1.63	1.61

Accordingly, the Commission allows FPPPA charges and revenue therefrom on the approved sales of 29668.17 MUs for FY 2019-20 at 1.61 Rs./kWh as shown in the Table below:

Table 6-6: Approved Revenue from FPPPA Charges for the FY 2019-20

(Rs. Crore)

Particulars		Amount
Rate of Base FPPPA considered (Rs/.kWh)	A	1.61
Sales (MUs)	B	29668.17
Base FPPPA Charges (Rs. Crore)	C= A * B	4776.57

6.3 Other consumer related income

PGVCL has estimated the other consumer related income at Rs. 215.43 Crore for FY 2019-20, as detailed in the Table below:

Table 6-7: Other Consumer related Income for FY 2019-20

(Rs. Crore)

Particulars	2019-20
Other Income Consumer Related	215.43

Petitioner's submission

PGVCL 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 excluding meter rent.

Commission's Analysis

The Commission has observed that PGVCL has projected the other consumer related income for FY 2019-20 as actuals of FY 2017-18 excluding the meter rent.

The Commission, accordingly, approves the other consumer related income at Rs. 215.43 Crore for FY 2019-20.

Table 6-8: Approved other consumer related income for FY 2019-20

(Rs. Crore)

Particulars	2019-20
Other Income Consumer Related	215.43

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 i.e. Rs 1100 Crores. The share of Agricultural Subsidy for FY 2019-20 is considered on pro-rata basis of agriculture consumption.

Table 6-9: Agriculture Subsidy projected for FY 2019-20

(Rs. Crore)

Particulars	2019-20
Share of Agriculture Subsidy	451.92

Commission's Analysis

The Commission considered the Agriculture Subsidy as claimed by the Petitioner.

The Commission, accordingly, approves the Agriculture Subsidy at Rs. 451.92 Crore for FY 2019-20:

Table 6-10: Approved agricultural subsidy for FY 2019-20

(Rs. Crore)

Particulars	2019-20
Share of Agriculture Subsidy	451.92

The Commission, accordingly, approves unmetered Agricultural Subsidy as Rs 451.92 Crore for FY 2019-20.

6.5 Total expected revenue for FY 2019-20

Petitioner's submission

The total expected revenue for PGVCL comprises of revenue from sale of power at existing tariff, FPPPA charges, other consumer related income and Agriculture Subsidy. Total revenue for FY 2019-20 is as shown in the Table below:

Table 6-11: Total Revenue projected for FY 2019-20

(Rs. Crore)

Sr. No.	Particulars	Amount
1	Revenue with Existing Tariff	11345.75
2	Base FPPPA Charges @ 163 paisa/kWh	4835.91
3	Other Income (Consumer related)	215.43
4	Agriculture Subsidy	451.92
5	**Total Revenue including subsidy (1 to 4)**	**16849.02**

Commission's Analysis

The total revenue as estimated by the Commission for FY 2019-20 is shown in the Table below:

Table 6-12: Approved Total Revenue for FY 2019-20

(Rs. Crore)

Sr. No.	Particulars	Amount
1	Revenue with Existing Tariff	11345.75
2	Base FPPPA Charges @ 161 paisa/kWh	4776.57
3	Other Income (Consumer related)	215.43
4	Agriculture Subsidy	451.92
5	**Total Revenue including subsidy (1 to 4)**	**16789.68**

6.6 ARR for the FY 2019-20

The Table below shows approved Aggregate Revenue Requirement including power purchase cost of PGVCL for the FY 2019-20.

Table 6-13: Approved Mid-Term Review ARR for FY 2019-20

(Rs. Crore)

Sr. No.	Particulars	Amount
1	Cost of Power Purchase	14573.28
2	Operations & Maintenance Expenses	1099.71
2.1	Employee Cost	1004.74
2.2	Repair & Maintenance	165.09
2.3	Administration & General Charges	177.35
2.4	Other Debits	0.00
2.5	Extraordinary Items	0.00
2.6	Net Prior Period Expenses / (Income)	0.00
2.7	Other Expenses Capitalised	(247.47)
3	Depreciation	712.43
4	Interest & Guarantee Charges	444.62
5	Interest on Working Capital	0.00
6	Provision for Bad Debts	2.15
7	**Sub-Total [1 to 6]**	**16832.19**
8	Return on Equity	577.65
9	Provision for Tax / Tax Paid	28.71
10	**Total Expenditure (7 to 9)**	**17438.55**
11	Less: Non-Tariff Income	258.58
12	Add: DSM Expenses	2.50
13	**Aggregate Revenue Requirement (10-11+12)**	**17182.47**

6.7 Estimated Revenue Surplus/ (Gaps) for FY 2019-20 for PGVCL

Based on the above, the estimated revenue gap for FY 2019-20 at existing tariff is as outlined in the Table below:

Table 6-14: Estimated Revenue Gap for FY 2019-20 at Existing Tariff for PGVCL

(Rs. Crore)

Sr. No.	Particulars	Projected by PGVCL	Approved by the Commission
1	**Aggregate revenue requirement**	17262.71	17182.47
2	Revenue (Gap)/ Surplus from True up of FY 2017-18	(221.67)	(295.40)
3	**Total aggregate revenue requirement (1-2)**	**17484.38**	**17477.87**
4	Revenue with existing tariff	11345.75	11345.75
5	FPPPA charges	4835.91	4776.57
6	Other income (Consumer related)	215.43	215.43
7	Agriculture Subsidy	451.92	451.92
8	**Total revenue including subsidy (4+5+6+7)**	**16849.02**	**16789.67**
9	**(Gap)/Surplus (8-3)**	**(635.36)**	**(688.19)**

6.8 Consolidated Revenue (Gap)/Surplus of the State Owned DISCOMs

Since the uniform tariff for State owned DISCOMs has been envisaged in the MYT Order dated 6th September, 2011 as well as MYT Order dated 31st March, 2017, it is necessary to consider the consolidated (gap)/surplus of FY 2019-20 for all the State-owned DISCOMs, while determining the tariff for FY 2019-20. The consolidated gap computed for FY 2019-20 is shown in the Table below:

Table 6-15: Consolidated (Gap)/Surplus computed for FY 2019-20

(Rs. Crore)

Particulars	DGVCL	MGVCL	PGVCL	UGVCL	Total
Trued Up (Gap)/ Surplus of FY 2017-18	409.64	116.83	(295.40)	(43.20)	187.87
Total (Gap)/ Surplus for FY 2019-20 including (Gap)/ Surplus of Trued Up Year	175.01	(13.46)	(688.19)	(322.53)	(849.17)

PGVCL has stated that there is a pending Ag. Subsidy of Rs. 1665 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 outstanding subsidy amount.

