GUJARAT ELECTRICITY REGULATORY COMMISSION (GERC)



Tariff Order

Truing up for FY 2019-20 and Determination of Tariff for FY 2021-22

For

Torrent Power Limited – Distribution
Surat

Case No. 1927 of 2021

31st March, 2021

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ABBREVIATIONS

A 0 C	Administration and Consul Consul
A&G	Administration and General Expenses
ARR	Aggregate Revenue Requirement
AMR	Automated Meter Readers
APTEL	Appellate Tribunal for Electricity
CAGR	Compounded Annual Growth Rate
CAPEX	Capital Expenditure
CEA	Central Electricity Authority
CERC	Central Electricity Regulatory Commission
Control period	The period from FY 2016-17 to FY 2020-21
DGVCL	Dakshin Gujarat Vij Company Limited
DISCOM	Distribution Company
DPC	Delayed Payment Charges
DSEZ	Dahej SEZ
DSL	Dahej SEZ Ltd.
EA	Electricity Act, 2003
EHT	Extra High Tension
EHV	Extra High Voltage
FPPPA	Fuel and Power Purchase Price Adjustment
FY	Financial Year
GERC	Gujarat Electricity Regulatory Commission
GETCO	Gujarat Energy Transmission Corporation Limited
GFA	Gross Fixed Assets
GIDC	Gujarat Industrial Development Corporation
GUVNL	Gujarat Urja Vikas Nigam Limited
HP	Horse Power
HT	High Tension
HTMD	High Tension Maximum Demand
IEX	Indian Energy Exchange
kV	Kilo Volt
kVA	Kilo Volt Ampere
kVAh	Kilo Volt Ampere Hour
kWh	Kilo Watt Hour
LT	Low Tension Power
LTMD	Low Tension Maximum Demand
MCLR	Marginal Cost of Funds Based Lending Rate
MSW	Municipal Solid Waste
MTR	Mid-term Review
MUs	Million Units (Million kWh)
MVA	Million Volt Ampere
MW	Mega Watt
MYT	Multi-Year Tariff
NRGP	Non-Residential General Purpose
NTPC	National Thermal Power Corporation
O&M	Operations and Maintenance
OFC	Optical Fiber Communication
ONGC	Oil & Natural Gas Corporation
PF	Power Factor
۲۲	FOWEI FACIOI



PPA	Power Purchase Agreement
PPC	Power Purchase Cost
RBI	Reserve Bank of India
REC	Renewable Energy Certificate
R&M	Repairs and Maintenance
RPO	Renewable Purchase Obligation
SBI	State Bank of India
SEZ	Special Economic Zone
SLC	Service Line Charges
TEL	Torrent Energy Limited
TPL	Torrent Power Limited
TPL-D (S)	Torrent Power Limited – Distribution, Surat



Before the Gujarat Electricity Regulatory Commission at Gandhinagar

Case No. 1927 of 2021

Date of Order: 31st March, 2021

CORAM

Shri Anand Kumar, Chairman Shri Mehul M. Gandhi, Member Shri. S. R. Pandey, Member

1. Background and Brief History

1.1. Background

Torrent Power Limited – Distribution (hereinafter referred to as TPL or the Petitioner) has filed the present petition under Section 62 of the Electricity Act, 2003 read in conjunction with the Gujarat Electricity Regulatory Commission (Multi-Year Tariff) Regulation, 2016 and Suo-Motu Order No.7 of 2020 dated 22nd December 2020 for the True-up of FY 2019-20 and determination of tariff for its distribution business in Surat for the FY 2021-22 on 8th January, 2021.



Gujarat Electricity Regulatory Commission (hereinafter referred "the Commission") notified the GERC (MYT) Regulations, 2016 on 29th March, 2016 which is applicable for determination of tariff in all cases covered under the Regulations from 1st April, 2016 onwards. These Regulations are in force till March, 2021, even though the process of framing the MYT Regulations for the next Control Period of FY 2021-22 FY 2025-26 has been initiated, it is likely to be delayed to finalize and notify the new MYT Regulations. Therefore, the Commission decided to defer the five (5) year Control Period for new MYT Regulations for one year and consider the next control period from FY 2022-23 to FY 2026-27 vide Suo-Motu Order No.7 of 2020 dated 22nd December 2020. Accordingly, all the concerned utilities and licensees were directed to file annual ARR for FY 2021-22 and application for determination of Tariff for FY 2021-22 based on the Principles and methodology as provided in the GERC (Multi Year Tariff) Regulations, 2016 on or before 8th January 2021.

Regulation 17.2 (b) of the GERC (Multi Year Tariff) Regulations, 2016 provides for submission of detailed application comprising Truing up for FY 2019-20, to be carried out under the Gujarat Electricity Regulatory Commission (Multi Year Tariff) Regulations, 2016, revenue from sale of power at existing tariffs and charges for the ensuing year, i.e., FY 2021-22, Revenue Gap or Revenue Surplus for the ensuing year for determination of tariff for FY 2021-22.

Accordingly, the Petitioner submitted the current Petition for truing-up of FY 2019-20, and determination of ARR and tariff for FY 2021-22 on 8th January, 2021

After Technical validation of the Petition, it was registered on 11th January, 2021 ion and as provided under Regulation 29.1 of the GERC MYT Regulations, 2016, the Commission has proceeded with this Tariff Order.

1.2. Torrent Power Limited (TPL)

Torrent Power Limited (TPL), a company incorporated under the Companies Act, 1956, is carrying on the business of Generation and Distribution of electricity in the cities of Ahmadabad, Gandhinagar and Surat. The present petition has been filed by



TPL-Distribution (Surat) (TPL-D (S)) for its distribution business in Surat.

TPL had assumed the business, consequent upon the amalgamation of Torrent Power Ahmadabad Limited (TPAL), Torrent Power Surat Limited (TPSL) and Torrent Power Generation Limited (TPGL) with Torrent Power Limited. Besides, TPL is also engaged in other businesses, which do not come under the regulatory purview of the Commission.

1.3. Commission's order for Approval of final ARR for FY 2016-17 and Approval of Multi-Year ARR for FY 2016-17 to FY 2020-21

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 29th November, 2016. The Petition was registered on 3rd December, 2016 (under Case No. 1628 of 2016).

The Commission vide order dated 9th June, 2017 approved the Truing up for 2015-16, Final ARR for 2016-17, Multi-Year ARR for FY 2016-17 to FY 2020-21 and determined the tariff for FY 2017-18 for TPL-D (S).

1.4. Commission's Order for approval of True-up for FY 2016-17 and Determination of tariff of FY 2018-19

The Petitioner filed its Petition for Truing up for FY 2016-17 and Determination of tariff for FY 2018-19 on 30th December, 2017. The Petition was registered on 3rd January, 2018 (under Case No. 1697 of 2017). The Commission vide Order dated 31st March, 2018 approved the Truing up for FY 2016-17 and determined the tariff for FY 2018-19.

1.5. Commission's Order for approval of True-up of FY 2017- 18 and Mid-Term Review of ARR for FY 2019-20 & FY 2020-21

The Petitioner filed a Petition for Truing Up of FY 2017-18, Mid-Term Review of FY 2019-20 and FY 2020-21 on 30th November, 2018. The Petition was registered on 4th December, 2018 (Case No. 1765 of 2018). The Commission approved the Truing-up of FY 2017-18, and revised the ARR for FY 2019-20 & FY 2020-21 vide Order dated



24th April, 2019.

1.6. Commission's Order for approval of True-up of FY 2018-19 and Determination of tariff of FY 2020-21

The Petitioner filed its Petition for Truing up for FY 2018-19 and Determination of tariff for FY 2020-21 on 30th November, 2019. The Petition was registered on 4th December, 2019 (under Case No. 1845 of 2019). The Commission vide Order dated 31st March, 2020 approved the Truing up for FY 2018-19 and determined the tariff for FY 2020-21.

1.7. Background of the present petition

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

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

The Commission vide its Order dated 22nd December, 2020 has directed the utilities to file the petition for ARR for FY 2021-22 and determination of Tariff for FY 2021-22 based on the principles and methodology as provided in the GERC (Multi Year Tariff Regulations, 2016.

1.8. Registration of the Current Petition and the Public Hearing Process

The Petitioner submitted the current Petition for truing up of FY 2019-20 and determination of tariff for FY 2020-21 on 8th January, 2021. After technical validation the Petition was registered on 11th January, 2021 (Case No. 1927 of 2021), and as provided under Regulation 29.1 of the GERC (MYT) Regulations, 2016, the



Commission has proceeded with this Tariff Order.

In accordance with Section 64 of the Electricity Act, 2003, TPL-D (S) was directed to publish its application in an abridged form in the newspapers to ensure due public participation.

The Public Notice, inviting objections / suggestions from the stakeholders on the Petition filed by it, was published in the following newspapers:

Table 1.1: List of Newspapers in which Public Notice was published by the Petitioner

SL. No.	Name of Newspaper	Language	Date of Publication
1	The Times of India (Surat Edition)	English	13/01/2021
2	Gujarat Mitra (Surat Edition)	Gujarati	13/01/2021

The Petitioner also placed the Public Notice and the Petition on its website (<u>www.torrentpower.com</u>), for inviting objections and suggestions. The interested parties / stakeholders were asked to file their objections/suggestions on the Petition on or before 13th February, 2021.

The Commission also placed the Petition and additional details received subsequently from the Petitioner on its website (www.gercin.org) for information and study of all the stakeholders.

The Commission also issued a notice for Public Hearing in the following newspapers in order to solicit wider participation by the stakeholders:

Table 1.2: List of Newspapers in which Public Notice for Hearing was published by the Commission

SI. No.	Name of Newspaper	Language	Date of Publication
1	The Indian Express	English	20/02/2021
2	Divya Bhaskar	Gujarati	20/02/2021
3	Sandesh	Gujarati	20/02/2021

The Commission received objections / suggestions from consumers / consumer organizations as shown in Table below. The Commission examined the objections / suggestions received from the stakeholders and fixed the Public Hearing for the Petition on 9th March, 2021, through video conferencing considering prevailing covid situation. Subsequently a communication and Microsoft TEAM Platform Link was sent to the objectors to take part in the public hearing process for presenting their views



before the Commission. The stakeholders who desired to remain present at the Commission Office, were provided video conferencing facility at the office.

The Commission also published the notice for Virtual Public Hearing (via video conferencing) on its website www.gercin.org intimating the date and venue as given below in order to solicit participation by the objectors who have submitted their objections, comments and also by any stakeholders who are interested.

Petitions	Date & Time	Venue
TPL-(G), TPL-D(A), TPL-D(S), TPL-D(D)	09.03.2021 at 11.30 A.M	GERC office, Gandhinagar (through Microsoft TEAMS
		platform)

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:

Table 1.3: List of Stakeholders who commented on petition filed by TPL-D (S)

SI.	Name of Stakeholders	Written	Oral	Present on
No.		Submission	Submission	09.03.2021
1	K K Bajaj	Yes	Yes	Yes
2	Surat Citizen's Council Trust	Yes	Yes	Yes
3	Users Welfare Association	Yes	Yes	Yes
4	Surat Municipal Corporation	Yes	Yes	Yes
5	Vishnubhai Desai	Yes	Yes	Yes
6	Utility Users Welfare Association	No	Yes	Yes
7	R J Tillan	No	Yes	Yes
8	Gujarat Krushi Viz Grahak Suraksha Sangh	No	Yes	Yes
9	Bharatiya Samyavadi Paksh	Yes	Yes	Yes

A short note on the main issues raised by the objectors in the submission in respect of the Petition, along with the response of TPL-D (S) and the Commission's views on the response, are as given in Chapter 3.

1.9. Approach of this Order

The GERC (Multi Year Tariff) Regulations, 2016, provide for "Truing up" of the previous year and determination of tariff for the ensuing year. The Commission on 9th June,2017 passed order for Truing-up of FY 2015-16, determination of final ARR for FY 2016-17, determination of ARR for the Third Control period i.e., FY 2016-17 to FY 2020-21 and determination of Tariff for the FY 2017-18.

TPL-D (S) has approached the Commission with the present Petition for "Truing up" of



the FY 2019-20 and determination of tariff for FY 2021-22.

The Commission has undertaken "Truing up" for FY 2019-20, based on the submissions of the Petitioner. The Commission has undertaken the computation of gains and losses for FY 2019-20, based on the annual accounts and final ARR for FY 2019-20 approved vide MTR Order dated 24th April, 2019 in Case No. 1763/2018. While truing up for FY 2019-20 the Commission has been primarily guided by the

following principles:

- Controllable parameters have been considered at the level approved as per the MTR Order, unless the Commission considers that there are valid reasons for revision of the same.
- Uncontrollable parameters have been revised, based on the actual performance observed.
- The Truing up for the FY 2019-20 has been considered, based on the GERC (MYT) Regulations, 2016.

Determination of Tariff for FY 2021-22 has been considered as per the GERC (MYT) Regulations, 2016 and amendments thereof as the base. Truing up of FY 2021-22 shall be carried out based on the principles and methodology adopted in GERC (MYT) Regulations, 2016.

1.10 Contents of this Order

The order is divided into Nine Chapters as detailed under:

- 1. The first chapter provides a brief background regarding the Petitioner, the Petition on hand and details of the Public Hearing process and approach adopted in this Order.
- 2. The second chapter outlines the summary of TPL-D (S)'s Petition
- 3. The third chapter deals with the objections raised by various stakeholders, TPL-D's response and Commission's views on the response
- 4. The fourth chapter focuses on the details of truing up for FY 2019-20
- 5. The fifth chapter deals with the determination of tariff for FY 2021-22
- 6. The sixth chapter deals with compliance of directives and issue of fresh directives.



- 7. The seventh chapter deals with FPPPA charges
- 8. The eight chapter outlines the Wheeling Charges and Cross-Subsidy Surcharge.
- 9. The ninth chapter deals with tariff philosophy and tariff proposals.



2. Summary of TPL-D (Surat)'s Petition

2.1. Introduction

TPL-D (S) has submitted the current petition seeking approval of True-up for ARR for FY 2019-20. The Petitioner has also submitted the tariff proposal for FY 2021-22, based on the Revenue Gap for FY 2019-20 and ARR for FY 2021-22.

2.2. Actuals for FY 2019-20 submitted by TPL-D (S)

The details of expenses under various heads of ARR approved by the Commission in the Mid Term Review (MTR) Order dated 24th April, 2019 and actual in FY 2019-20 are as given in the Table below:

Table 2.1: Actuals Claimed by TPL-D (S) for FY 2019-20

(Rs. Crore)

Particulars	Approved in the MTR Order	Actual as per TPL-D (S)
Power Purchase	1,732.41	1,884.36
O&M expenses	133.31	131.42
Interest on loans	27.80	30.47
Interest on SD	18.57	19.32
Interest on working capital	-	-
Depreciation	52.96	64.30
Bad debts written off	0.39	0.51
Contingency reserve	0.40	0.40
RoE	90.74	91.20
Income Tax	39.68	22.19
Less: Non-tariff income	21.92	10.13
Annual Revenue Requirement (ARR)	2,074.34	2,234.05

2.3. Sharing of gains and losses for FY 2019-20

The sharing of gains and losses as projected by TPL-D (S) is as depicted below.