Accordingly, after consideration of the amount of outstanding subsidy, the resultant surplus works out to Rs. 815.83 Crore (1665-849.17) for FY 2019-20.

It is observed that there is a surplus of Rs. 187.87 Crore against the true up of FY 2017-18, which is due to disallowance of Rs. 440.40 Crore claim of DGVCL on account of non-recovery of dues pending before various adjudicating authorities on the amount receivable from M/s Essar Steel India Limited. Therefore, this surplus is not allowed to be passed through at this stage.

Further, the remaining surplus is on account of Mid-Term Review sought by the Petitioners and approval of the Commission based on the various parameters and Regulations of the third MYT period. The Commission feels that it may not be reasonable that such surplus to be passed through in the tariff as in response of representations of certain category of consumers, the Commission has made some changes in slab rate, optional tariff and reduction in Lift Irrigation tariff. Similarly, there are certain changes likely in the energy sales of high value consumers due to Open Access, uncertainty in power market, impact of revision in employee cost of DISCOMs on account of 7th Pay Commission etc. Hence, the Commission may consider such variations in the ARR of respective year true up.

7 Compliance of Directives

7.1 Compliance to earlier directives

The Commission had given various directives to PGVCL in the Order dated 31st March 2018, compliance of which is mentioned below:

Directive 1: Category wise Cost to Serve Report:

The Commission has directed the Discom to furnish the cost to serve report every year along with tariff petition:

Compliance:

PGVCL is in process of preparation of Cost to Serve Report for FY 2017-18 and shall submit at the earliest.

Commission's comments:

The Petitioner has submitted Cost to Serve report on 1st January, 2019. The Commission directs the Petitioner to ensure that the cost to serve report is submitted along with the tariff petition.

Directive 2: Meters on Distribution Transformers

The Commission has directed the PGVCL to install meters on balance transformers and submit the Quarterly progress report to the Commission.

Compliance:

Status of Meters installed on Distribution Transformer as on September, 2018 is as under.

Sr. No.	Particulars	Nos. as on 30.09.2018	Meters installed as on 30.09.2018	%
1	Other Than Agriculture	111957	111957	100
2	Agriculture	690237	690237	100
3	Total	802194	802194	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.

Commission's comments:

PGVCL has completed 100% work of installation of energy meters on Distribution Transformer. They are 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.

Directive 3: Losses on Jyoti Gram Yojana feeders

DISCOMs are directed to identify the feeders with more than 50 % loss level and 5% loss reduction should be targeted for such feeders.

Compliance:

Distribution loss of JGY Feeder:

Sr. No.	Year	Unit sent out [MUs]	Unit sold out [MUs]	% Loss
1	2012-13	4311.10	2333.23	45.88
2	2013-14	4276.31	2544.09	40.51
3	2014-15	4703.27	2902.94	38.28
4	2015-16	5028.06	3221.70	35.90
5	2016-17	5216.62	3511.92	32.68
6	2017-18	5483.63	3772.45	31.21

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 have been carried out by the Company:

Sr. No.	Activity	UOM	2016-17	2017 -18	2018 – 19 (Upto Sep-18)
1	Deaugmentation of Transformer	Nos.	845	310	126
2	DTC meter installation	Nos.	78088	14628	1111
3	F meter Replaced - 1 Phase	Nos.	79103	64059	35329
4	F meter Replaced - 3 Phase	Nos.	25032	5687	5871
5	Pilfer proofing of connections - 1 Phase	Nos.	476946	302449	47650
6	Pilfer proofing of connections - 3 Phase	Nos.	87929	23827	6957
7	Replacement of service line having Joint	Nos.	125735	76760	33841
8	Armour service Provided	Nos.	2532	25205	3068
9	AB Cable Provided	Kms	2243	2904	506
10	5 KVA DTC Installed	Nos.	1630	988	313
11	Ag Crossings Removed	Nos.	1891	1268	868
12	Connections Checked	Nos.	1050097	465688	230787
13	Connection Detected	Nos.	176603	72544	36771
14	Locked Premises Verification	Nos.	214615	151058	64635
15	Zero Consumption Verification	Nos.	271734	274264	149181
16	Cross verification of meter reading	Nos.	281539	223692	121230
17	Disconnected conn. Verification	Nos.	84231	103815	51851
18	Unconnected conn. Verification	Nos.	3644	3026	1600

Sr. No.	Activity	UOM	2016-17	2017 -18	2018 – 19 (Upto Sep-18)
19	Verification of X status connection	Nos.	155303	168701	84349
20	Verification of Y status connection	Nos.	32372	27598	15489
21	Verification of RGP connections < 50 units	Nos.	274967	252762	128081
22	Verification of NRGP connections < 50 units	Nos.	68099	57280	27741
23	Release of New Connections (All category)through E-Urja	Nos.	188853	82544	29096
24	Maintenance of HT Line	Kms	95611	24657	10865
25	Maintenance of LT Line	Kms	47815	15265	7488
26	Maintenance of T/C Centers	Nos.	73714	22031	9812
27	Augmentation of Transformer for Ag. Load extension	Nos.	552	206	75

As directed by the Commission, PGVCL selected 582 nos. Jyotigram feeders having more than 50% Distribution Loss for focused action on such feeders. Aggregate loss of all such feeders was 48.32% as on March'17 which is now reduced to 45.92% as on March'18.

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:

Compliance submitted by the Petitioner is noted. The Petitioner is directed to continue the efforts for reduction in the losses of the selected JGY feeders and submit quarterly report about actions taken in this regard to the Commission.

Directive 4: Energy Audit and Segregation of HT & LT losses

The Commission has directed PGVCL to submit a report about actions taken to reduce technical and commercial losses on HT system and LT system including different feeders, transformers (DTC) on monthly basis to the Commission so as to monitor the losses.

Compliance:

PGVCL submitted that the Company has achieved 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 level goes down. 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.

Since long, as per the practice prevailing, LT connections in the villages and Ag fields were released extending LT line from Distribution Transformers considering the operational and maintenance aspects and availability of infrastructure equipment and available capacity transformers. Later, with the availability of low capacity Dist. Transformers it became feasible to extend 11 KV line upto the consumer premises or utilization point which has helped in elimination or reduction of LT line in the network. Accordingly, distribution utilities have adopted utilization of small capacity Dist. Transformers for releasing Ag connections and individual transformers were utilized for releasing Ag connections.

New connections for Ag category were released adopting this HVDS method since 2008 and at the same time, existing Ag Dom feeders having higher capacity of Distribution Transformers were converted to individual dist. Transformers for existing Ag consumers in phased manner. Accordingly, so far 459 Nos. of 11 KV feeders of Ag category have been converted to HVDS feeders and thus existing 8113 Km LT line is converted to HT Line.

The status of work carried out of converting existing 11 KV Ag feeder to HVDS during the last 5 years is as under:

Year of completion	Total No of HVDS Feeders	LT to HT Conversion (Km)
2013-14	77	1069.35
2014-15	94	1985.47
2015-16	127	2060.84
2016-17	91	1844.02
2017-18	70	1153.80
Total	**459**	**8113.48**

Due to huge financial investment, the work of converting LT to HT line and using small capacity Dist. Transformers has been implemented in phased manner. At the same time, since last 5 years, more than 4 Lakhs numbers of new Ag connections have been released using HVDS system which has helped to improve HT – LT ratio under PGVCL. The year-wise HT LT ratio for PGVCL from the year 2010 to 2018 is shown in the table which indicates that there has been considerable improvement in HT-LT ratio compared to the year 2010, from 0:81 as on Sept-2010 to 1:58 as on Mar-2018.

Year	HT Line (Km)	LT Line (Km)	Ratio
Mar-10	97881	120939	0.81
Mar-11	100378	123358	0.81
Mar-12	108288	127603	0.85
Mar-13	118144	124629	0.95
Mar-14	137951	125948	1.10
Mar-15	143551	128763	1.11

Year	HT Line (Km)	LT Line (Km)	Ratio
Mar-16	152032	131357	1.16
Mar-17	173150	123510	1.40
Mar-18	192304	121782	1.58

Major activities carried out for reduction of Technical loss are enumerated hereunder:

Sr. No.	Activity	UOM	2017 -18	2018-19 (Upto Sep.'18)
1	Deaugmentation of Transformer	Nos.	2532	366
2	Maintenance of HT Line	Kms	94552	50404
3	Maintenance of LT Line	Kms	45787	26148
4	Maintenance of T/C Centers	Nos.	65153	41531
5	Augmentation of Transformer for Ag. Load extension	Nos.	2358	595
6	Feeder Bifurcation	Nos.	176	83
7	Conductor Replacement	Kms	13258	4690
8	Providing of 5 KVA T/C	Nos.	1310	391

Commission's comments:

The Commission noted the compliance submitted by the Petitioner and directed to continue their efforts to avoid any slippages in future.

Directive 5: Replacement of Defective Meters

The Commission directed to ensure correct functioning of the meters so that the energy consumption is reflected correctly and accordingly correct revenue is earned from the consumers against cost of supply

Compliance:

Replacement and Status of defective meter is submitted to the Commission on quarterly basis by the Company. The company replaces meters regularly and, in fact, it is a continuous activity. Reports on faulty meters- stuck up, running slow, fast, creeping or improperly recording or not functioning as per requirement as observed during inspection, checking, testing, meter reading etc are generated on monthly basis and actions for replacement are taken regularly. This being a continuous process, defective meters as observed/reported during the month are added in the pending figure of previous month. These defective old meters, which include electromechanical as well as static meters, are replaced regularly. Details of the meters replaced during last five years and planning for next two years is given here under:

Meters Replaced:

Sr. No.	Year	Description	No. of Meters Replaced
1	2015- 16	Defective replaced	123830
		Other than defective replaced	276492
		Total	400322
2	2016-17	Defective replaced	100438
		Other than defective replaced	305960
		Total	406398
3	2017 -18	Defective replaced	133627
		Other than defective replaced	450413
		Total	584040
4	2018-19 (Upto September'18)	Defective replaced	70303
		Other than defective replaced	224622
		Total	294925

Since, this being a continuous activity, it is planned that consumer meters having present faulty status shall be replaced within a year's time and the planning for next two years is as under.

Planning for Meter Replacement:

Sr. No.	Year	Planning for replacement
1	2018-19	600000
2	2019-20	540000

Commission's comments:

The Commission noted the compliance submitted by the Petitioner and directed to continue efforts to replace the defective energy meters as planned. Utilities may also conduct a study to understand the nature of fault and take up the issue with the manufacturers of such meters for mitigation.

Directive 6: High Distribution Loss of PGVCL

PGVCL was directed submit the report of efforts made for loss reduction on monthly basis.