Table 2.2: Summary of Sharing of Gains and Losses for TPL-D (S) for FY 2019-20

(Rs. Crore)

Particulars	FY 2019-20 (MTR Order)	FY 2019-20 (Actual)	Over (+) /Under (-) recovery	Controllable	Uncontrollable
Power Purchase	1,732.41	1,884.36	(151.95)	3.59	(155.54)
O&M expenses	133.31	131.42	1.89	2.65	(0.76)
Depreciation	52.96	64.30	(11.34)	-	(11.34)
Interest on loans	27.80	30.47	(2.67)	-	(2.67)
Interest on Security	18.57	19.32	(0.75)	-	(0.75)



Particulars	FY 2019-20 (MTR Order)	FY 2019-20 (Actual)	Over (+) /Under (-) recovery	Controllable	Uncontrollable
Deposit					
Interest on Working					
Capital	-	-	-	-	-
Return on Equity	90.74	91.20	(0.47)	-	(0.47)
Bad debts written Off	0.39	0.51	(0.12)	(0.12)	-
Contingency Reserve	0.40	0.40	-	-	-
Income Tax	39.68	22.19	17.49	-	17.49
Less: Non-tariff					
Income	21.92	10.13	11.79	-	11.79
Annual Revenue	2,074.34	2,234.05	(159.71)	6.12	(165.83)
Requirement					

2.4. Summary of ARR, Revenue at Existing Tariff and Proposed Revenue Gap for FY 2019-20

The Table below summarises the proposed ARR claimed by TPL-D (S) for Truing up, revenue from sale of power at existing tariff and the revenue gap estimated for FY 2019-20.

Table 2.3: True-up ARR claimed by TPL-D (S) for FY 2019-20

(Rs. Crore)

		(1.131 0.010)
Particular		Claimed
ARR as per MTR	(a)	2,074.34
Gains/(Losses) due to Uncontrollable Factors	(b)	(165.83)
Gains/(Losses) due to Controllable Factors	(c)	6.12
Pass through as tariff	$d = -(1/3^{rd} \text{ of } c + b)$	163.79
Trued -up ARR	e=a+d	2,238.13

The Table below summarises the Revenue (Gap)/Surplus for TPL-D (S) for FY 2019-20:

Table 2.4: Revenue (Gap)/ Surplus for TPL-D (S) for FY 2019-20

(Rs. Crore)

Particular	FY 2019-20 (Claimed)
Trued-up ARR	2,238.13
Revenue from Sale of Energy	2,326.15
Less: Revenue towards recovery of Earlier Years' approved (Gap)/Surplus	113.46
Balance Revenue	2,212.69
(Gap)/ Surplus	(25.44)



2.5. ARR, Revenue at Existing Tariff and Revenue (Gap) / Surplus for FY 2021-22

Table 2.5: Revenue (Gap)/ Surplus of TPL-D (S) for FY 2021-22

(Rs. Crore)

Particulars	
	TPL-D (S)
ARR for FY 2021-22	2,090.69
Less:	
Revenue from sale of power at existing tariff rates including base FPPPA revenue @Rs. 1.82 per unit	2,100.57
(Gap)/ Surplus	9.88

TPL-D (S) has claimed the cumulative revenue (gap)/surplus for FY 2021-22 as detailed in the Table below:

Table 2.6: Cumulative Revenue (Gap)/Surplus for determination of tariff of TPL-D (S) for FY 2021-22

(Rs. Crore)

Particulars	Claimed by
	TPL-D (S)
(Gap)/ Surplus of FY 2019-20	(25.44)
Carrying Cost	13.83
DSM	0.54
(Gap)/ Surplus of FY 2021-22	9.88
Cumulative (Gap)/ Surplus to be recovered through tariff	(29.93)

2.6. TPL-D (S)'s Prayer to the Commission

- a) Admit the petition for truing up of FY 2019-20, Aggregate Revenue Requirement for FY 2021-22, and determination of tariff for FY 2021-22.
- b) Approve the trued-up (Gap)/ Surplus of FY 2019-20 including impact of change in law as set out in the petition.
- c) Approve the sharing of gains/ losses as proposed by the Petitioner for FY 2019-20.
- d) Approve the Aggregate Revenue Requirement for FY 2021-22.
- e) Approve the cumulative (Gap)/ Surplus.
- f) Approve the wheeling ARR and corresponding charges for wheeling of electricity with effect from 1st April, 2021.
- g) Approve the recovery of Regulatory Charge as proposed and/or through retail tariff of FY 2021-22.



- h) Allow recovery of the costs as proposed as per the Judgments/ orders of the Hon'ble Tribunal/Commission in the Appeals/Review Petitions filed by the Petitioner.
- i) Allow additions/ alterations/ changes/ modifications to the petition at a future date.
- j) Permit the Petitioner to file all necessary pleading and documents in the proceeding and documents from time to time for effective consideration of the proceeding.
- k) Allow any other relief, order or direction which the Hon'ble Commission deems fit to be issued.
- I) Condone any inadvertent omissions/ errors/ rounding off difference/ shortcomings.



3. Brief outline of Objections raised, Response from TPL-D (S) and the Commission's View

3.1. Stakeholder's suggestions / objections, Petitioner's response and the Commission's view

In response to the public notice inviting objections / suggestions from the stakeholders on the Petition filed by TPL-D (S) for Truing up of ARR for FY 2019-20 and determination of Tariff for FY 2021-22 under the GERC (MYT) Regulations, 2016, a number of Consumers / organizations filed their objections / suggestions in writing. Some of these objectors participated in the public hearing also. The objections / suggestions by the consumers / consumers' organizations, the response from the Petitioner and the views of the Commission are given below:

3.2. Issue-wise submissions, replies and the Commission's view

3.2.1 Projection of Energy Sales for FY 2021-22

The Objector has suggested that the energy sales may increase in FY 2021-22 due to recovery of economy after COVID-19 Pandemic.

Petitioner's response

There is substantial de-growth in sales of FY 2020-21 over FY 2019-20 for the same period. Therefore, long term trends of sales as well as increasing penetration of solar roof top generation also considered. Hence, the sales may be approved as estimated in the petition.

Commission's view

The Commission has noted the objection and response of the petitioner. The energy sales are considered as projected by the petitioner for FY 2021-22 since under the present prevailing conditions, Petitioner is in appropriate position to properly estimate the sales for ensuring year.



3.2.2 Diversion of Energy (DoE) Units

The Objector has submitted that the DoE units should not be considered as energy sales for computation of distribution loss

Petitioner's response

The units which are recovered under theft of energy are reported in sales under the head DoE units, as the same amount to consumption of energy by consumer. Further, distribution loss denotes the difference between the energy purchased and energy sales. Accordingly, units booked as DoE are included in sales.

Commission's view

The Petitioner has clarified the issue in his response.

3.2.3 Bi-monthly Billing

The Objector has submitted that the Electricity Consumption bills are prepared on bi-monthly basis and hence charges increase automatically.

Petitioner's response

Tariff determination by the Commission is always on monthly basis. However, the distribution licensee can opt for the monthly or bi-monthly billing period as per the provision of the Supply Code. The Petitioner prepares bills considering necessary adjustment in slab size due to bi-monthly billing period. Therefore, the understanding that charges increase on account of bi-monthly billing is not correct.

Commission's View

The Commission has given tariff schedule for billing on monthly basis. If any distribution licensee bill on bimonthly basis, the billing is adjusted for monthly billing as explained by Petitioner. It may not make any difference in billing as per approved tariff.



3.2.4 Additional Slab of above 400 units

The Objector has suggested that an additional slab of above 400 units per month for residential consumers may be introduced with higher tariff, so that the consumers with higher consumption of electricity shall pay higher charges.

Petitioner's response

As contemplated under the Electricity Act, the key factors to be considered for tariff design are capacity to pay, incentivizing energy conservation through telescopic tariff, promotion of efficient use of electricity. The Commission may take appropriate view in accordance with the applicable statutory provisions.

Commission's view

The suggestion is noted. At present there are three slabs for Residential Category.

The Commission will look in to the necessity of increasing the number of consumption slabs for residential category.

3.2.5 Libraries to be categorized under GLP Category

The Objector has suggested that libraries built and operated by Government bodies and Urban local bodies shall be charged at Rate: GLP and not at Rate: Non RGP.

Petitioner's response

The Commission shall determine the tariff as per the provision of the Act and National Tariff Policy. Tariff structure of the Petitioner is based on certain widely recognized best practices and in accordance with the legal frame work. The Petitioner suggests that there is no requirement for any change.

Commission's view

The suggestion of the Objector and the response thereon by the Petitioner are noted.



3.2.6 Connected Load based fixed charges for above 15 KW load residential consumers.

The Objector has suggested that connected load based fixed charges for consumer above 15 KW will ensure recovery of fixed cost from the same consumers and will also help in creation of adequate net work to cater to the load, issue of over loading of network due to lack of regularization of load by consumers in such cases will also reduce.

Petitioner's response

The Commission may take appropriate view to rationalize the fixed charges for residential consumers or alternatively introduce connected load based fixed charges.

Commission's view

The Commission has noted the suggestion and response on the same and will consider the same in future at the time of rationalization of the charges.

3.2.7 Separate fixed charges for consumers installing solar roof top plants

The Objector has suggested to specify separate fixed charges reflective of fixed cost for consumers installing solar roof top plants.

Petitioner's response

Consumers who have installed solar roof top plants are paying energy charges applicable on net consumption only. This does result in cross subsidization by consumers having lower paying capacity. The Commission may take appropriate view on the suggestion.

Commission's view

The Commission has noted the suggestion of the Objector and response of the Petitioner. The net metering facilities allowed based on the prevailing regulatory framework.



3.2.8 Fixed / Demand Charges based on KVA for LTMD Category

The Objector suggested that the fixed / demand charges for LTMD category consumers shall also be based on KW, instead of on KVA on par with TPL-D Ahmedabad and Gandhi Nagar area consumers.

Petitioner's response

The Supply Code mandates that the three phase supply consumers to maintain power factor not less than 90% failing which power factor surcharge will be levied. Power Factor incentive is built in the KVA based fixed / demand charge tariff. This ensures consumers to maintain better power factor, which is in the overall interest of the system. Therefore, there is no requirement of any change.

Commission's view

The Petitioner has clarified the suggestion. If the Power Factor is maintained nearer to unity, the demand in KV and KVA will almost the same.

3.2.9 O & M Expenses

The Objector has submitted that the O & M expenses are increased due to wage revision and amendment of the Gratuity Act 1872 which needs scrutiny.

Petitioner's response

There has been an increase in Employee Cost owing to wage revision and change in law resulting in variation in the employee expenses. The exercise of wage settlement of unionized employees of Ahmedabad was concluded in FY 2019-20 and its impact was considered accordingly. Further, Government of India issued a Notification dated 29th March, 2018, amending the payment of Gratuity Act, 1972, inter alia increasing ceiling of gratuity to Rs. 20 lakhs from Rs. 10 lakhs. These developments have resulted in an increase in the employee cost of the Petitioner



Commission's view

The O & M expenses claimed / projected have been examined and appropriate decision has been taken after prudence check and validation in accordance with the GERC, MYT Regulations, 2016.

3.2.10 Audit by CAG

The Objector has submitted that the account details produced by the Petitioner have to be audited by CAG or by an independent agency for their correctness.

Petitioner's response

The accounts are prepared and maintained in accordance with the accounting standards issued by the Institute of Charted Accountants of India and the same are duly verified by the statutory auditors of the company.

Commission's view

The Commission has noted the suggestion and the response of the petitioner.

3.2.11 Less generation due to aged plants

The Objector has submitted that lesser investments in up keeping of old generating plants and machinery is leading to low production and high price.

Petitioner's response

The petitioner keeps its plants & machinery in well maintained condition through regular O & M activities to ensure efficiency of its operations. Generation of energy depends on demand which is beyond the control of the licensee.

Commission's view

The Commission has noted the suggestion and the response of the petitioner.

3.2.12 Fixed Cost of SUGEN and UNOSUGEN

The Objectors has submitted that the fixed costs of SUGEN & UNOSUGEN plants shall be verified with respect to applicable CERC tariff order.



One of the objector contended that cost of power from UNOSUGEN is higher than the Medium Term Power Purchase price.

Petitioner's response

The fixed costs of SUGEN & UNOSUGEN are in line with that approved by the Appropriate Commission.

Commission's view

The Commission has allowed Power Purchase Cost in accordance with the orders of CERC/GERC as per prevailing regulatory framework.

3.2.13 TPL-Generation Cost for FY 2019-20

The Objector has submitted that as per TPL-G petition, trued up ARR for FY 2019-20 is Rs. 1012.97 Crore, where as in TPL-D petition the same is considered as Rs. 1027.87 Crore which needs reconciliation.

Petitioner's response

Trued up ARR of TPL-G (APP) for FY 2019-20 is corresponding to actual generation where as the power purchase cost considered for TPL-D (A) is corresponding to scheduled generation.

Commission's view

The Commission has examined the power purchase cost from various sources and has taken appropriate decision.

3.2.14 Power purchase from Bilateral Sources

The Objector has submitted that more power is procured from bilateral sources vis-à-vis procurement of power from exchange in FY 2019-20.

Petitioner's response

Power purchase is arranged from the sources approved by the Commission. Petitioner has carried out competitive bidding process for procurement of short



term power and tied up bilateral power from the relevant period. Balance power has been procured through power exchange to ensure 24 X 7 power supply to the consumers.

Commission's view

Power available from exchange is short term or on day ahead basis which is not guaranteed, where as power supply from the bilateral source or long term source agreement / arrangement are assured power supply.

3.2.15 Focus on Wind / Solar Energy

The Objector has contended that the Petitioner has sought increase in price of coal without focusing on Wind / Solar and natural source of production.

Petitioner's response

The Petitioner procures power from the approved sources which includes both conventional and renewable energy sources.

Commission's view

The Commission has notified the Renewable Power Purchase Obligation Regulations specifying to purchase certain percentage of energy requirement from solar and non-solar energy sources.

3.2.16 RPO Compliance

The Objector has submitted that there is short fall in RPO compliance by the Petitioner in FY 2019-20 and suggested to verify the status of RPO compliance by the Petitioner.

Renewable power shall be procured through competitive bidding, to fulfill the RPO compliance.



Petitioner's response

The Petitioner has approached the Commission seeking revision of minimum quantum of purchase (in %) from renewable energy sources for FY 2019-20. The matter is subjudice.

Regarding procurement of renewable power though competitive bidding, the Petitioner would like to submit that the Commission has direct TPL to procure RE power through competitive bidding and accordingly TPL will take-up RE power through competitive bidding.

Commission's view

The objection and response of the Petitioner on the same are noted. Decision will be taken on the relevant petition filed by the petitioner.

3.2.17 Regulatory Charges

The Objector has submitted that the Petitioner is trying to increase the price of electricity in the name of Regulatory Charge of 0.19 paise per unit in Ahmedabad and Rs. 0.09 per unit in Surat which are to be rejected.

Petitioner's response

The Petitioner has proposed Regulatory charge of Rs. 0.19 paise per unit in Ahmedabad and Rs. 0.09 per unit in Surat supply area mainly to recover the gap arising on account of past years under recovery. The Regulatory Charge proposed is to avoid as permanent increase in tariff and to ensure the outstanding under recoveries.

Commission's view

The Commission has discussed the issue in detail in Chapter 9 of this Order.

3.2.18 Proceedings of Suo-Motu Petition No. 1534/2015

The Objector has referred to the proceedings in Suo Motu Petition No. 1534 / 2015 and submitted that there are violations of various provisions of Electricity Act, GERC (MYT) Regulations and Tariff Policy.



Petitioner's response

The Commission has initiated the proceedings Suo Motu and directed the Petitioner to file the Petition for truing-up of FY 2014-15 and determination of tariff for FY 2016-17. There has been no irregularity or informative in the proceedings and the said proceedings attained finally.