Compliance:

PGVCL is the largest Distribution Company supplying electricity to approximately 50 lakh different category of 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. 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 equipments, best practices implemented across India in other States, continuous monitoring of installation checking activity, etc., PGVCL has been able to achieve reduction of approximately 21% over 12 years of working, and present loss level at the end of March-2018 is 17.89%. Category wise comparison of distribution loss level as on March-2006 & March-2018 is as under:

Sr. No.	Category	% loss as on Mar-06	% loss as on Mar-18
1	Urban	29.90	13.56
2	JGY	64.89	31.21
3	Ag Dom	48.87	30.19
4	Industrial	11.45	2.58
5	GIDC	12.81	3.07
6	Overall	38.48	17.89

From the above Table, it can be observed that significant loss reduction is achieved in all category feeders including Jyotigram (JGY) feeders. Distribution loss of JGY category has been reduced from 65% to 31.21%, while in Urban category, losses are reduced from 30 % to 13.56%.

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 25% 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 is 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 Manager is held at various levels.

Year wise feeders selected and status of Distribution Losses of at the end of each year and at the end of March'18 is as under.

Year	Nos. of selected feeders	Reducing trend in Nos. of feeders compared to previous year	% loss at the beginning Jul-14	% loss at Mar15	% loss at Mar16	% loss at Mar17	% loss at Mar18	% reduction in losses in selected feeders
2014-15 (selection in Jul-14)	1283	1022	54.37	48.89	42.12	40.14	38.61	15.76% in 3.5 yrs
2015-16	1491	1297		44.47	40.67	36.51	34.83	9.64 % in 3 yrs
2016-17	1466	1388			44.50	39.01	37.20	7.30 % in 2 yrs
2017-18	1354	1209				42.15	37.44	4.71 % in 1 yrs

It can be seen that significant reduction in Distribution Loss is observed on such feeders. For, FY 2017-18, 1354 Nos. of feeders are selected.

For more specific action, feeders are selected based on Distribution Loss as well as increase compared to respective month of Last year Following criteria has been adopted for selection of such feeders:

a) Urban category feeders - above 25% loss

b) JGY category feeders - above 50% loss

c) Industrial / GIDC feeders - above 5% loss

Accordingly, 110 no. 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

Similarly, 127 no. 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

Similarly, 103 no. of feeders were identified during FY 2017-18. The result of loss reduction activities on these feeders is as under:

Feeders 2017-18	% loss as on Mar-17	% loss as on Mar-18
103	45.92	42.52

For FY 2018-19, 113 No. of feeders are selected.

Commission's comments:

The Commission appreciates loss reduction efforts. It is directed to continue the efforts in the same line.

Directive 7: Optimization of Power purchase Cost with varying demand at competitive rate.

The Commission has directed to plan out power purchase in advance on priority to optimise power purchase cost with the varying demand at competitive rate so as to maintain consistent and reliable supply in the State.

Compliance:

GUVNL has tied up adequate capacity on long term basis which can successfully meet the entire power demand including peak demand. However, availability of power from imported coal based projects has been highly varying during last 2 years specifically after Hon'ble Supreme Court's Order dated 11.4.2017.

As per the directive of the Commission and in order to ensure procurement of power at competitive rates and to optimize overall power purchase cost, GUVNL in consultation with SLDC, had invited bids well in advance in Jan-18 and tied up around 300 MW power for the period of March 2018 to May 2018 and also tied up 200-1025 MW for the period of September 2018 to December 2018 by inviting tender in July-18 through competitive bidding followed by reverse auction through DEEP Portal in accordance with Ministry of Power's Guidelines for Short term procurement of power.

In addition, GUVNL had invited bid for tie up of 500 MW power under Flexible Coal Utilization Scheme of Ministry of Power wherein supply is already commenced from Jan-18 which has enabled savings in coal transportation cost and ensured supply at competitive rates. GUVNL has also invited second bid for tie-up of 1000 MW power under flexible coal utilization scheme.

Further, considering the future requirement of power, GUVNL is contemplating to invite bids for capacity tie-up on long term basis for meeting the future power requirement without relying on short term arrangement.

Commission's comments:

The Commission noted the compliance of the Petitioner. It is further directed to sale surplus power in the market looking to the availability of significant amount of cheaper RE power in the State by optimizing grid operations in consultation with SLDC/GUVNL so as end consumer gets benefited.

Directive 8: Detailed study to work out cost of supply at EHV level

In order to promote supply at higher voltages the Discoms are directed to carry out a detailed study to work out cost of supply at EHV level, reduction in technical loss for supplying electricity at higher voltages, and submit it to the Commission on or before 30th September, 2018.

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.

Commission's comments:

DISCOMs are directed to ensure timely completion of the study and submit the report by 30th June, 2019.

Directive 9: Scheme for Installation of solar pump for agriculture consumers

In order to promote renewable energy, the Commission has directed to explore the possibilities for promotion of installation of solar pump for agriculture consumers thereby promoting de-centralised energy generation.

Compliance:

In order to achieve multiple objectives of addressing the energy requirement of farmers and to promote de-centralized renewable energy generation, the State Government decided to utilize solar resources available in the State for the benefit of the farmers and accordingly notified the Scheme namely Suryashakti Kisan Yojna (SKY) to be implemented on pilot basis.

Major objectives of the scheme are:

- To provide adequate and reliable day time power to farmers by installation of solar PV panels.
- To incentivize farmers by selling surplus solar power to DISCOM and to provide secondary source of income to farmers thereby encouraging farmers to efficient utilization of power and water.
- To help farmers to become self reliant for their power requirement.
- To create employment opportunities in rural area.
- To reduce financial burden of DISCOMs and Government by reducing the subsidized power to farmers.
- To promote source of renewable energy and meet solar renewable purchase obligation of DISCOMs.

As per the directive of the Commission, the scheme has been implemented on Pilot basis in the areas of all four DISCOMs.

Commission's comments:

Commission noted compliance of the Petitioner and directed to submit the outcome of the pilot project.

Directive 10: Initiate study for implementing Demand Response Measures

The Commission has directed DISCOM to initiate study for implementing Demand Response Measures and submit its action plan by 30th September, 2018.

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.

Commission's comments:

DISCOMs are directed to ensure timely completion of the study and submit the report by 30th June, 2019

7.2 Fresh directives

Directive 1:

Petitioner is directed to report the outcome of HVDS implementation along with the petition of next Tariff Order.

Directive 2:

Petitioner is directed to keep the FPPPA information available on their website for all the quarters of a year till the truing up exercise of that particular year is completed.

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, GUVNL cost

GETCO cost, PGCIL charges, SLDC charges for FY 2019-20 from various sources as given in the Table below:

Table 8-1: Base price of Power Purchase

(Rs. Crores)

Sr.No.	Particulars	FY 2019-20
1	Fixed Cost	11900
2	Variable Cost	24572
3	GETCO Cost	4115
4	GUVNL Cost	399
5	PGCIL Charge	2077
6	SLDC Charge	29
7	Total Power Purchase Cost	43092
8	Total Energy Requirement	99680
9	Power Purchase Cost (Rs./ kWh)	4.32

As mentioned above the base Power Purchase cost for the DISCOMs is **Rs. 4.32/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.

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

DISCOMs have submitted that in the True up Order dated 31st March, 2018, the Commission have considered the base power purchase cost at Rs. 4.22/unit and base FPPPA at Rs. 1.49/unit. As per approved FPPPA formula, any increase in power purchase cost of Rs. 4.22/unit is to be recovered through FPPPA over and above base FPPPA of Rs. 1.49/unit on quarterly basis. As per projected ARR for FY 2019-20, the weighted average power purchase cost worked out to Rs. 4.34/unit. Thus, the incremental power purchase cost of Rs. 0.12/unit for FY 2019-20 (i.e. 4.34-4.22) to be recovered, after grossing up by approved loss, through FPPPA over and above base

FPPPA of Rs. 1.49/unit. Accordingly, DISCOMs have proposed to shift base FPPPA from Rs. 1.49/unit to Rs. 1.63/unit.

The Commission has approved base power purchase cost for FY 2019-20 as Rs. 4.32/unit as stated above. Thus, there is an increase of Rs. 0.10/unit in the base power purchase cost of DISCOMs for FY 2019-20 over that of for FY 2018-19. The Commission finds it appropriate to increase the base FPPPA by Rs. 0.12/unit after grossing up the incremental base power purchase cost of Rs. 0.10/unit with the approved losses. Accordingly, the base FPPPA for FY 2019-20 is approved as Rs. 1.61/unit (1.49+0.12).

9 Wheeling Charges and Cross Subsidy Surcharge

9.1 Allocation matrix

Regulations 87 of the MYT Regulations, 2016 of GERC stipulates that the Commission shall specify the wheeling charges of distribution wires business of the distribution licensees in its ARR and Tariff Order.

GERC (MYT) Regulations, 2016 (Regulation 87) provides the allocation matrix for allocation of costs between wires business and retail supply business as shown in the table below:

Table 9-1: Allocation matrix for segregation of wheeling and retail supply for PGVCL for the FY 2019-20

Sr. No.	Allocation Matrix	Wire Business	Retail Supply Business
1	Power Purchase Expenses	0%	100%
2.1	Employee expenses	60%	40%
2.2	Repair & Maintenance expenses	90%	10%
2.3	Administration & General Expenses	50%	50%
2.4	Other Debits	50%	50%
2.5	Extraordinary Items	50%	50%
2.6	Net Prior Period Expenses / (Income)	25%	75%
2.7	Other Expenses Capitalized	55%	45%
3	Depreciation	90%	10%
4	Interest & Finance charges	90%	10%
5	Interest on Working Capital & Security Deposit	10%	90%
6	Bad debts written off	0%	100%
7	Income tax	90%	10%
8	Return on Equity	90%	10%
9	Non-tariff income	10%	90%

Based on the above allocation the approved ARR for wires business and retail supply business are computed for PGVCL for FY 2019-20.

Table 9-2: Allocation of ARR between wheeling and retail supply business for PGVCL for FY 2019-20

(Rs. Crore)

Sr. No.	Particulars	Distribution	Wire Business	Retail Supply Business
1	Power Purchase Expenses	14573.28	-	14573.28
2	O & M Expenses	1099.71	703.99	395.72
2.1	Employee Cost	1004.74	602.85	401.90
2.2	Repairs & Maintenance Expenses	165.09	148.58	16.51
2.3	Administration & General Expenses	177.35	88.68	88.68
2.4	Other Debits	-	-	-
2.5	Extraordinary Items	-	-	-

Sr. No.	Particulars	Distribution	Wire Business	Retail Supply Business
2.6	Net Prior Period Expenses /(Income)	-	-	-
2.7	Other Expenses Capitalized	(247.47)	(136.11)	(111.36)
3	Depreciation	712.43	641.19	71.24
4	Interest & Finance Charges	318.67	286.75	31.86
5	Interest on Security Deposit	126.02	12.60	113.41
6	Interest on Working Capital	-	-	-
7	Bad Debts written Off	2.15	-	2.15
8	Contribution to contingency reserves	-	-	-
9	**Total Revenue Expenditure**	**16832.18**	**1644.53**	**15187.65**
10	Return on Equity Capital	577.65	519.89	57.77
11	Income Tax	28.71	25.84	2.87
12	**Aggregate Revenue Requirement**	**17438.54**	**2190.25**	**15248.29**
13	Less: Non-Tariff Income	258.58	25.86	232.72
14	Add: DSM Expenses	2.50	2.50	
15	**Aggregate Revenue Requirement**	**17182.47**	**2166.89**	**15015.58**