Commission's view

Section 64 of the Electricity Act, 2003 explicitly specifies the procedure to be followed for tariff order. The Commission adheres to the provisions of Electricity Act, Tariff Policy and the GERC (MYT) Tariff Regulations, APTEL decisions and other applicable regulations.

3.2.19 Double recovery of uncovered gap of Rs. 223.11 Crore

The objector has referred to Tariff Order dated 31.03.2016 in Case No. 1553 of 2015 for FY 2016-17 of TPL- D (Surat) and stated that there is double recovery resulting in uncovered gap of Rs. 223.11 Crore.

Petitioner's response

The outstanding gap that has already been considered in previous tariff orders has not been considered again in the present petition filed. It is to submit that the proposed regulating charge is mainly to recover the gap arising on account of past years under recovery.

The Commission in the past tariff orders has approved cumulative gap which included amongst other things the then previous years' approved gap as well. Hence, at the time of truing-up, the revenue recovered for the year is required to be compared with the components against which it was approved for. Further, those components of gap have also been revised due to various applicable orders by the Hon'ble Tribunal as well as the Commission. The overall result is thus working out to be revenue gap which is required to be recovered by the Petitioner. The same has



been proposed to be recovered by way of regulatory charge to be levied in FY 2021-22.

Commission's view

The revenue (gap) / surplus was determined by the Commission in various previous orders after due analysis and so there is no duplication of recovery of revenue gap by TPL.

3.2.20 Revenue Computation for some LT Category

The Objector has referred to the revenue computation in Form 10 (A) for RGP, LTMD-1, LTMD-2. Temporary HT & LT categories for FY 2019-20 and submitted that there is difference in the computation of energy / fixed charges.

Petitioner's response

The Objector has erroneously computed the energy / fixed charges without considering the tariff schedule / computation methodology. The petitioner has computed the revenue as per the format prescribed by the Commission.

Commission' view

The Objector and the clarification given by the Petitioner are noted.

3.2.21 Revenue from FPPPA

The Objector submitted that during FY 2019-20 FPPPA charge was Rs. 2.11 / kWh, therefore for total sales of 3286.01 MU, FPPPA charges works out to Rs. 693.33 Crore. But FPPPA revenue is shown at Rs. 685.81 Crore by the petitioner.

Petitioner's Response

FPPPA revenue as approved by the Commission and as per formula given in the Tariff Order. The FPPPA revenue is booked quarterly on accrual basis considering saleable energy and the differential amount is accounted on billing of FPPPA in subsequent quarter.



Commission's View

The Petitioner has clarified the issue in his response as to how FPPPA is claimed and realized from the consumers which is self explanatory.

3.2.22 Installation of Smart Meters

The Objector has submitted that despite guidelines from Government of India Smart Meters are not yet installed leading to extra charges on public.

Petitioner's response

The technology of Smart Meters is still at nascent stage and the petitioner is evaluating the options and shall approach the Commission at appropriate time.

Commission's view

Installation of Smart Meters based on need and in a phased manner may be expedited.

3.2.23 Electricity Duty

The Objector has submitted that the Electricity Duty is very high for some category of consumers and suggested to recommend to State Government to rationalize the Electric Duty

Petitioner's response

Electricity Duty is levied as per Electricity Duty Act and the same is within the jurisdiction of the Government.

Commission's view

Electricity Duty is governed by the State Act and it does not fall within the jurisdiction of the Commission.

3.2.24 Electricity Theft Cases

The Objector has submitted that there are many case of electricity theft and the same is required to be stopped.



Petitioner response

Petitioner is making consistent efforts to contain the distribution loss and consequent to the efforts the petitioner has one of the lowest distribution losses in the country.

Commission's view

The Commission has noted the objection and response of the petitioner and directs the petitioner to continue the efforts to reduce the electricity theft.

3.2.25 Wheeling and Retail Supply

The Objector has submitted that there are no wheeling losses of the petitioner and no ground has been stated in the petition related to it. The petitioner is mixing up the issue with regard to the supply of electricity and network used for supply. The Objector also stated that there is no cost or charges for the distribution as the same are automatic in overall cost of the petitioner and the transmission tariff would be same irrespective of amount of electricity supplied.

Petitioner's response

Petition has been filed as per provisions of the GERC MYT Regulations, 2016 which inter-alia provides for segregation of ARR into wheeling and retail supply business. Accordingly, approval for determination of wheeling charges and retail supply tariff is sought.

Commission's view

The Commission has to determine the tariff for Distribution Wire Business and for Retail Supply Business in accordance with Regulation 27.2 of GERC MYT Regulation, 2016.

3.2.26 Taxes Not Regulated by GST

The Objector has stated that taxes are not regulated by GST and therefore common people are suffering from high cost. The Objector has also suggested that tariff



charges may be different but taxation should be uniform as per the policy of the Union and the State Government.

Petitioner's response

The tariff proposed by the Petitioner is exclusive of Electricity Duty, Tax on sale of electricity, Taxes and other charges levied / may be levied or such other taxes as may be levied by the Government or other Competent Authorities on bulk / retail supplies from time to time. Further, the implementation of GST is within the jurisdiction of the Government. The suggestions made by the Objector in relation to taxation or objections raised by him are beyond the ambit of the present proceeding under Section 64 (3) of the Electricity Act, 2003.

Commission' view

The issues raised by the Objector and the response of the Petitioner are noted.

3.2.27 Recovery of Past Period Dues

The Objector has referred to the under-recoveries of past years and suggested to clear such under-recoveries as any delay will attract carrying cost. Further, the Objector has also stated that Regulatory charges proposed by the Petitioner should be discontinued upon recovery of past dues.

Petitioner's response

The regulatory charge is proposed mainly to recover the gap arising on account of past years' under recovery and the same will be discontinued upon completion of recovery of such past under-recoveries. Further, the carrying cost for such unrecovered gap is the legitimate claim of the Petitioner to factor in time value of money due to deferment in recovery of gap. The recovery of carrying cost is the settled position of law.



Commission's view

The (gap) / surplus in truing up of earlier years is carried out forward to the current year as per GERC (MYT) regulations. Carrying cost is allowed for earlier years' unrecovered gap as per APTEL decisions.

3.2.28 Billing fixed charges when energy not used due to Covid Pandemic

The Objector has submitted that due to Covid Pandemic, shops, factories, were shut off in Surat areas except residential consumers, the said other consumers did not consumed energy. However, TPL has billed those consumers of fixed charges and thus wrongly interpreted the rules.

Petitioner's response

Consumer electricity consumption billing is done as per Tariff Schedule notified by the Commission.

Commission's view

Capacity charges / fixed charges have to be paid to the generators as per the agreement / arrangement made for the contracted capacity irrespective of whether energy is drawn or not. Any charges deferred now, may lead to revenue gap while truing up which will have to be allowed along with carrying cost.

3.2.29 Investment Performance

The Objector has suggested that TPL may be advised to provide figures of load weighted investment Rs.lakhs/MWhr, Rs.lakhs/MW to assess efficacy of investment effectiveness of power delivery system to end user

Petitioner's response

The petition is filed in line with the GERC (MYT) Regulations, 2016 and all the information has been furnished in the formats prescribed to be filed with the petition.



Commission's view:

The Commission has noted the suggestion of the Objector. The distribution and retail business and cost of supply thereon shall be measured in terms of Average Cost of retail sales (Rs./kWh) to the end consumers/users.

3.2.30 Segregation of Regulated and Unregulated Businesses

The Objector has suggested that the aim of the unbundling of electricity sector is to segregate the businesses based on functions ie. Generation, transmission and distribution & retail businesses to improve operational and financial efficiency in the businesses. TPL does not maintain separate accounts of regulated and unregulated business, but extract the accounts to submit to the regulator. The auditors take no responsibility for accuracy and relevance of such extracted accounts. Dividend declared are astronomical which a regulated business can not generate. Costs relating to unregulated business are loaded in to regulated business and cost-plus tariff claimed.

The regulated business shall be made into separate entity for each geographical area of operations for each function i.e. Generation, distribution, manufacturing of transformers and cables, etc. as the mixed bag creates conflict of interest and complexity to regulators while determining tariff.

Petitioner's response

The accounts are maintained and prepared in accordance with the Companies Act and submitted to the Commission as specified in the GERC (MYT) Regulations, 2016.

Commission's view:

Sections 64 of the Electricity Act, 2003 explicitly specify the procedure to be followed for tariff order. The Commission sternly adheres to the provisions of the Electricity Act, the Tariff Policy and the GERC MYT Tariff regulations, APTEL decisions and other applicable regulations and accordingly processes the petitions. Based on prudence check and validation of claims, the Commission determines the ARR and tariffs year on year.



The Commission has issued separate licenses for each area of operation and ARR and tariffs are notified separately for each area of operations and also for generation business and tariffs thereon year on year continuously post unbundling of the State power sector.

3.2.31 Uniform Tariff across the State

The Objector has suggested that uniform tariff shall be prescribed or notified for similarly placed consumer category across the State as is being implemented in other States where multiple Discoms are operating.

Petitioner's response

Determination of tariffs is the jurisdiction of the Commission. However, the costs/expenses and performance of the utilities have bearing on determination of tariffs.

Commission's view:

Sections 64 of the Electricity Act, 2003 explicitly specify the procedure to be followed for tariff order. The Commission has determined the tariff for the Petitioner Licensee in accordance with prevailing regulatory framework.



4. Truing up for FY 2019-20

4.1. Introduction

This Chapter deals with the truing up of FY 2019-20. The Commission has studied and analysed each component of the ARR for FY 2019-20 in the following paragraphs.

4.2. Energy Sales to the Consumers

Petitioner's submission:

TPL Petitioner has submitted category-wise actual energy sales for Surat area for FY 2019-20 along with the sales approved by the Commission in the MTR Order dated 24th April, 2019, as given in the Table below.

Table 4.1: Energy Sales for FY 2019-20 for TPL-D (S) area

(MU)

SI.	Category	Approved in the	Actual
No		MTR Order	Claimed
1	RGP	882.75	811.86
2	NRGP	1,262.57	1,204.16
3	LTMD	927.60	915.88
4	HT	351.92	326.95
5	Others	26.99	26.09
6	DoE units	-	1.08
7	Total	3,451.83	3,286.01

The Petitioner has submitted that the actual sales in FY 2019-20 are lower than that approved in MTR order due to combined effect of slowdown in industry, lower temperature. Further, the installed capacity of solar rooftop has reached to about 14 MW as on 31st March, 2020 which also has an impact on sales. Based on above, the major reasons for deviation in category-wise sales are enumerated hereunder:

- a) The actual sales for RGP category is lower than the MTR approved sales primarily due to lower temperature and prolonged monsoon and rising number of solar rooftop installation.
- b) The Non RGP & LTMD category comprise of sales from commercial and industrial and non-industrial consumers. The actual sales for both Non RGP and LTMD category during FY 2019-20 are lower than MTR approved sales due to slowdown of industries, mainly textile and diamond industries and Covid-19 related lockdown.



- c) In HT category, the consumption is mainly attributed to industries and commercial establishments, water works and pumping stations run by the local authority, temporary services. During FY 2019-20, the total sales in HT category were lower than approved sales mainly due to slow down of industries, wind / solar wheeling by local authority and Covid-19 related lockdown.
- d) In the Others category, the actual sales registered was marginally lower than MTR approved sales due to lower sales.

The Petitioner has further submitted that the GERC (MYT) Regulations, 2016 specifies that the variation in quantities of electricity supplied to the consumers is attributed as an uncontrollable factor and requested for the truing up of actual sales as shown in the table above.

Commission's analysis

The actual sales in FY 2019-20 were 3286.01 MUs as against 3451.83 MUs approved in the MTR Order dated 24th April, 2019 i.e. lesser by 165.82 MU. The sales as submitted by the Petitioner have been verified, compared and confirmed with the sale of energy furnished in the monthly return under Form A specified in Rule 6(1) (A) filed by TPL-D (S) with the Chief Electrical Inspector and Collector of Electricity Duty vide additional data submitted on 10.02.2021.

The Commission considers the energy sales totalling to 3286.01 MUs for FY 2019-20 as submitted by the Petitioner.

The Commission approves the energy sales as mentioned in Table 4.1 above for TPL- D (S) totalling to 3286.01 MUs for truing up for FY 2019-20.

4.3. Distribution Losses

Petitioner's submission

The Petitioner has submitted that the distribution loss for Surat distribution license area was 3.64% as per MTR Order dated 24th April, 2019 whereas the actual distribution loss is 3.43% for FY 2019-20 as given in the Table below. TPL- D (S) has been making consistent efforts to contain the distribution losses. Consequently, it has outperformed the distribution losses approved by the Commission. TPL-D (S) also submitted that the distribution loss has been marginally impacted by COVID-19



considering mismatch between power purchase and sales booking period towards the end of financial year and submitted the deviation from the approved value as shown in the Table below:

Table 4.2: Distribution Losses for FY 2019-20 as submitted by TPL-D (S)

Particulars	Approved in the MTR Order	Actual Claimed
Distribution Loss	3.64%	3.43%

TPL-D (S) has submitted that the variation in the distribution loss compared to the approved value is to be considered as uncontrollable.

Commission's analysis

The reduction in distribution losses in the licensed area has taken place due to upgrading / uprating of the distribution network, augmentation of the old assets, etc. Substantial capitalisation of assets amounting to Rs. 114.18 Crore has been done by TPL-D (S) during FY 2019-20, which has resulted in reduction in transformation losses as well as line losses and ultimately overall Distribution Losses. The Commission accepts TPL-D (S)'s submission and approves the actual Distribution Losses of 3.43% for FY 2019-20.

The Commission also accepts TPL-D (S)'s submission to treat the deviation in the distribution loss as controllable factor and share the gain accordingly.

4.4. Energy Requirement

Petitioner's submission

The Petitioner has submitted that the actual energy requirement for Ahmedabad & Surat licensee area furnished is based on the (i) actual energy sales, (ii) transmission loss and (iii) distribution loss for FY 2019-20 as given in the Table below:

Table 4.3: Energy Requirement for FY 2019-20 for TPL-D

(MUs)

Particulars	Approved in the MTR Order	Actual Claimed
Ahmedabad Supply Area	Oraci	- Ciamica
Energy Sales	8,145.80	7,822.08
Distribution loss (in %)	6.70%	4.98%
Distribution loss	584.96	409.95
Energy input at distribution level	8,730.76	8,232.04
Transmission loss	41.23	41.37
Energy Requirement (A)	8,771.99	8,273.41



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Particulars	Approved in the MTR Order	Actual Claimed
Surat Supply Area		
Energy Sales	3,451.83	3,286.01
Distribution loss (in %)	3.64%	3.43%
Distribution loss	130.39	116.72
Energy input at distribution level	3,582.22	3,402.73
220 kV/Transmission loss	28.53	28.39
Energy Requirement (B)	3,610.75	3,431.12
Total Energy Requirement (A + B)	12,382.74	11,704.53

The Petitioner submitted that the total energy requirement was met through various sources as discussed in the subsequent section.

Commission's analysis

The actual energy requirement submitted by the Petitioner for FY 2019-20 along with energy requirement as per MTR Order dated 24th April 2019 has been examined and verified by the Commission. The Commission observed that there is a reduction of 678.21 MUs in the energy requirement for TPL-D (S) and TPL-D (S) against the quantum of 12382.74 MUs approved in the MTR order.

The actual energy requirement is lower than that approved in the MTR Order due to lower energy sales and Distribution Losses. The actual energy requirement being the sum of energy sales, Transmission Losses and Distribution Losses, works out to 11704.53 MUs for FY 2019-20.

The Commission accordingly approves the energy requirement at 11704.53 MUs for truing up of FY 2019-20 as given in the above Table 4.3.

4.5. Energy Availability

Petitioner's submission

The Petitioner has submitted that the power is sourced collectively for Ahmedabad and Surat Licence area from TPL-G (APP), SUGEN, UNOSUGEN Renewable Sources of Energy and other sources such as Bilateral and purchase through Power Exchange. The source- wise power purchase is given in the Table below:



Table 4.4: Energy Availability (Net) for FY 2019-20 for Ahmedabad & Surat

(MUs)

SI.	Energy Sources	Approved in the	Actual
No.		MTR Order	Claimed
1	TPL - G (APP)	2,584.59	2,157.92
2	SUGEN	6,341.80	5,559.81
3	UNOSUGEN		1,506.50
4	Bilateral	168.56	383.80
5	Power Exchange	1,517.05	816.16
6	Renewables	1,770.73	1,275.00
7	Sub-Total	12,382.74	11,699.19
8	Add: Sale of surplus power/UI/ Wind Setoff	-	5.34
9	Total	12,382.74	11,704.53

During FY 2019-20, overall lower off-take is mainly on account of reduction in power requirement due to lower sales, reduction in distribution losses and Covid-19 / lockdown imposed in the later part of March 2020.

During FY 2019-20, based on the approval received from the Commission, the Petitioner has commenced sourcing of power from UNOSUGEN. The Petitioner has also procured power from bilateral sources and balance requirement has been fulfilled through procurement of top up power from power exchange.

The Petitioner has submitted that it has also procured power from bilateral sources and balance requirement has been fulfilled through procurement of top-up power from Power Exchange.

4.5.1 Renewable Power Purchase Obligation

Petitioner's submission

The Petitioner has submitted that the Regulation 4.1 of the GERC (Procurement of Energy from Renewable Energy Sources) Regulation, 2010 specifies the Renewable Power Purchase Obligation (RPPO). Subsequently, the Commission notified the GERC (Procurement of Energy from Renewable Sources) (Second Amendment) Regulations, 2018 specifying RPPO for the period FY 2017-18 to 2020-21. TPL-D has made all efforts to fulfill its RPPO.

The renewable energy requirement and renewable energy sourced for FY 2019-20 for TPL-D (A) and TPL-D (S) combined, is as under:



Table 4.5: RPPO submitted by TPL for FY 2019-20

SI.	Particulars	MU
No		
1	Energy Requirement	11,704.53
2	RE Procurement as per RPO	
3	Wind energy to be procured (@8.05%)	942.21
4	Solar energy to be procured (@5.50%)	643.75
5	Biomass/Bagasse/Others (@0.75%)	87.78
6	Total (14.30%)	1,673.75
7	Compliance (Non-Solar)	
8	Wind	1,031.94
9	Non-Solar REC	-
10	Compliance	1,031.94
11	Compliance (as % of Energy Requirement)	8.82%
12	Compliance (Solar energy)	
13	Solar	360.77
14	Solar-REC Solar-REC	-
15	Compliance	360.77
16	Compliance (as % of Energy Requirement)	3.08%

The Petitioner has submitted that they have approached the Commission in the matter of revision of minimum quantum of purchase (in %) from renewable energy sources for FY 2019-20 in accordance with the RPO Regulations vide its Petition No. 1901 of 2020.

Commission's analysis

The sources of power approved by the Commission in the MTR Order dated 24th April, 2019 are AMGEN, SUGEN, Bilateral Sources, Power Exchange and Renewable Energy. The Commission had approved the total quantum of power purchase at 12,382.74 MUs for TPL-D (A) and TPL-D (S) combined for FY 2019-20 in the MTR Order dated 24th April, 2019 against which the Petitioner has purchased 11,704.53 MUs during FY 2019-20. The same is due to lower transmission and distribution losses and also due to lower than the approved sales in FY 2019-20.

TPL-D has procured 1506.50 MU from UNOSUGEN which was not considered in the Power Purchase for FY 2019-20 in the MTR Order and simultaneously reduced the intake from SUGEN from 6341.80 MU approved to 5559.81 MU. It is also noted that the energy cost of UNOSUGEN was Rs. 3.91 / kWh whereas the same from SUGEN was Rs. 4.83 / kWh, thus there was saving in the cost of power procurement.



The Commission has sought reconciliation of sale of surplus power / UI / Wind setoff of $5.34 \, \text{MU}$ as per Form -2. The Petitioner submitted the details vide additional data dated 2^{nd} March 2021 as given below.

SI.	Particulars	MU
No		
1	UI	214.71
2	Renewable Purchase Settlements reflecting in UI	-95.33
3	Sale through Power Exchange	-11.29
4	Open Access Settlements	0.87
5	Energy delivered to Wind Consumers	-103.61
6	Total Sale of surplus power/UI/ Wind Setoff	5.34

The Commission notes that TPL has procured renewable energy from the generators under preferential tariff for compliance of RPO. The Commission notes that 1031.94 MU of wind energy compliance and 360.77 MU of solar energy compliance shown in the above Table 4.5 includes 56.97 MU of wind energy and 66.74 MU solar energy from consumers. The RPO targets approved by the Commission as per GERC (Procurement of energy from Renewable Sources) (Second Amendment, Regulations, 2018 for FY 2019-20 are as follows:

Table 4.6: RPO Targets approved by the Commission for TPL-D

Description	FY 2019-20
Solar	5.50%
Wind	8.05%
Others (Biomass, Small Hydro, Bagasse, MSW)	0.75%

TPL has achieved 8.82% RPO related to Non-solar and 3.08% RPO related to Solar. There is shortfall in RPO pertaining to both non-solar and solar energy purchase. The Commission notes that TPL has filed a separate Petition for compliance of RPO, which is pending for adjudication before the Commission. Therefore, as far as the compliance of RPO is concerned, the Commission will decide it in separate proceedings.

The Commission has considered the aforesaid aspects and accordingly approves the availability of energy during FY 2019-20 as shown in the Table below:

Table 4.7: Approved Energy Availability (Net) for FY 2019-20 for TPL-D (A) and TPL-D (S) (MU)

SI.	Energy Sources	Approved in	Actual	Approved in
No.		the MTR Order	Claimed	Truing Up
1.	TPL-G (APP)	2,584.59	2,157.92	2,157.92
2.	TPL-G (SUGEN)	6,341.80	5,559.81	5,559.81
3.	UNOSUGEN	-	1,506.50	1,506.50
4.	Bilateral	168.56	383.80	383.80
5.	Power Exchange	1,517.05	816.16	816.16
6.	Renewables	1,770.73	1,275.00	1,275.00
7.	Sub-Total	12,382.74	11,699.19	11,699.19
8.	Add: UI	1	5.34	5.34
	Total	12,382.74	11,704.53	11,704.53

4.6. Power Purchase Cost

Petitioner's submission

TPL has submitted the actual power purchase cost for FY 2019-20 against the power purchase cost approved in the MTR Order dated 24th April, 2019 as shown in the Table below:

Table 4.8: Power Purchase Cost projected by TPL for Ahmedabad and Surat area for FY 2019-20

(Rs. Crore)

SI.	Energy Sources	Approved in the	Actual Claimed
No		MTR Order	
1	TPL - G (APP)	1,126.85	1,027.87
2	SUGEN	3,321.38	3,358.89
3	UNOSUGEN	-	764.14
4	Bilateral	51.92	226.39
5	Power Exchange	687.22	334.74
6	Renewables	753.76	716.06
7	Total	5,941.13	6,428.09

The Petitioner has submitted that the quantum of power purchase depends on energy sales and distribution loss and the mix of power purchase depends on availability and cost of different sources at a point of time.

The variation in the power purchase cost from the MTR Order is on account of variation in sales and distribution losses, variation in actual cost with respect to the base rate along with purchase of power from short term sources to meet the shortfall during the year.



TPL has also submitted that the variation in power purchase cost is an uncontrollable component except on account variation in distribution losses and, hence, the same needs to be allowed in ARR as per Regulations.

TPL submitted that the power purchase for its Ahmedabad and Surat license areas has been carried out on collective basis and the total power purchase cost has been apportioned between Ahmadabad and Surat on the basis of usage of power. Accordingly, the allocated power purchase cost for Surat Supply area is Rs. 1884.36 Crore for FY 2019-20.

Commission's analysis

The Commission, in its MTR Order dated 24th April, 2019 had approved the power purchase plan for FY 2019-20 as per the details furnished by TPL in its Case No. 1764 of 2018. The Commission had approved power purchase for TPL-D (A) & (S) from long-term and short-term sources based on its availability during the previous three quarters of FY 2018-19.

The Commission had approved the quantum of power purchase at 12,382.74 MUs for FY 2019-20 in the MTR Order against which TPL has purchased 11,704.53 MUs. The energy requirement is evaluated based on the sale of energy and losses in the transmission and distribution system of Ahmedabad / Gandhinagar and Surat license area. The energy requirement for TPL-D (S) license area works out to 29.31% of the total energy requirement and accordingly, 29.31% of the total power purchase cost has been considered for TPL-D (S) license area.

The Commission has approved power purchase cost of Rs. 5941.13 Crore for FY 2019-20 in the MTR Order against which TPL has incurred Rs. 6428.09 Crore.

The Commission observes that the total power purchase cost has increased by Rs. 486.96 Crore for FY 2019-20 over that approved in the MTR Order. The main reason for the increase in power purchase cost in FY 2019-20 is increase in the variable cost of purchase from SUGEN power plant. TPL-D has purchased power from SUGEN at a variable cost of Rs. 4.83/kWh as against Rs. 3.98/kWh approved by the Commission in the MTR Order. The generation cost from SUGEN plant has increased due to increase in the fuel gas price.



TPL-D has also purchased power from UNOSUGEN at variable cost of Rs. 3.91 / kWh based on the approval from the Commission which has reduced the power purchase cost considerably.

The Petitioner has procured power from bilateral sources to meet the shortfall of energy from tied-up sources and balance requirement has been fulfilled through procurement of top up power from power exchange. The Petitioner has procured short-term power from Indian Energy Exchange (IEX) at the rate of Rs. 4.10 / kWh as submitted in Form 2. The Commission has noted the increasing trend of rates in the Power Exchange. The Petitioner has purchased power from bilateral sources at Rs. 5.90 / kWh as submitted in Form 2. Similarly, the bilateral power price during the MTR period was taken on an average price prevailing during FY 2018-19, which was around Rs. 3.08 / kWh which went up to Rs. 5.90 / kWh during the truing up period i.e. FY 2019-20. These are the major reasons which have increased the power purchase cost of TPL.

The Commission has specified the minimum RPO to be fulfilled by the Petitioner as per the GERC (RPO) Regulations. The break-up of purchase from Wind and Solar RE sources is given in the Table below.

Table 4.9: Break-up of purchase from RE sources for FY 2019-20

SI. No.	Particulars	Quantum (MU)	Variable Cost (Rs./kWh)	Total Cost (Rs. Crore)
1	Wind	980.97	4.64	455.59
2	Solar	294.03	8.86	260.47
3	Total Renewable	1275.00	5.62	716.06

The Commission has duly verified the annual accounts of TPL-D, Ahmedabad and Surat and the FPPPA approved in 4 (four) quarters of FY 2019-20.

The generation cost of TPL-G (APP) has been considered as approved for TPL-G (APP) for FY 2019-20 in truing-up in Case No. 1925/2021 based on scheduled energy as per GERC MYT Regulations, 2016.

The Commission has approved the power purchase cost for FY 2019-20 as given in the Table below:



Table 4.10: Approved Power Purchase Cost for TPL-D (A) and TPL-D (S) for FY 2019-20 (Rs. Crore)

Energy Sources	Approved in the	Actual Claimed	Approved in Truing
	MTR Order		Up
TPL - G (APP)	1,126.85	1,027.87	1027.78
SUGEN	3,321.38	3,358.89	3358.89
UNOSUGEN	-	764.14	764.14
Bilateral	51.92	226.39	226.39
Power Exchange	687.22	334.74	334.74
Renewables	753.76	716.06	716.06
Total	5,941.13	6,428.09	6428.00

Considering the approved power purchase cost of Rs. 6428.00 Crore for the approved total energy procurement of 11,704.53 MUs, the per unit power purchase cost works out to Rs. 5.491 / kWh for FY 2019-20.

Since, the Commission has approved the energy requirement of TPL-D (S) licence area at its periphery which is 3431.11 MUs, i.e. 29.31% of the total power purchase quantum, the power purchase cost for TPL-D (S) licence area is computed at Rs. 1884.33 Crore.

The Commission accordingly approves the power purchase cost at Rs. 1884.33 Crore for TPL-D (S) licence area in the True-Up for FY 2019-20.

4.6.1 Sharing of Gains/Losses due to reduction in Distribution Losses

Petitioner's submission

The variation in distribution losses has resulted in reduction in the energy requirement, which in turn has reduced the cost of power purchase. Accordingly, the reduction in power procurement cost due to lower distribution losses is treated as controllable.

For the purpose of calculation of gains on account of reduction in distribution loss, the loss level approved by the Commission in Case No. 1628 of 2016 vide order dated 9th June, 2017 has been considered as base level by the Petitioner the gains due to reduction in distribution loss at Rs. 3.59 Crore. The calculation of gains on account of reduction in distribution loss is quantified as per the table below.



Table 4.11: Gain due to reduction in energy requirement for FY 2019-20 claimed by TPL-D (S)

Particulars	Unit	Legend	Actual Claimed
Actual Energy purchased at distribution level	MU	(a)	3,402.73
Energy Sales	MU	(b)	3,286.01
Wheeling Energy - OA/RE	MU	(c)	50.23
Total wheeled units	MU	(d) = (b)+(c)	3,336.25
Approved Distribution Loss	%	(e)	3.64%
Energy required at distribution level at approved	MU	(f) (a) //a (a))	3,462.27
loss		(f) = (d)/(1-(e))	
Difference	MU	(g) = (f)-(a)-(c)	9.31
Units recovered as loss	MU	(h)	2.77
Reduction in Energy Requirement	MU	(i) = (g)-(h)	6.54
Average PPC	Rs./kWh	(j)	5.49
Savings	Rs. Crore	(k) = (i)*(j)/10	3.59

Commission's analysis

The Commission has approved distribution loss at 3.64% in the MTR Order dated 24th April, 2019 whereas TPL has claimed the actual distribution loss at 3.43% for FY 2019-20. The Commission has worked out gain on account of reduction in distribution losses as shown in the Table below:

Table 4.12: Approved Gains due to reduction in Distribution Losses for FY 2019-20

Particulars	Unit	Legend	Approved in
			Truing Up
Actual energy purchased at distribution	MU	а	3,402.72
level			
Energy Sales	MU	b	3,286.01
Wheeling of energy	MU	С	50.23
Total energy wheeled	MU	d=b + c	3,336.24
Approved Distribution Loss	%	е	3.64%
Energy required at distribution			3,462.27
level at approved loss	MU	f=d/(1-e)	
Difference	MU	g=(f)-((a)+ (c))	9.31
Units recovered as loss	MU	h	2.77
Reduction in Energy Requirement	MU	i=g-h	6.54
Average PPC	Rs/kWh	j	5.4919
Savings	Rs. Cr	k=i * j/10	3.59

The Commission, accordingly, approves the gain on account of reduction in distribution loss at Rs. 3.59 Crore during FY 2019-20 for truing up.