9.2 Wheeling charges

The wheeling charges for the four Distribution Companies, DGVCL, MGVCL, PGVCL and UGVCL for the FY 2019-20, as given below are applicable for use of the distribution system of a 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 2019-20

Sr. No.	Particulars	Units	FY 2019-20
1	Distribution costs of the four DISCOMs	**Rs. Crore**	4659.44
2	Distribution cost of the four DISCOMs at 11 kV level (30% of total distribution cost)	**Rs. Crore**	1397.83
3	Distribution cost of the four DISCOMs at LT level (70% of total distribution cost)	**Rs. Crore**	3261.61
4	Energy input at 11 Kv	**MUs**	94414
5	**Wheeling charges at 11 Kv**	**Ps./kWh**	**14.81**
6	Energy Input at 400 V	**MUs**	51334
7	**Wheeling charges at 400 V (LT)**	**Ps./kWh**	**63.54**

Accordingly, the Commission approves wheeling charges for HT network (11 KV system) at 14.81 Paise per unit and wheeling charges for LT network (400 V system) at 63.54 Paise per unit.

Distribution losses

The distribution loss at 11 kV and 400 V during FY 2019-20 are given below:

Particulars	Point of energy delivered	
	11 kV	**400 Volts**
11 kV, 22 kV and 33 kV	10%	12.75%
400 Volts		5.05%

The losses in HT and LT network are 10% and 5.05% 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 12.75% of the energy injection at 11 kV network.

The above wheeling charges payable shall be uniform in all the four distribution companies, DGVCL, MGVCL, PGVCL and UGVCL.

9.3 Cross subsidy charges

The cross subsidy surcharge 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 cross subsidy surcharge based on the above formula is worked out as shown in the Table below:

Table 9-4: Cross subsidy surcharge for FY 2019-20

Sr. No.	Particulars	Units	HT Industry
1	T	Rs/ kWh	6.82
2	C	Rs/ kWh	4.32
3	D	Paise/ kWh	14.81
4	L	%	10%
5	S (cross subsidy surcharge)	Rs/ kWh	1.87

S= 6.82 – [4.32/(1-0.10) + (14.81/100) + 0]= 1.87

Thus, Cross subsidy surcharge as per Tariff Policy, 2016 works out to Rs. 1.87 /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.

In view of above, the Commission decided to restrict the Cross Subsidy Surcharge leviable from the consumers of the four State Owned Distribution Companies, seeking Open Access, for FY 2019-20 at Rs. 1.36 /kWh.

Accordingly, Cross Subsidy Surcharge for HT Category = Rs. **1.36/kWh for FY 2019-20.**

10 Tariff Philosophy and Tariff Proposals

10.1 Introduction

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 DISCOMs Tariff Proposal and Changes in Tariff Structure

Petitioner's Submission

The change/revision/modification proposed in the tariff structure proposed by the Petitioner for FY 2019-20 is as under:

Existing Provision

"Tariff Schedule"

10. RATE AG

This tariff is applicable to services used for irrigation purposes only excluding installations covered under LTP- Lift Irrigation category.

Proposed Provision

"Tariff Schedule"

10. RATE AG

This tariff is applicable to services used for irrigation purposes only excluding (i) installations covered under LTP- Lift Irrigation category, (ii) Floriculture, (iii) Horticulture, (iv) Sericulture, (v) Fishries, (vi) Dairy, (vii) Tissue Culture activities, (viii) Nursery.

Commission's Analysis

The Commission has examined the proposal of the Licensee. Since, no detail was produced by the Petitioner in the proposed change, the Commission has decided not to accept proposal of the Petitioner at this stage. Accordingly, there will be no change in Tariff Schedule.

10.3 Rationalization of Tariff

Some of the stake holder have suggested to modify the Tariff Schedule. The details suggestions considered by the Commission is given as under;

10.3.1 Extending benefit of Optional Demand Based Tariff to small consumers

Some of the stake holder have suggested to insert option clause about availability of demand-based tariff in the description of NRGP category also for the knowledge of the consumers. It is also suggested to reduce minimum billing criteria for LTMD category from 10 KW to 6 KW. The Commission has accepted both the suggestions and necessary changes have been made in the Tariff Schedule attached with this Order.

10.3.2 Numbers of Slabs in RGP Tariff Category

It has been suggested by stake holders that one slab of 200 to 250 Unit should be removed and one more slab for consumption more than 400 Unit is to be introduced with higher rate of energy charges as consumers with higher capacity to pay have to pay higher charges. The Commission agrees with the suggestion of removal of slab of 200 to 250 Unit and decides to merge it with the Slab of 100 to 200 Unit. Thus, the Energy Charge Rate for the Consumption between 100 to 250 Unit/Month shall be charged at Rs. 4.15 per Unit. In order to keep the slabs minimum, the Commission does not accept the suggestion of introduction of new slab. With this modification there will be total reduction of Rs. 5.31 Crore in the revenue of the four DISCOM.

10.3.3 Reduction in the Tariff for Lift Irrigation.

It has been represented before the Commission to reduce the tariff of Lift Irrigation and make it at par with tariff of AG category since the end purpose of the usage of electricity by consumers of both the categories is same. The Petitioner responded that the consumers of Lift Irrigation category are being provided with 24 Hrs. supply whereas consumers of AG category are getting supply for 8-10 hours on roster basis. Hence both categories can not be equated though the end use of electricity by both the categories is same. The Commission find it appropriate to differentiate among AG and Lift Irrigation category. It has been observed by the Commission that in LTP-Lift Irrigation category there are generally more than one consumers and in HTP V category there is a group of consumers. In order to motivate the farmers who do not have at present any electricity connection form a co-operative society and take advantage of Lift Irrigation wherein under one single connection a group of farmers stand to benefit. This will also reduce their waiting period and on the other hand utilities' list of pending applications will also get reduced, if a group of farmers form a co-operative society and opts for Lift Irrigation under LTP-Lift Irrigation category / HTP V category. This will help utilities in reducing their losses also. Accordingly, the Commission considers to offer a tariff of Rs. 1.50/unit to the consumers of these categories. With this modification, there will be impact of Rs. 0.71 Crore in the revenue of the four DISCOMs.

With changes in Tariff as mentioned at Para 10.3.2 and 10.3.3, the total reduction is expected to be Rs. 6.02 Crore in the Revenue of the four DISCOMs in FY 2019-20.

10.4 Deletion of Prompt Payment Rebate clause from the Tariff Schedule

As per Clause 42.3 of the GERC (MYT) Regulations, 2016, it is optional for the Distribution Utilities to allow rebate to consumer on payment of bills within seven days of presentation of bills. Thus, providing rebate to consumer is not mandatory for Distribution Licensees. The same provision was mentioned in the Tariff Schedule of FY 2018-19, but was creating confusion amongst consumers that Distribution Licensees are required to give rebate but are not giving. To avoid such kind of confusion now onwards, the Commission finds it appropriate to delete the provision from the Tariff Schedule of FY 2019-20. However, the stipulation made in Clause 42.3 read with Clause 42.4 of the GERC (MYT) Regulations, 2016 continues to be in force. Hence, the Distributions licensees are free to provide rebate to the consumers but will not be allowed as a cost item in the ARR of the Licensee.

COMMISSION'S ORDER

The Commission approves the Aggregate Revenue Requirement for FY 2019-20 and FY 2020-21 in the Mid Term Review for PGVCL as shown in the Table below:

Approved ARR for FY 2019-20 and FY 2020-21

(Rs. Crore)

Sr. No.	Particulars	Approved for Mid Term Review	
		2019-20	2020-21
1	Cost of Power Purchase	14573.28	15435.93
2	Operations & Maintenance Expenses	1099.71	1162.62
2.1	Employee Cost	1004.74	1062.21
2.2	Repairs & Maintenance	165.09	174.53
2.3	Administration & General Charges	177.35	187.50
2.4	Other Debits	0.00	0.00
2.5	Extraordinary Items	0.00	0.00
2.6	Net Prior Period Expenses / (Income)	0.00	0.00
2.7	Other Expenses Capitalised	(247.47)	(261.63)
3	Depreciation	712.43	799.62
4	Interest & Guarantee Charges	444.62	485.55
5	Interest on Working Capital	0.00	0.00
6	Provision for Bad Debts	2.15	2.15
7	**Sub-Total [1 to 6]**	**16832.19**	**17885.86**
8	Return on Equity	577.65	640.56
9	Provision for Tax / Tax Paid	28.71	28.71
10	**Total Expenditure (7 to 9)**	**17438.55**	**18555.13**
11	Less: Non-Tariff Income	258.58	258.58
12	Add: DSM Expenses	2.50	2.50
13	**Aggregate Revenue Requirement (10-11+12)**	**17182.47**	**18299.05**

The retail supply tariffs for PGVCL distribution area for FY 2019-20 determined by the Commission are annexed to this Order. This Order shall come into force with effect from the 1st May, 2019. The revised rate shall be applicable for the electricity consumption from the 1st May, 2019 onwards.

Sd/-	Sd/-	Sd/-
P. J. THAKKAR	**K. M. SHRINGARPURE**	**ANAND KUMAR**
Member	Member	Chairman

Place: Gandhinagar
Date: 24/04/2019

ANNEXURE: TARIFF SCHEDULE

TARIFF FOR SUPPLY OF ELECTRICITY AT LOW TENSION, HIGH TENSION, AND EXTRA HIGH TENSION

Effective from 1st May, 2019

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 or kilo watt (HP or kW) 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
(d)	Above 6 kW	Rs. 70/- per month

For BPL Household Consumers:

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 CONSUMER BELOW POVERTY LINE (BPL)**

(a)	First 30 units	150 Paise per Unit
(b)	For 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 30 units per month.

1.4 MINIMUM BILL

Payment of fixed charges as specified in 1.1 above.

2. RATE: RGP (RURAL)

This tariff is 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 / 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
(d)	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 30 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 30 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 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 and research and development laboratories.

(a)	Fixed charges	Rs. 70/- per month
(b)	Energy charges	390 Paise per Unit

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

(a) "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, huller, salt industry, sugar factory, khandsari, cold storage plants (including such plants in fisheries industry), tapioca industries manufacturing starch, etc.

(b) 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.

(c) The total minimum amount under the head "Fixed and Energy Charges" payable by the seasonal consumer satisfying the eligibility criteria under sub-clause (a) above and complying with the provision stipulated under sub-clause (b) above shall be Rs. 1800 per annum per kW of the contracted load.

(d) The units consumed during the off-season period shall be charged for at a flat rate of 480 Paise per unit.

(e) 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 (c) above.

5. <u>RATE: LTMD</u>

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 FIXED CHARGES:

(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 CHARGES:

For the entire consumption during the month	460 Paise per Unit

PLUS

5.3 REACTIVE ENERGY CHARGES:

For all the reactive units (KVARH) drawn 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 etc.

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.

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 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 demand charge during the relevant billing month shall be billed as per Non-RGP category demand 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 demand charge and entire energy consumption during the relevant billing month shall be billed as per Non-RGP category demand 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.*
7. *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 FIXED CHARGES PER MONTH:

50% of the Fixed 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 demand charge and 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 For entire consumption during the month	150 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 **<u>TIME OF USE DISCOUNT</u>:**

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	60 Paise per Unit per month

10.1.3 TATKAL SCHEME:

Fixed Charges	Rs. 20 per HP per month
Energy Charges: For entire consumption	80 Paise per Unit per month

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: SL

11.1 Tariff for Street Light for Local Authorities and Industrial Estates:

This tariff includes the provision of maintenance, operation and control of the street lighting system.