4.7. Fixed Charges

4.7.1 Operation and Maintenance (O&M) Expenses

Petitioner's submission

TPL-D (Surat) has claimed Rs.131.42 Crore as O&M expenses as against the total O&M expenses of Rs.133.31 Crore approved for FY 2019-20 in the MTR Order dated as detailed in the Table below:

Table 4.13: O&M expenses claimed by TPL-D (Surat) for FY 2019-20

(Rs. Crore)

		(1.51 5.515)
Particulars	Approved in MTR order	Actuals claimed
O&M Expenses	133.31	131.42

The Petitioner has submitted that the variation in O&M expenses should be considered as controllable except change in law and the factors beyond the control.

It was further submitted that the Government of India vide Notification dated 29.03.2018 has increased the upper ceiling of gratuity to Rs.20 lakhs from Rs.10 lakhs resulting in increase in the employee cost. The said notification i.e. amendment in the Payment of Gratuity Act, 1972 is a change in law in terms of Regulation 2(15) of the MYT Regulations, 2016 and has resulted in the increase in Employee Cost by Rs.0.76 Crore for FY 2019-20.

The Petitioner has requested the Commission to consider the increase in O&M expenses on account of change in law as uncontrollable and allow gains/losses accordingly.

Commission's analysis

TPL-D (Surat) has submitted the actual O&M expenses at Rs.131.42 Crore inclusive of impact of "Re-measurement of Defined Benefit Plans" of Rs.3.36 Crore in the truing-up for FY 2019-20. It is observed that as per Annual Accounts the O&M Expenses are Rs.128.72 Crore. The head-wise analysis is as under:

a) Employee Expenses: Employee expenses as per annual accounts are Rs.61.94 Crore net of expenses capitalised of Rs.25.29 Crore. TPL-D (Surat) has added the commission to Non-Executive Directors of Rs.0.76 Crore (from A&G expenses head) and expense towards re-measurement of defined benefit plans of Rs.3.36 Crore from P & L statement. Accordingly, the employee expenses are Rs.66.06 Crore. The Commission has approved the employee expenses as Rs.66.06 Crore.



b) A&G Expenses: A&G Expenses as per annual accounts is Rs.36.50 Crore (net of capitalisation of Rs.8.71 crore). The Petitioner has claimed the A&G Expenses after reduction on account of Commission to Non-Executive Directors (Rs.0.76 Crore), Bad Debts Written off-net ((-) Rs.0.06 Crore), Insurance Claim Receipt (Rs.0.02 Crore), DSM expenses (Rs.0.54 Crore), Allowance of Doubtful Debts (Rs.0.16 Crore), Advertisement Expenses (Rs.0.05 Crore) and claimed Lease payments (Rs.0.05 Crore) and accordingly, claimed Rs.35.08 crore (net of capitalisation of Rs.8.71 crore) towards A&G expenses in true up for FY 2019-20.

The Commission has considered Insurance Claim Receipt (Rs.0.02 crore) as a part of Non-Tariff Income and the same has not been reduced from A&G expenses. Accordingly, the Commission approves the A&G expense of Rs.35.10 Crore.

c) R&M Expenses: The Petitioner has claimed R&M expenses of Rs.30.28 Crore as per annual accounts for FY 2019-20 and the Commission approves the same.

The Commission, accordingly, approves the O&M expenses of Rs.131.44 Crore, for truing up of FY 2019-20.

Further as per Regulation 22 of the GERC (MYT) Regulations, 2016 the variation in O&M expenses is to be considered as controllable except the change in law. The increase in employee cost due to the amendment in the Payment of Gratuity Act, 1972 has resulted in the increase in Employee Cost by Rs.0.76 Crore for FY 2019-20. The same has been considered as uncontrollable and not subject to sharing of gain/(loss).

Accordingly, as per the GERC (MYT) Regulations, 2016 Gain/(Losses) on account of O&M expenses in the truing up of FY 2019-20 is approved by the Commission as given in the Table below:

Table 4.14: O&M Expenses approved by the Commission for FY 2019-20

(Rs. Crore)

Particulars	Approved in	• •		Gains/ (Losses)	, ,
	the MTR Order	Truing Up	+/(-)	due to	due to
				Controllable	Uncontrollable
				Factors	Factors
O&M Expenses	133.31	131.44	1.87	2.63	(0.76)



4.7.2 Capital Expenditure, Capitalization and Sources of Funding

a) Capital Expenditure

Petitioner's submission

The petitioner has claimed capital expenditure of Rs.114.18 Crore in the truing up for FY 2019-20, based audited annual accounts as against Rs.314.08 Crore approved in the MTR Order dated 24th April, 2019 as per the details given in the Table below:

Table 4.15: Capital expenditure claimed by TPL-D (Surat) for FY 2019-20

(Rs. Crore)

Particulars	Approved in the MTR order	Actual Claimed
EHV	185.36	48.24
HT Network	30.89	29.16
LT Network	23.07	23.52
Special projects	27.41	2.71
Civil related works	0.25	0.48
Meter management	15.08	7.75
Customer care	0.15	
IT	1.28	1.36
Miscellaneous	30.58	0.96
Total	314.08	114.18

TPL-D (Surat) has submitted that the capital expenditure incurred in FY 2019-20 is Rs. 114.18 Crore which is lower than the approved value. TPL-D (Surat) has reported the reasons for the major variances in the actual expenditure against the approved expenditure as detailed below:

- (a) <u>EHV Network</u> The Commission had approved the capital expenditure of Rs.185.36 Crore for EHV. In this regard, the Petitioner has incurred the expenditure of Rs.48.24 Crore. The major variation is on account of expenditure incurred towards the following:
 - New 220kV EHV SS: 220 kV C-GIS along with 220 kV & 66 kV inter-connectivity was initiated in FY 2017-18. During FY 2019-20 expenditure has been incurred towards work of (i) Commissioning of 220 kV control & relay panel, GIS panel and ICT, (ii) 220 kV connectivity between C-Puna, (iii) 220 kV connectivity between FGIS CGIS, and (iv) 66kV connectivity between C-A station.
 - <u>220kV connectivity with GETCO</u>: 220 kV cable connectivity with GETCO was proposed during MTR to ensure reliability of power supply to TPL, Surat. The



technical proposal is under evaluation and submitted to GETCO for finalization. Capex shall be incurred as per finalized scheme.

- 220 kV EHV Line/Cable: Capex has been incurred towards replacement of porcelain insulators by polymeric insulators in 220 kV network to improve reliability.
- New 66 kV substation: Proposed to establish new 66 kV substation at Katargam and Bhatena during the MTR. Land procurement for Katargam has been initiated in FY 2020-21 and for Bhatena, appropriate land at reasonable rates is yet to be finalised.
- Additional 66 kV connectivity to cater to load growth: Work on additional 66 kV cable connectivity between Puna-E has been completed in FY 2019-20 and work
 Bhatar H S/C Cable and Puna K S/C Cable had to be rescheduled due to prolonged monsoon.
- Augmentation / Replacement of Power Transformer & ICT: Capex incurred for Augmentation / Replacement of Power Transformer & ICT related to protection relay of Power Transformer and balance capex for power transformer at F2 substation has been carried forward based on transformer test results
- <u>Renovation and Replacement in existing EHV SS:</u> Capex incurred towards renovation and replacement of various equipment in EHV Substations.
- <u>Technology upgradation and capacity enhancement of EHV SS:</u> Capex incurred in B Station.
- <u>Supporting Infrastructure:</u> Deferred capex relating to ABT & SCADA system upgradation based on change in scope and lower cost incurred.
- (b) HT The Commission had approved the capital expenditure of Rs.30.89 Crore for HT network and expenditure of Rs.29.16 crore is incurred. The major variation is because of (i) less number of Distribution Substation Automation carried out (ii) Less number of HT/LT panel requirement (iii) Less number of HT applications; and (iv) Lower requirement of Distribution Transformers upgradation based on loading condition.
- (c) <u>LT</u> The Commission had approved the capital expenditure of Rs.23.07 Crore for LT network and expenditure of Rs.23.52 crore is incurred due to higher number



- of applications received and longer length of LT network than estimated and also towards replacement of deteriorated, aged and unsafe MSP.
- (d) Meter management The Commission had approved the capital expenditure of Rs.15.08 Crore. The major variation is because of (i) Lower quantum of meter requirement for replacement than estimated; (ii) Deferment of fully automatic testing bench and equipment; and (iii) Deferment of central storage system.
- (e) Special Projects The Commission had approved capital expenditure of Rs. 27.41 Crore and capex of Rs.2.67 crore is incurred. Deviation in actual expenditure is due to rescheduling the execution of sub-stores with Power Supply Centers. The capital expenditure proposed towards PSC will be incurred based on revised comprehensive design.
- (f) Others Capex of Rs.1.36 Crore is incurred for hardware & software towards IT and communication and Rs.0.48 Crore for civil works for offices and distribution substation.

Commission's analysis

The Petitioner has claimed CAPEX of Rs.114.18 Crore in truing up for FY 2019-20, against CAPEX of Rs.314.08 Crore approved in MTR Order 24.04.2019.

The Commission has observed that according to the audited annual accounts for FY 2019-20, the capex is at Rs.114.18 crore. The petitioner has furnished the project-wise/scheme-wise/work-wise details of CAPEX in the Form 4.2 of the petition.

The Commission opines that in order to meet the system demand and to provide 24x7 uninterrupted reliable quality power supply, necessary augmentation and upgradation of EHV / HV / LV network is required. TPL-D (Surat) had submitted the CAPEX plan for the MYT period and accordingly CAPEX and capitalization is being undertaken and it is approved based on the yearly progress.

The Commission sought for additional information regarding difference in the CAPEX during the FY 2019-20 and capitalization against the approval of the Commission in MTR Order. With reference to the Commission's query regarding detailed information for the deviation in CAPEX from the approved plan as per MTR Order, the Petitioner has submitted the details. The details of the approved CAPEX as per MYT Order and



the actual CAPEX and the capitalization during FY 2019-20 is as mentioned in the Table below:

Table 4.16: Details of Capex break-up along with Project Date & Date of Completion submitted by TPL-D (Surat) for FY 2019-20

(Rs. Crore)

	0		1	Astro-l
Project Title	Capex approved in MTR order	Project Start Date	Estimated Completion date	Actual capex during FY 2019-20
EHV				
New EHV 220 kV SS	91.55	01.04.2017	31.03.2022	42.89
220 kV Connectivity with GETCO	17.91			
220 kV EHV Lines/cables	0.57	01.04.2019	31.01.2020	0.51
New 66 kV substations	43.76			
Additional 66 kV connectivity	18.63	01.04.2018	31.08.2019	3.05
Additional/Augmentation/Replacement of Power Transformer & ICT	2.97	01.04.2018	30.06.2019	0.08
Renovation and Replacement	1.25			0.79
Technology upgradation & capacity enhancement of EHV SS		01.04.2017	31.12.2020	0.06
Support Infrastructure	8.72	01.04.2020	31.12.2020	0.85
Total EHV	185.36			48.24
HT				
11 kV HT Network development & modernisation	1.78	01.04.2019	31.03.2020	1.83
Replacement/shifting of HT network	1.81	01.04.2019	31.03.2020	1.77
Distribution SS automation	5.14	01.04.2019	31.03.2020	2.71
New Distribution substations	8.86	01.04.2019	31.03.2020	9.35
New HT consumers	1.61	01.04.2019	31.03.2020	1.42
Additional/Augmentation/Replacement of Distribution Transformers	9.21	01.04.2019	31.03.2020	10.17
Installation/replacement of 11 kV Switchgear/LT	0.38	01.04.2019	31.03.2020	0.23
panel/Breaker and acc. For safety				
Reactive power compensation	1.73	01.04.2019	31.03.2020	1.61
Supporting Infrastructure	0.37	01.04.2019	31.03.2020	0.06
Total HT	30.89			29.16
LT				
New connections/load extension	13.92	01.04.2019	31.03.2020	15.21
LT network development & modernisation	5.51	01.04.2019	31.03.2020	4.82
Replacement of MSP/MB for safety and reliability	3.59	01.04.2019	31.03.2020	3.48
Supporting Infrastructure	0.05			
Total LT	23.07			23.51
Special projects				
Establishment of Central stores at ESS	26.32	01.04.2018	31.03.2020	0.03
Infrastructure development for PSC & other offices	0.79	01.04.2018	31.03.2020	2.67
GIS	0.30			
Total	27.41			2.71
Civil	0.25	01.04.2019	31.03.2020	0.48
Meter management	15.08	01.04.2019	31.03.2020	7.75
Customer care	0.15	01.04.2019		
IT	1.28	01.04.2019	31.03.2020	1.36
Miscellaneous / Others	30.58	01.04.2019	31.03.2020	0.96
Sub-total Sub-total	47.34			10.55
Grand Total	314.08			114.18



Table 4.17: Approved CAPEX as per MYT Order & Actual CAPEX and Capitalization during FY 2019-20 for TPL-D (Surat)

(Rs. Crore)

Project Title	Capex proposed for FY 2019-20 in MTR petition	Capex approved for FY 2019-20 in MTR order	Capex claimed and approved in truing up for FY 2019-20	Capitalisati on proposed for FY 2019-20 in MTR petition	Capitalisati on approved for FY 2019-20 in MTR order	Capitalisation claimed in truing up for FY 2019-21	Difference proposed Vs approved capitalisation for FY 2019-20
Α	В	С	D	Е	F	G	H=(F-G)
EHV	04.55	04.55	42.00	FC 24	22.66	F2.40	40.03
New EHV 220 kV SS 220 kV Connectivity with GETCO	91.55 17.91	91.55 17.91	42.89	56.31 17.91	32.66 10.39	52.48	-19.82 10.39
220 kV Connectivity with GETCO	0.57	0.57	0.51	0.57	0.33	0.51	-0.18
New 66 kV substations	43.76	43.76	0.51	42.76	24.8	0.51	24.8
Additional 66 kV connectivity	18.63	18.63	3.05	18.63	10.81	4.94	5.87
Additional/Augmentation/Replacem ent of Power Transformer & ICT	2.97	2.97	0.08	2.97	1.72	0.08	1.64
Renovation and Replacement	1.25	1.25	0.79	1.25	0.73	0.62	0.11
Technology upgradation & capacity enhancement of EHV SS			0.06		0	0.06	-0.06
Support Infrastructure	8.72	8.72	0.85	8.72	5.06	0.52	4.54
Total EHV	185.36	185.36	48.24	149.12	86.49	59.22	27.27
HT							
11 kV HT Network development & modernisation	1.78	1.78	1.83	1.78	1.03	1.83	-0.8
Replacement/shifting of HT network	1.81	1.81	1.77	1.81	1.05	1.77	-0.72
Distribution SS automation	5.14	5.14	2.71	5.14	2.98	2.71	0.27
New Distribution substations	8.86	8.86	9.35	8.86	5.14	8	-2.86
New HT consumers	1.61	1.61	1.42	1.61	0.93	1.85	-0.92
Additional/Augmentation/Replacem ent of Distribution Transformers	9.21	9.21	10.17	9.21	5.34	9.71	-4.37
Installation/replacement of 11 kV Switchgear/LT panel/Breaker and acc. For safety	0.38	0.38	0.23	0.38	0.22	0.23	-0.01
Reactive power compensation	1.73	1.73	1.61	1.73	1	1.61	-0.61
Supporting Infrastructure	0.37	0.37	0.06	0.37	0.21	0.06	0.15
Total HT	30.89	30.89	29.16	30.89	17.92	27.77	-9.85
LT							
New connections/load extension	13.92	13.92	15.21	13.92	8.07	15.27	-7.2
LT network development &	5.51	5.51	4.82	5.51	3.2	4.77	-1.57
modernisation Replacement of MSP/MB for safety	3.59	3.59	3.48	3.59	2.08	3.47	-1.39
and reliability Supporting Infrastructure	0.05	0.05		0.05	0.03		0.03
Total LT	23.07	23.07	23.51	23.07	13.38	23.52	-10.14
Special projects	25.07	23.07	25.51	25.07	15.56	25.52	10.17
Establishment of Central stores at ESS	26.32	26.32	0.03	0.79	0.46	0.05	0.41
Infrastructure development for PSC & other offices	0.79	0.79	2.67	16.87	9.78		9.78
GIS	0.3	0.3		0.3	0.17	0.9	-0.73
Total	27.41	27.41	2.71	17.96	10.42	0.96	9.46
Civil	0.25	0.25	0.48	0.25	0.15	0.41	-0.27
Meter management	15.08	15.08	7.75	15.08	8.75	7.61	1.14
Customer care	0.15	0.15		0.15	0.09		0.09
IT	1.28	1.28	1.36	1.28	0.74	1.36	-0.62
Miscellaneous / Others	30.58	30.58	0.96	18.05	10.47	0.78	9.69
Sub-total	47.34	47.34	10.55	34.81	20.19	10.16	10.03
Grand Total	314.08	314.08	114.18	255.85	148.39	121.63	26.76



From the said details, it is observed that the major deviation in the capital expenditure is on account of deviation in EHV works. Against approved capital expenditure of Rs.185.36 Crore for EHV works, the Petitioner has incurred capital expenditure of Rs.48.24 Crore. Under the head of EHV works, major expenditure has been incurred towards 220 kV control and relay panel and ICT, 220 kV connectivity between C – Puna, FGIS-CGIS and C – A station 66 kV connectivity. Replacement of porcelain insulators by polymeric insulators in 220 kV network.