11.1.1 ENERGY CHARGES:

For all the units consumed during the month:	405 Paise per Unit

11.1.2 OPTIONAL KVAH CHARGES:

For all the kVAh units consumed during the month:	305 Paise per Unit

11.1.3 Renewal and Replacements of Lamps:

The consumer 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.

11.1.4 Maintenance other than Replacement of Lamps:

Maintenance of the street lighting conductor provided on pole to connect the street light shall be carried out by Distribution Licensee.

11.2 Tariff for power supply for street lighting purposes to consumers other than the local authorities and industrial estates:

11.2.1 FIXED CHARGES:

Rs. 30 per kW per month

11.2.2 ENERGY CHARGES:

For all units consumed during the month	405 Paise per kWh

11.2.3 Renewal and Replacement of Lamps:

The consumer 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.

11.2.4 Maintenance other than Replacement of Lamps:

Maintenance of the street lighting conductor provided on pole to connect the street light shall be carried out by Distribution Licensee.

12. 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.

12.1 FIXED CHARGE

Fixed Charge per Installation	Rs. 15 per kW per Day

12.2 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.

13. 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.

13.1 FIXED CHARGES / MONTH:

Fixed Charge	Rs. 25 per installation

13.2 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

14. RATE: HTP-I

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.

14.1 DEMAND CHARGES:

14.1.1 For billing demand up to contract demand

(a)	For 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

14.1.2 For Billing Demand in Excess of Contract Demand

For billing demand in excess over the contract demand	Rs. 555 per kVA per month

PLUS

14.2 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

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:

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

14.5 MINIMUM BILLS:

Payment of “demand charges” based on kVA of billing demand.

14.6 POWER FACTOR ADJUSTMENT CHARGES:

14.6.1 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 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.

14.6.2 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 14.2 of this schedule, for every 1% rise or part thereof in the average power factor during the month above 95%.

14.7 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.

14.8 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.

14.9 REBATE FOR SUPPLY AT EHV:

On Energy charges:		**Rebate @**
(a)	If supply is availed at 33/66 kV	0.5%
(b)	If supply is availed at 132 kV and above	1.0%

14.10 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 40 Paise per unit.

14.11 SEASONAL CONSUMERS TAKING HT SUPPLY:

14.11.1 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 etc.

14.11.2 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.

14.11.3 The total minimum amount under the head "Demand and Energy Charges" payable by a seasonal consumer satisfying the eligibility criteria under sub-clause 14.11.1 above and complying with provisions stipulated under sub-clause 14.11.2 above shall be Rs. 4550 per annum per kVA of the billing demand.

14.11.4 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.

14.11.5 Units consumed during the off-season period shall be charged for at the flat rate of 430 Paise per unit.

14.11.6 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.

15. 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.

15.1 DEMAND CHARGES:

15.1.1 For billing demand up to contract demand

(a)	For 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

15.1.2 For billing demand in excess of contract demand

For billing demand in excess of contract demand	Rs. 360 per kVA per month

PLUS

15.2 ENERGY CHARGES:

For entire consumption during the month		
(b)	Up to 500 kVA of billing demand	435 Paise per Unit
(c)	For billing demand above 500 kVA and up to 2500 kVA	455 Paise per Unit
(d)	For billing demand above 2500 kVA	465 Paise per Unit

PLUS

15.3 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

15.4 Billing demand **15.5** Minimum bill **15.6** Maximum demand and its measurement **15.7** Contract Demand **15.8** Rebate for supply at EHV **15.9** Concession for use of electricity during night hours	}	Same as per HTP-I Tariff

15.10 POWER FACTOR ADJUSTMENT CHARGES:

15.10.1 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 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.

15.10.2 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 15.2 of this schedule, for every 1% rise or part thereof in the average power factor during the month above 95%.

16. <u>RATE: HTP-III</u>

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.

16.1 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

PLUS

16.2 ENERGY CHARGES:

For all units consumed during the month	660 Paise/Unit

PLUS

16.3 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

16.4 Billing demand
16.5 Minimum bill
16.6 Maximum demand and its measurement
16.7 Contract Demand
16.8 Rebate for supply at EHV

} Same as per HTP-I Tariff

16.9 POWER FACTOR ADJUSTMENT CHARGES:

16.9.1 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 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.

16.9.2 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 16.2 of this schedule, for every 1% rise or part thereof in the average power factor during the month above 95%.

17 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.

17.1 DEMAND CHARGES:

1/3rd of the Fixed Charges specified in Rate HTP-I above.

PLUS

17.2 ENERGY CHARGES:

For all units consumed during the month	225 Paise per 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%.

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 14.1 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 14.2 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 14.1 and 14.2 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*

18 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.

18.1 DEMAND CHARGES:

Demand Charges Rs. 25 per kVA per month

PLUS

18.2 ENERGY CHARGES:

For all units consumed during the month	150 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 per 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: RAILWAY TRACTION

This tariff is applicable for power supply to Railway Traction at 132 kV/66 kV.

19.1 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 19.1 (b).

PLUS

19.2 ENERGY CHARGES:

For all units consumed during the month	500 Paise per Unit

19.3 Billing demand
19.4 Minimum bill
19.5 Maximum demand and its measurement
19.6 Contract Demand
19.7 Rebate for supply at EHV

Same as per HTP-I Tariff

19.8 POWER FACTOR ADJUSTMENT CHARGES:

19.8.1 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 19.2 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 19.2 of this schedule, will be charged.

19.8.2 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 19.2 of this schedule, for every 1% rise or part thereof in the average power factor during the month above 95%.

20 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.

20.1 DEMAND CHARGES:

For billing demand up to contract demand	Rs. 25/- per kVA per Month
For billing demand in excess of contract demand	Rs. 50/- per kVA per Month

PLUS

20.2 ENERGY CHARGES: FOR THE TOTAL MONTHLY CONSUMPTION

ENERGY CHARGE	400 Paise per Unit

20.3 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