The capex in respect of works of 220 kV connectivity with GETCO is under technical evaluation and capex of New 66 kV substations at Katargam and Bhatena, land procurement for Katargam is initiated in FY 2020-21 and land for other SS is yet to be finalized.

Capital expenditure related to HT network of Rs.29.16 Crore, major capex has been incurred towards augmentation/replacement of distribution transformers based on load conditions. Expenditure has also been incurred for installation of new distribution transformers. Capital expenditure towards LT network of Rs.23.52 Crore has been incurred towards release of new connections / load extension, LT network development and modernisation and replacement of MSP/MB for safety and reliability.

The planned capex for establishment of Stores, the capex incurred is Rs.0.03 crore against Rs.26.32 crore approved in MTR order, is due to rescheduling the execution of sub-stores with Power Supply Centers.

The Commission has verified from the annual accounts that the Petitioner has incurred capital expenditure of Rs. 114.18 Crore during FY 2019-20.

The Commission has considered the opening CWIP at Rs.39.88 crore based audited annual accounts for FY 2019-20.

The Commission based on the audited annual accounts of FY 2019-20 has considered the opening CWIP, capex and capitalisation during the year and closing CWIP in true up for FY 2019-20 as given in the table below:



Table 4.18: Capital works in progress (CWIP) approved in true up for FY 2019-20 for TPL-D (Surat)

(Rs. Crore)

Sl. No.	Particulars	Approved in truing up
1	Opening CWIP	39.88
2	Capex during the year	114.18
3	Less: Capitalisation	121.63
4	Closing CWIP (1+2-3)	32.43

The Commission, accordingly, approves the CWIP in truing up for FY 2019-20 as detailed in the table above.

b) Capitalization and Gross Fixed Assets

Petitioner's submission

TPL-D (Surat) has claimed a sum of Rs.121.63 Crore towards capitalization, against the approved capitalization of Rs.148.39 Crore for FY 2019-20 in the MTR Order dated 24.04.2019.

Commission's analysis

The Petitioner has claimed capitalisation of Rs.121.63 Crore in truing up for FY 2019-20, against capitalisation of Rs.148.39 Crore approved by the Commission in MTR Order 24.04.2019 in Case no.1765 of 2018.

The Commission has observed that there is significant variation in the value of Opening GFA in the Annual Accounts and Petition. TPL-D (Surat) clarified that the Fixed Asset Schedule in Annual Accounts is on NFA basis as per Ind-AS. However, TPL-D (Surat) has submitted fixed asset schedule in the petition on GFA basis as per the GERC (MYT) Regulations, 2016 vide additional details dated 22nd January, 2020.

The Commission has approved closing GFA at Rs.1810.20 crore in true up for FY 2018-19 and the same is considered as opening GFA for FY 2019-20.

The Commission has observed that according to the audited annual accounts for FY 2019-20, the capitalisation is at Rs.121.63 crore. The petitioner has furnished details of asset wise capitalization in Form 4.2 which is depicted in the Table below:



Table 4.19: Break up of capitalised assets for FY 2019-20

(Rs. Crore)

Accet Classification	(RS. Crore
Asset Classification	Actual Capitalisation
EHV	Capitalisation
New 220 kV EHV SS	52.48
220 kV EHV Line/Cable	0.51
Additional 66 kV connectivity	4.94
Additional/Augmentation/Replacement of Power transformer & ICT	0.08
Renovation and Replacement in existing EHV SS	0.62
Technology upgradation and capacity enhancement of EHV SS	0.02
Support Infrastructure	0.52
Total EHV	59.22
HT	33.22
11 kV HT network development and modification	1.83
Replacement/shifting of HT network	1.77
Distribution substation automation	2.71
New distribution substations	8.00
New HT Consumers	1.85
Additional / Augmentation / Replacement of Dist. transformer	9.71
Installation / Replacement of 11 kV S/Gear / LT Panel / Breaker and Acc.	0.23
for Safety	0.23
Reactive Power compensation	1.61
Supporting Infrastructure - HT	0.06
Total HT	27.77
LT	
Normal connections / Load extension	15.27
LT network development and modification	4.77
Replacement of MSP/MB for Safety and reliability	3.47
Total LT	23.52
Special projects	
Establishment of Central Store at ESS	0.05
Infrastructure development for PSC and other offices	0.90
Total Meters	0.96
Civil	0.41
Meter management	7.61
IT	1.36
Others	0.78
Grand Total	121.63

Further, the Commission has sought the following details with respect to the capitalization of the assets during the FY 2019-20.



Table 4.20: Details of CEI Certificates & Transformers for TPL-D (Surat) for FY 2019-20

Capex Head	Voltage level/ Voltage ratio	Description	CEI inspection date	Location
	220/66 kV	Transformer 160000 KVA	20.06.2019	
	220/66 kV	Transformer 160000 KVA	20.06.2019	at C receiving
EHV	245 kV	HT Breaker 3150 AMP	20.06.2019	station
	245 kV	HT Breaker 3150 AMP	20.06.2019	
	630 KVA	Transformer 630 KVA	17.05.2019	Vakarsang

Table 4.21: Details of CEI Certificates & UG cabling for TPL-D (Surat) for FY 2019-20

Capex Head	Voltage level/ Voltage ratio	Description	Length of line (KM)	CEI inspection date	Type of Conductor	Location from	Location to
		220 kV XLPE			1200		
	220 kV	UG Cable	4.08	09.04.2019	sq.mm	Puna	C - GIS
ELIV/		66 kV XLPE UG			1200		
EHV	66 kV	Cable	2.40	20.07.2019	sq.mm	Puna	E Station
		66 kV XLPE UG			12000		
	66 kV	Cable	2.40	20.07.2019	sq.mm	C - GIS	A Station

The Commission has noted the submissions of the Petitioner regarding the capital expenditure as well as capitalisation of assets. The Commission notes that TPL-D (Surat) has upgraded and uprated some of the existing sub-stations and lines as well as switchgears.

The Commission has verified the energisation of EHV system during FY 2019-20 from the Certificate of energisation issued by the Chief Electrical Inspector and details of loading of newly created EHV network, as submitted vide additional details dated 10th February, 2021, 2nd March, 2021 and 11th March, 2021 which substantiates that the assets created through CAPEX have been put to service.

Based on the above observations and verification from the annual accounts, the Commission approves the capitalization of Rs.121.63 Crore in truing up for FY 2019-20 as shown in the Table given below:

Table 4.22: Capitalisation approved for TPL-D (Surat) for FY 2019-20

(Rs. crore)

			(KS. Crore)
Project Title	Capitalisation	Capitalisation	Capitalisation
	approved for	claimed in	approved in
	FY 2019-20 in	truing up for	truing up
	MTR order	FY 2019-21	- ,
EHV			
New EHV 220 kV SS	32.66	52.48	52.48
220 kV Connectivity with GETCO	10.39		
220 kV EHV Lines/cables	0.33	0.51	0.51
New 66 kV substations	24.8	0.51	0.51
Additional 66 kV connectivity	10.81	4.94	4.94
Additional/Augmentation/Replacement of Power	1.72	0.08	0.08
Transformer & ICT	1.72	0.08	0.08
Renovation and Replacement	0.73	0.62	0.62
	0.73	0.02	0.02
Technology upgradation & capacity enhancement of EHV SS			
Support Infrastructure	5.06	0.52	0.52
Total EHV	86.49	59.22	59.22
HT			
11 kV HT Network development & modernisation	1.03	1.83	1.83
Replacement/shifting of HT network	1.05	1.77	1.77
Distribution SS automation	2.98	2.71	2.71
New Distribution substations	5.14	8	8
New HT consumers	0.93	1.85	1.85
Additional/Augmentation/Replacement of Distribution	5.34	9.71	9.71
Transformers			
Installation/replacement of 11 kV Switchgear/LT	0.22	0.23	0.23
panel/Breaker and acc. For safety			
Reactive power compensation	1	1.61	1.61
Supporting Infrastructure	0.21	0.06	0.06
Total HT	17.92	27.77	27.77
LT			
New connections/load extension	8.07	15.27	15.27
LT network development & modernisation	3.2	4.77	4.77
Replacement of MSP/MB for safety and reliability	2.08	3.47	3.47
Supporting Infrastructure	0.03	3.17	3.17
Total LT	13.38	23.52	23.52
Special projects	13.30	25.52	25.52
Establishment of Central stores at ESS	0.46	0.05	0.05
Infrastructure development for PSC & other offices	9.78	0.03	0.03
•		0.00	0.00
GIS	0.17	0.90	0.90
Total	10.42	0.96	0.96
Civil	0.15	0.41	0.41
Meter management	8.75	7.61	7.61
Customer care	0.09		
IT .	0.74	1.36	1.36
Miscellaneous / Others	10.47	0.78	0.78
Sub-total	20.19	10.16	10.16
Grand Total	148.39	121.63	121.63

Further, TPL-D (Surat) has de-capitalised assets to the extent of Rs.11.46 Crore during FY 2019-20. However, it is observed that deductions from GFA is at Rs.5.95 crore as per (Note 4.1) the audited annual accounts for FY 2019-20. The Commission vide letter dated 27.01.2021 has addressed the petitioner to furnish the details for the discrepancy. The Petitioner vide letter dated 6th February 2021 has reported that the



fixed asset shown in the annual accounts is on Net Fixed Assets (NFA) basis as per Ind AS and the same is shown in the petition on Gross Fixed Assets (GFA) basis as per GERC MYT Regulations. Hence, the Commission considers de-capitalised assets at Rs.11.46 Crore and accordingly adjustments made to GFA in truing up for FY 2019-20

The Commission, in view of the above and based on the values reported through audited annual accounts has considered the capex, capitalisation, asset deductions and closing GFA in true up for FY 2019-20 as given in the table below:

Table 4.23: Gross Fixed Assets approved in true up for FY 2019-20 for TPL-D (Surat)

(Rs. Crore)

SI. No.	Particulars	Approved in Truing up
1	Opening GFA	1810.20
2	Assets capitalized during the year	121.63
3	Less: Deductions	11.46
4	Closing GFA (1+2-3)	1920.37

The Commission, accordingly, approves the GFA in truing up for FY 2019-20 as detailed in the table above.

c) Funding of CAPEX

Petitioner's submission

TPL-D (Surat) has submitted the capitalisation and funding of CAPEX, as detailed in the Table below:

Table 4.24: Funding of capitalization claimed by TPL-D (Surat) for FY 2019-20

(Rs. Crore)

Particulars	Approved in the	Claimed by the
	MTR order	petitioner
Opening GFA	1777.95	1810.20
Addition to GFA	148.39	121.63
Deletion from GFA		11.46
Closing GFA	1926.34	1920.37
Less: SLC Additions	7.71	14.04
Balance Capitalization	140.68	96.13
Normative Debt @ 70%	98.48	67.29
Normative Equity @ 30%	42.20	28.84

Commission's analysis

The Commission as deliberated in earlier paragraph has considered de-capitalised assets to the extent of Rs.11.46 Crore during FY 2019-20 and reduced the



capitalisation during the year by deletion of the said amount from the fixed assets to work out net capitalisation for debt and equity component as provided in Regulation 33 of the GERC (MYT) Regulations, 2016.

The normative debt-equity considered towards additional capitalisation are Rs.67.29 Crore and Rs.28.84 Crore, respectively. The Commission verified the above details and approves the capitalisation and funding thereof as shown in the Table below for truing up of FY 2019-20:

Table 4.25: Funding of capitalization approved for TPL-D (Surat) for FY 2019-20 (Rs. Crore)

Particulars	Approved in the	Claimed by the	Approved in
	MTR Order	Petitioner	Truing-up
Opening GFA	1777.95	1810.20	1810.20
Addition to GFA	148.39	121.63	121.63
Deletion from GFA	-	11.46	11.46
Closing GFA	1926.34	1920.38	1920.37
Less: SLC Additions	7.71	14.04	14.04
Balance Capitalization	140.68	96.13	96.13
Normative Debt @ 70%	98.48	67.29	67.29
Normative Equity @ 30%	42.20	28.84	28.84
T	·		

The Commission approves the capitalization and funding as shown in the above Table in the truing up for FY 2019-20.

4.7.3 Depreciation

Petitioner's submission

TPL-D (Surat) has claimed a sum of Rs.64.30 Crore towards depreciation in the truing up for FY 2019-20 as against Rs.52.96 Crore approved in the MTR Order for FY 2019-20 as shown in the Table below:

Table 4.26: Depreciation claimed by TPL-D (Surat) for FY 2019-20

(Rs. Crore)

Particulars	Approved in the MTR order	Claimed by the Petitioner
Depreciation	52.96	64.30

TPL-D (Surat) has submitted that the depreciation rates, as per CERC (Terms and Conditions of Tariff) Regulations, 2004, are applied on the Opening GFA of FY 2009- 10 and for addition of assets from 1st April, 2009 onwards, the depreciation has been computed at the rates specified in the GERC Regulations. The Petitioner has submitted that depreciation is an uncontrollable item.



Commission's analysis

The Commission has considered the opening balance of GFA for FY 2019-20 equal to the closing balance of GFA for FY 2018-19 approved in truing up by the Commission vide Order dated 31.03.2020 in Case No. 1845 of 2019.

The details of opening GFA as on 1st April, 2019, addition to and deduction from the Gross Block during FY 2019-20 and the asset classification-wise depreciation are given in the Form 5 along with the petition.

The Commission has verified the depreciation from the annual accounts for FY 2019-20. It is observed that depreciation as per annual accounts is Rs.73.77 Crore. The Petitioner has added leased land depreciation of Rs.0.18 Crore and reduced the depreciation of Rs.9.47 Crore on assets funded through service line contribution, and accordingly claimed depreciation of Rs.64.30 Crore.

The Commission has observed that the petitioner has claimed leased land depreciation of Rs.0.18 Crore. The Petitioner has clarified that the amount represents amortisation of lease value of RoU asset proportionate to tenure of the lease period. The Commission accordingly considered Rs.0.18 crore as part of the depreciation in truing up for FY 2019-20.

As per Regulation 39.2(b) of the GERC (MYT) Regulations, 2016, depreciation of assets financed through consumer contribution, deposit works, and grants should be considered as per Audited Accounts. However, since deferred income on this account has not been claimed under Non-Tariff Income, the depreciation on assets financed through consumer contribution and grants has been deducted.

The Commission, accordingly, approves the depreciation of Rs.64.30 Crore in the truing up for FY 2019-20 as given below.

SI. No.	Particulars	Amount (Rs. Crore)
1	Depreciation on assets (Note 4.1 of annual accounts)	72.35
2	Depreciation on intangible assets (Note 6 of annual accounts)	1.24
3	Amortisation of lease value of RoU assets	0.18
4	Less: Depreciation on assets financed through SLC	9.47
5	Net depreciation allowed in true up (1+2+3-4)	64.30

The Commission has approved depreciation at Rs.52.96 crore in MTR order dated 24.04.2019. The deviation of Rs.11.34 Crore is considered as an uncontrollable loss as



the depreciation is dependent on capitalisation.

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

Table 4.27: Depreciation and Gains/Losses approved by the Commission for FY 2019-20 (Rs. Crore)

Particulars	Approved in the MTR Order	Approved in Truing-up	Deviation +(-)	Gains/(Losses) due to Uncontrollable Factors
Depreciation	52.96	64.30	(11.34)	(11.34)

4.7.4 Interest and Finance Charges Petitioner's submission

TPL-D (Surat) has claimed a sum of Rs.30.47 Crore towards actual interest expenses in truing up for FY 2019-20 as detailed in the Table below as against Rs.27.80 Crore approved in the MTR Order dated 24.04.2019.

Table 4.28: Interest Expense claimed by TPL-D (Surat) for FY 2019-20

(Rs. Crore)

Particulars	Approved in the	Claimed by the
	MTR Order	Petitioner
Addition to GFA		121.63
Less: Deletions from GFA		11.46
Less: SLC Additions		14.04
Capitalisation for Debts		96.13
Normative Debt @ 70%		67.29
Opening Balance of Loans	302.78	326.97
Loan addition during the year	98.48	67.29
Repayments	52.96	64.30
Closing Balance of Loans	348.30	329.96
Average Loan	325.54	328.47
Weighted average rate of interest	8.54%	9.07%
Interest Expense	27.80	29.78
Other Borrowing Cost		0.69
Total Interest & Finance Charges	27.80	30.47

The Petitioner has submitted that interest is calculated on normative loans in terms of the GERC (MYT) Regulations, 2016 by applying Weighted Average Rate of interest of the actual loan portfolio of the Petitioner during the year on the loan component while repayment has been considered equal to the depreciation of the assets for the year.

The Petitioner has requested the Commission to approve the interest expenses



claimed as above. The variation in interest expenses compared to the approved expenses be treated as uncontrollable as it depends on the quantum of actual capitalization and the variation in the interest rates.

Commission's analysis

The Commission has considered the opening normative loan at Rs.326.97 crore for FY 2019-20 based the closing normative loan approved in true up for FY 2018-19 in Order dated 31.03.2020 in Case No. 1845 of 2019.

Addition to loan during the year FY 2019-20 is considered at Rs.67.29 crore as approved (Table 4.25) in accordance with the GERC MYT regulations 2016. The repayment is considered equivalent to depreciation of Rs.64.30 Crore as approved in the section of depreciation. The GERC (MYT) Regulations, 2016 provides for computation of interest on loan on normative basis on the opening balance of loan brought forward from the previous year's closing balance, capitalisation and funding approved during the year.

As per first proviso of the Regulation 38.5 of the GERC (MYT) Regulations, 2016, at the time of truing up, the weighted average rate of interest calculated on the basis of the actual loan portfolio during the year applicable to the Distribution Licensee shall be considered as the rate of interest.

Accordingly, the Commission sought information such as the actual loan portfolio and computation of weighted average rate of interest, which the Petitioner submitted vide additional submission dated 6th February, 2021. The Commission has calculated the weighted average rate of interest at 9.04% against 9.07% claimed by the Petitioner for the actual loan portfolio submitted for FY 2019-20.

The Commission sought information on reconciliation of other borrowing cost, which the Petitioner has submitted vide additional details dated 06.02.2021. The Petitioner has given a reconciliation with respect to the other borrowing cost of Rs.0.80 Crore reported in Note 33 of Annual Accounts, based on which the Petitioner has claimed other borrowing cost of Rs.0.69 Crore, after deducting Rs.0.11 Crore against amortisation for FY 2015-16. The Commission accordingly approves the other



borrowing cost of Rs.0.69 Crore based on the annual accounts.

The Commission has computed the interest on loan for FY 2019-20, as detailed in the Table below:

Table 4.29: Interest Expenses approved in truing up for FY 2019-20

(Rs. Crore)

SI. No.	Particulars	Claimed by the petitioner in truing-up	Approved in truing-up
1	Opening loan balance	326.97	326.97
2	Additions during the year	67.29	67.29
3	Normative Repayment	64.30	64.30
4	Closing Loan (1+2-3)	329.96	329.96
5	Average Loan {(1+4)/2}	328.47	328.47
6	Interest rate	9.07%	9.04%
7	Interest on loans (5 * 6)	29.78	29.69
8	other finance charges	0.69	0.69
9	Total interest and finance charges	30.47	30.39

The Commission, accordingly, approves the interest and finance charges at Rs. 30.39 Crore in the truing up for FY 2019-20.

As regards the computation of Gains/(Losses), Regulation 22.2 of the GERC (MYT) Regulations, 2016 considers variation in capitalization on account of time and/or cost over-runs/efficiencies in the implementation of capital expenditure project not attributable to an approved change in scope of such project, change in statutory levies or force majeure events, as a controllable factor. As per Regulation 24 of the GERC (MYT) Regulations, 2016, if the gain is on account of lower capital expenditure and capitalization, it cannot be attributed to the efficiency of the utility to allow 2/3rd of gains to the utility. Similarly, if the loss is on account of higher capital expenditure and capitalization due to bona-fide reasons beyond the control of utility due to Force Majeure event like Act of God, non-receipt of statutory approval, etc., the utility cannot be penalized by allowing only 1/3rd of the losses in the ARR.

The Commission, accordingly, approves the Gains/(Losses) on account of interest and finance charges in the truing up for FY 2019-20, as detailed in the Table below:



Table 4.30: Interest Expenses and Gains/ (Losses) approved by the Commission for FY 2019-20

(Rs. Crore)

Particulars	Approved in the MTR Order	Approved in Truing-up	Deviation +/(-)	Gains/(Losses) due to Uncontrollable Factors
Interest and Finance charges	27.80	30.39	(2.59)	(2.59)

4.7.5 Return on Equity

Petitioner's submission

TPL-D (Surat) has claimed a sum of Rs.91.20 Crore towards Return on Equity @ 14% in the truing up for FY 2019-20 as against Rs.90.74 Crore approved in the MTR Order dated 24.04.2019 as detailed in the Table below:

Table 4.31: Return on Equity claimed by TPL-D (Surat) for FY 2019-20

(Rs. Crore)

Particulars	Approved in the MTR Order	Claimed by the Petitioner
Opening Equity	627.01	637.02
Equity addition during the year	42.20	28.84
Closing Equity	669.21	665.86
Average of Opening and Closing Equity	648.11	651.44
Rate of Return on Equity	14%	14%
Return on Equity	90.74	91.20

TPL-D (Surat) has submitted that the closing balance of equity has been arrived at considering additional of 30% of the capitalization during the year. The return on equity has been computed by applying the rate of 14% on the average of the opening and closing balance of equity for FY 2019-20.

The Petitioner has requested the Commission to consider the variation in RoE as uncontrollable and allow the same for the purpose of truing-up.

Commission's analysis

The Commission has considered opening equity for FY 2019-20 based on closing equity approved in the Truing up for FY 2018-19 order dated 31st March 2020 in Case No. 1845 of 2019.



During the year FY 2019-20, the net asset addition to GFA is at Rs.107.59 Crore (addition to GFA Rs.121.63 crore less SLC Rs.14.04 crore) and the equity at 30% works out to Rs.32.28 Crore. Further during the year deletion from GFA is at Rs.11.46 Crore. Accordingly, reduction in equity is considered at Rs.3.44 Crore being 30% of the asset reduction. Thus, net equity addition is considered at Rs.28.84 Crore for FY 2019-20 in truing up

The rate of return is considered at 14% as per the GERC (MYT) Regulations, 2016 to work out the Return on Equity as shown in the Table below:

Table 4.32: Return on Equity approved by the Commission for FY 2019-20

(Rs. Crore)

SI. No.	Particulars	Approved in MTR	Claimed by the	Approved in truing	
		order	petitioner	up	
1	Opening Equity	627.01	637.02	637.02	
2	Additions during the year	42.20	32.28	32.28	
	Reduction in equity on account of asset				
3	retirement		3.44	3.44	
4	Net equity addition during the year (2-3)		28.84	28.84	
5	Closing Equity (1+4)	669.21	665.86	665.86	
6	Average Equity (1+5)/2	648.11	651.44	651.44	
7	Rate of Return on Equity	14%	14%	14%	
8	Return on opening Equity (1*7)	87.78	89.18	89.18	
9	Return on equity addition during the year (4/2)*7	2.95	2.02	2.02	
10	Total Return on Equity (8+9)	90.74	91.20	91.20	

The Commission, accordingly, approves the Return on Equity at Rs.91.20 Crore in truing up for FY 2019-20.

The Return on Equity depends on the amount of capitalization during the year and the debt equity ratio considered during the Financial Year and these parameters are uncontrollable in nature. The variance in the amount of Return on Equity is therefore treated as an uncontrollable item.

The Commission, accordingly, approves the gains/(losses) on account of Return on Equity in the truing up for FY 2019-20 as detailed below.



Table 4.33: Return on Equity and Gains/Losses approved in truing up for FY 2019-20

(Rs. Crore)

Particulars	Approved in the MTR Order	Approved in Truing up	Deviation +/(-)	Gains/(Losses) due to Uncontrollable Factors
Return on Equity	90.74	91.20	(0.47)	(0.47)

4.7.6 Interest on Consumer's Security Deposit

Petitioner's submission

The Petitioner TPL-D (Surat) has claimed Rs.19.32 Crore towards interest on security deposit in truing-up for FY 2019-20 as against Rs.18.57 Crore approved in the MTR Order. The Commission in the MTR Order had approved the interest on security deposit for the Petitioner considering 6.25% interest rate on the average estimated balance of security deposit for FY 2019-20.

The Petitioner has submitted the actual interest expense on security deposit considering the rate of interest of 6.50% paid to consumers based on Bank Rate is submitted in the Table below.

Table 4.34: Interest on Security Deposit claimed by TPL-D (Surat) for FY 2019-20

(Rs. Crore)

Particulars	Approved in the MTR Order	Claimed by the Petitioner
Interest Rate	6.25%	6.50%
Interest on Security Deposit	18.57	19.32

The Petitioner has submitted that the variation in security deposit amount and the variation in interest rate are uncontrollable. Hence, the Petitioner has requested the Commission to treat the variation in interest on security deposit as compared to approved expenses as uncontrollable.

Commission's analysis

The Commission has verified the actual interest on security deposit and found the same to be as per the annual accounts for FY 2019-20 submitted with the petition.

The Commission, accordingly, approves the interest on security deposit at Rs.19.32 Crore in the truing up for FY 2019-20.

The deviation of Rs. 0.75 Crore is considered as gain on account of uncontrollable



factor as detailed in the Table below:

Table 4.35: Interest on Security Deposit and Gains/Losses approved for FY 2019-20 (Rs. Crore)

Particulars	Approved in	Approved in	Deviation	Gains/(Losses)
	the MTR Order	Truing- Up	+(-)	due to
				Uncontrollable
				Factors
Interest on Security Deposit	18.57	19.32	(0.75)	(0.75)

4.7.7 Income Tax

Petitioner's submission

The Petitioner has submitted that the Commission, in the MTR Order, has approved Rs.39.68 Crore as income tax as per the actuals of FY 2017-18.

The Petitioner has claimed the Income Tax based for FY 2019-20 based on the actual tax paid in proportion to the PBT of TPL-D (Surat). Hence, the total amount claimed under the head of income-tax is Rs.22.19 Crore.

Table 4.36: Income tax claimed by TPL-D (Surat) for FY 2019-20

(Rs. Crore)

Particulars	Approved in the MTR Order	Claimed by the petitioner
Income Tax	39.68	22.19

The Petitioner has requested the Commission to consider the variation in Income Tax as uncontrollable and allow the same for truing up.

Commission's analysis

The Commission had asked TPL-D (Surat) to furnish the details of segregation of income tax paid by TPL in respect of TPL-D (Surat) along with copies of challans of income tax paid. In its reply, TPL submitted that being a single corporate entity, income tax is paid for the company as a whole along with copies of challan of income tax paid for the year. The Petitioner has computed the Income Tax by applying the ratio of PBT and after adjustment of tax credit.

The Commission has verified the PBT figures from the annual accounts for FY 2019-20. The Petitioner has shown a PBT of Rs.126.81 Crore including Remeasurement of Defined Benefit Plans. The PBT as per standalone financial statement of TPL (including Re-measurement of Defined Benefit Plans) is Rs.1501.33 Crore and



the total tax paid by the Company as a whole is Rs.305.94 Crore. It is observed that during FY 2019-20, the Petitioner has paid Minimum Alternate Tax (MAT) of 17.472%, though the effective tax rate works out to be 20.38%. Applying the MAT rate of 17.472% on the PBT of TPL-D (Surat), the income tax for TPL-D (Surat) works out to be Rs.22.16 Crore.

The petitioner has made adjustment of tax credit of (-) Rs.0.04 crore and total tax of Rs.22.19 crore claimed in truing up for FY 2019-20.

The Commission, accordingly, approves the Income Tax at Rs.22.19 Crore in the truing up for FY 2019-20.

The Commission has treated the Income Tax as an uncontrollable expense and, accordingly, approves the gains/losses on account of Income Tax in the truing up for FY 2019-20, as detailed in the Table below:

Table 4.37: Income Tax and Gains/Losses approved in the truing up for FY 2019-20 (Rs. Crore)

Particulars	Approved in the MTR Order	Approved in Truing Up	Deviation +/(-)	Gains/(Losses) due to Uncontrollable Factors
Income Tax	39.68	22.19	17.49	17.49

4.7.8 Bad Debts Written Off

Petitioner's submission

The Commission in the MTR order had approved the bad debts of Rs.0.39 Crore on provisional basis for TPL-D (Surat). The Petitioner has written off bad debts of Rs.51 Crore during the year, as shown in the Table below.

Table 4.38: Bad Debts Written-off claimed by TPL-D (Surat) for FY 2019-20

(Rs. Crore)

		(1131 61016)
Particulars	Approved in the MTR Order	Claimed by the petitioner
Bad Debts Written off	0.39	0.51

The GERC (MYT) Regulations, 2016 provides that variation in bad debts written off is to be considered as controllable. Accordingly, the Petitioner has requested to consider the variation in bad debts written off in FY 2019-20 as controllable for



sharing of gains/losses in line with the Regulations.

Commission's analysis

The Petitioner has claimed Rs.0.51 Crore towards bad debts written off during FY 2019-20 against which the recovery of bad debts made is Rs.0.35 Crore, as claimed by the Petitioner under Non-Tariff Income. Therefore, the net bad debt written off (Rs.0.51 Crore minus Rs.0.35 Crore) is Rs.0.16 Crore. The Commission has verified the bad debt written off (net) from the Annual Accounts for FY 2019-20.

The Commission, accordingly, approves the bad debts written off at Rs.0.51 Crore in the truing up for FY 2019-20.

The deviation of Rs. 0.12 Crore in bad debts is considered as controllable factor.

The Commission, accordingly, approves the gains / losses on account of bad debts in the truing up for FY 2019-20 as detailed below:

Table 4.39: Bad Debts Written off and Gains/Losses approved for truing up for FY 2019-20

(Rs. Crore)

Particulars	Approved in the MTR Order	Approved in Truing up	Deviation +/(-)	Gains / (Losses) due to Controllable Factors
Bad Debts Written off	0.39	0.51	(0.12)	(0.12)

4.7.9 Contingency Reserve

Petitioner's submission

The Commission had allowed token amount towards the contingency reserve for meeting the requirement of unexpected emergent circumstances. Accordingly, the Petitioner has considered the approved values as shown in the following Table:

Table 4.40: Contingency Reserve claimed by TPL-D (Surat) for FY 2019-20

(Rs. Crore)

Particulars	Approved in the MTR Order	Claimed by the petitioner
Contingency Reserve	0.40	0.40

The Petitioner has requested the Commission to approve the contingency reserve for the purpose of truing up.



The proposed contingency reserve is consistent with the GERC (MYT) Regulations, 2016. Accordingly, the same is approved as shown below.

Table 4.41: Contingency Reserve and Gains/Losses approved for truing up for FY 2019-20 (Rs. Crore)

Particulars	Approved in the MTR Order	Approved in Truing up	Deviation +/(-)	Gains / (Losses) due to Uncontrollable Factors
Contingency Reserve	0.40	0.40	-	-

The Commission, accordingly, approves the contingency reserve at Rs.0.40 Crore in the truing up for FY 2019-20.

4.7.10 Non-Tariff Income

Petitioner's submission

The Commission had approved Non-Tariff Income of Rs.21.92 Crore for FY 2019-20 in the MTR Order dated 24.04.2019. The actual Non-Tariff Income considered for truing up is Rs.10.13 Crore.

In the previous Control Period, the Petitioner had considered the treatment towards income and expense of bad debts on similar lines as per the Hon'ble APTEL Judgment, wherein, the variation in recovery of bad debts was considered as controllable.

However, the GERC (MYT) Regulations, 2016 provides that variation in bad debts written off is to be considered as controllable, while variation in bad debts recovery is to be considered as uncontrollable. Therefore, the Petitioner has considered the entire variation in bad debts recovery in FY 2019-20 as uncontrollable for sharing of gains/losses in line with the Regulations. However, the Petitioner has requested the Commission to revisit the provision related to bad debts recovery and expenses.

Table 4.42: Non-Tariff Income claimed by TPL-D (Surat) for FY 2019-20

		(ns. ciole)
Particulars	Approved in the MTR Order	Claimed by the petitioner
Non-Tariff Income	21.92	10.13

The Petitioner has submitted that the variation in non-tariff income as detailed above has been considered as uncontrollable. Accordingly, it has requested the Commission to allow above variation in Non-Tariff Income as uncontrollable for the purpose of



truing up.

Commission's analysis

The Non-Tariff Income is specified in Regulations 89 and 97 of the GERC (MYT) Regulations, 2016, which includes various items such as income from sale of scrap, income from statutory investment, interest on advances to supplier/contractor, etc.

The Commission observes that the Non-Tariff Income claimed by the Petitioner for FY 2019-20 is Rs.10.13 Crore. The Non-Tariff Income as per the Annual Accounts is Rs.22.39 Crore. The Petitioner has reduced the Insurance Claim Receipt (Rs.0.02 Crore), Amortisation of Deferred Revenue (Rs.9.47 Crore) and Delayed payment surcharge (Rs.3.12 crore). The Petitioner has included recovery from bad debts of Rs.0.35 Crore in the Non-Tariff Income to arrive at claimed figure of Rs.10.13 Crore.

As discussed in the section on O&M expenses, Insurance Claim Receipt of Rs.0.02 crore has been considered as a part of Non-Tariff Income.

The Commission, accordingly, approves the Non-Tariff Income of Rs. 10.15 Crore for FY 2019-20.

The Commission, accordingly, approves the gains/(losses) on account of Non- Tariff Income in the truing up for FY 2019-20 as detailed below:

Table 4.43: Non-Tariff Income and Gains/(Losses) approved for truing up for FY 2019-20

(Rs. Crore)

Particulars	Approved in the MTR Order	Approved in Truing up	+/(-)	Gains / (Losses) due to Uncontrollable Factors
Non-Tariff Income	21.92	10.15	(11.77)	(11.77)

4.7.11 Interest on Working Capital

Petitioner's submission

The working capital requirement is arrived at as per the GERC (MYT) Regulations, 2016. As the working capital requirement is negative, the Petitioner has not claimed



any interest on working capital.

Table 4.44: Interest on Working Capital claimed by TPL-D (Surat) for FY 2019-20

(Rs. Crore)

Particulars	Approved in the MTR Order	Claimed by the petitioner
O&M Expense for 1 month	11.11	10.95
1 % of GFA for Maintenance Spares	17.78	18.10
Receivables for 1 month	172.86	193.85
Less: Security Deposit	297.18	309.27
Working Capital Requirement	-	-
Interest Rate (%)	10.65%	10.66%
Interest on Working Capital	-	-

The Petitioner has submitted that the variation in working capital requirement is primarily on account of variation in actual O&M expenses and receivables. Further, there is a variation in the interest rate applicable to working capital requirement. Accordingly, the Petitioner has requested the Commission to consider the variation in interest on working capital as uncontrollable.

Commission's analysis

The Commission has computed the working capital requirement of TPL-D (Surat) as specified in Regulation 40.4 and Regulation 40.5 of the GERC (MYT) Regulations 2016 read in conjunction with the GERC (MYT) (First Amendment) Regulations, 2016 after considering the security deposit amount available during the year.

TPL-D (Surat) has considered the working capital interest rate @ 10.66% per annum, being the weighted average 1-year MCLR prevailing during FY 2019-20 plus 250 basis points.

The regulations (read with amendment notification No.7 of 2016 dated 02.12.2016) specify the rate of interest to be allowed shall be the weighted average 1-year SBI MCLR plus 250 basis points (i.e.2.50%). The Commission has verified the weighted average 1-year MCLR during FY 2019-20 from the State Bank of India website which worked out to 8.16%. Accordingly, the rate of interest for computation of interest on working capital works out to 10.66% (8.16%+2.50%) and the same is adopted in truing up for FY 2019-20.

The working capital requirement and the interest on working capital is as shown in



the Table below:

Table 4.45: Interest on Working Capital approved by the Commission for FY 2019-20 (Rs. Crore)

SI. No.	Particulars	Approved in MTR order	Claimed by the petitioner	Approved in truing up
1	O&M exp. (1 month)	11.11	10.95	10.95
2	Maintenance spares @1% of opening GFA	17.78	18.10	18.10
3	Receivables for 1 month	172.86	193.85	193.85
4	sub-total (1+2+3)	201.75	222.90	222.90
5	Less : Amount held as Security deposit from Distribution system users	297.18	309.27	309.27
6	Working capital requirement (4-5)	-	-	_
7	Rate of interest %	10.66%	10.66%	10.66%
8	Interest on working capital (6 * 7)	_	-	_

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

4.7.12 Revenue from Sale of Power

Petitioner's submission

The Petitioner has submitted the revenue from sale of power as Rs.2326.15 Crore as the revenue from sale of power in the truing up for FY 2019-20 as detailed in the Table below.

Table 4.46: Revenue from Sale of Power claimed by TPL-D (Surat) for FY 2019-20 (Rs. Crore)

Particulars	Claimed by the petitioner
Revenue from Sale of Power	2326.15

Commission's analysis

The Commission has verified the revenue from sale of power from the annual accounts for FY 2019-20. As per the audited annual accounts the revenue from sale of power is depicted (Note 30) at Rs. 2269.43 crore. However, in Form 10 of the petition, the petitioner has reported a revenue of Rs. 2326.15 crore. It was stated that provision of Rs. (-) 56.72 Crore is not considered in revenue from sale of electricity.



The Commission has asked the petitioner vide letter dated 27.01.2021 to explain why it is not considered under revenue for sale of energy. The Petitioner vide letter dated 06.02.2021 and 02.03.2021 has submitted certificate of Statutory Auditor certifying that amount of Rs. (-) 56.72 Crore Crore is not recovered from the consumers on account of unrecovered gap/ FPPPA charges. The Commission has considered the amount of Rs. (-) 56.72 Crore on account of unrecovered FPPPA charges not reflected as revenue for FY 2019-20. Accordingly, the Commission has considered revenue of Rs. 2326.15 Crore for the purpose of truing up of FY 2019-20.

The Commission has considered the revenue from sale of power at Rs. 2326.15 crore as depicted in the Form 10 of the petition.

The Commission in accordance with the GERC (MYT) Regulations, 2016 approves the Revenue from sale of power at Rs. 2326.15 Crore for FY 2019-20 in the truing up.

4.7.13 Gains/Losses under truing up for FY 2019-20

Petitioner's submission:

The Petitioner has submitted that the gains/(losses) on account of uncontrollable factors shall be passed through in tariff as per Regulation 23 and the gains/(losses) on account of controllable factors are shared between the licensee and the consumer in the form of tariff adjustment as per Regulation 24.

The Petitioner has compared the actuals for FY 2019-20 with the approved figures and has segregated the variation as controllable or uncontrollable based on the analysis mentioned hereinabove in the truing up section as given in the table below:

Table 4.47: Controllable & Uncontrollable variations for FY 2019-20 claimed by the Petitioner

(Rs. Crore)

Particulars	Approved in MTR order dated 24.04.2019	Claimed in truing up	Over (+) / Under (-) recovery	Controllable	Uncontrollable
Power purchase	1732.41	1884.36	(151.95)	3.59	(155.54)
O & M expenses	133.31	131.42	1.89	2.65	(0.76)
Depreciation	52.96	64.30	(11.34)		(11.34)
Interest and finance					
charges	27.80	30.47	(2.67)		(2.67)



Particulars	Approved in MTR order dated 24.04.2019	Claimed in truing up	Over (+) / Under (-) recovery	Controllable	Uncontrollable
Interest on SD	18.57	19.32	(0.75)		(0.75)
Interest on working capital	_	_	_		
Bad debts written off	0.39	0.51	(0.12)	(0.12)	0.00
Contingency reserve	0.40	0.40	0.00		0.00
Return on Equity	90.74	91.20	(0.47)		(0.47)
Income tax	39.68	22.19	17.49		17.49
Less: Non-tariff					
income	21.92	10.13	11.79		11.79
Net ARR	2074.34	2234.05	(159.71)	6.12	(165.83)

The Commission has reviewed the performance of TPL-D (Surat) under Regulation 22 of the GERC (MYT) Regulations, 2016, for FY 2019-20. The Commission has computed the gains/(losses) for FY 2019-20 based on the truing up for each of the components discussed in the above paragraphs.

The Commission based on the Aggregate Revenue Requirement (ARR) approved in the MTR, the actuals claimed in truing up and as approved by the Commission in truing up, has computed the Gains/(Losses) in accordance with the GERC (MYT) Regulations, 2016 as given in the Table below:

Table 4.48: ARR approved in respect of TPL-D (Surat) in the truing up for FY 2019-20 (Rs. Crore)

SI.	Particulars	Approved	Approved in	Over / (Under)	Controllabl	Uncontrollable
No.		in MTR order dated 24.04.201 9	truing up	recovery	e	
1	2	3	4	5 = (4-3)	6	7
1	Power purchase	1732.41	1884.33	(151.92)	3.59	(155.52)
2	O & M expenses	133.31	131.44	1.87	2.63	(0.76)
3	Depreciation	52.96	64.30	(11.34)		(11.34)
4	Interest and finance charges	27.80	30.39	(2.59)		(2.59)
5	Interest on Security deposits from consumers	18.57	19.32	(0.75)		(0.75)
6	Interest on working capital	0.00	0.00	0.00		0.00



SI. No.	Particulars	Approved in MTR order dated 24.04.201 9	Approved in truing up	Over / (Under) recovery	Controllabl e	Uncontrollable
1	2	3	4	5 = (4-3)	6	7
7	Bad debts written off	0.39	0.51	(0.12)	(0.12)	0.00
8	Contribution to contingency reserve	0.40	0.40	0.00		0.00
9	Return on Equity	90.74	91.20	(0.47)		(0.47)
10	Income tax	39.68	22.19	17.49		17.49
11	Total ARR	2096.26	2244.09	(147.83)	6.10	(153.93)
12	Less: Non-tariff income	21.92	10.15	11.77		11.77
13	Net ARR	2074.34	2233.94	(159.60)	6.10	(165.70)

4.7.14 Sharing of Gains / (Losses) for FY 2019-20

The Commission has shared the gains/(losses) on account of controllable and uncontrollable factors in accordance with Regulation 23 of the GERC (MYT) Regulations, 2016.

The relevant Regulations are extracted below:

"Regulation 23. Mechanism for pass-through of gains or losses 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 gains or losses on account of controllable factors

- 24.1 The 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."

The trued up ARR for FY 2019-20 as claimed by TPL-D (Surat) and as approved by the Commission is summarized in the Table below:

Table 4.49: Approved Trued up ARR incl. Gains/(Losses) for TPL-D (Surat) for FY 2019-20 (Rs. Crore)

SI. No.	Particulars	Claimed by the Petitioner	Approved in truing up
Α	ARR as per MTR order dated 24.04.2019	2074.34	2074.34
В	Gains/(Losses) due to uncontrollable factors	(165.83)	(165.70)
С	Gains/(Losses) due to controllable factors	6.12	6.10
D	Less: 1/3 of gains/(Losses) due to controllable factors (C/3)	2.04	2.03
Е	Pass through as tariff (B-D)	(163.79)	(163.67)
F	True up ARR (A+E)	2238.13	2238.00



The Petitioner has requested the Commission to consider an amount of Rs. 113.46 Crore as revenue towards recovery of earlier years' approved (Gap)/Surplus as per the Commission's orders dated 24th April 2019 and 5th September 2020 (read with APTEL judgement dated 9th June 2020). The Petitioner has submitted that carrying cost of past periods not allowed by the Commission shall be allowed to be recovered in totality as per APTEL judgement and accordingly carrying cost has been considered. The Commission sought further break-up of the revenue of Rs.113.46 Crore considered towards recovery of earlier years' approved (Gap)/Surplus. The Petitioner vide additional details dated 11th February, 2021 submitted the break-up of the same as shown below.

Table 4.50: Break-up of Revenue towards recovery of earlier years approved (Gap)/Surplus for TPL-D (Surat) claimed for FY 2019-20

(Rs. Crore)

Particulars	Claimed by the
	Petitioner
(Gap)/Surplus of FY 2017-18	(28.91)
Carrying cost	(4.62)
APTEL judgement in A.No.248/2017	(79.93)
Total	(113.46)

The Commission analysed the above submitted details. The Commission has allowed the recovery of the past gap as claimed by the Petitioner after due diligence.

The Commission has approved Rs.33.53 crore towards revenue gap (Rs.28.91 crore) and carrying cost (Rs.4.62 crore) in truing up for FY 2017-18 in Order dated 24.04.2019 in Case No.1765 of 2018 and adjusted the same in the ARR of FY 2019-20. The Commission, accordingly has considered Rs.33.53 crore in truing up for FY 2019-20.

As could be observed from the table above, the Petitioner is claiming Rs.79.77 crore towards past periods carrying cost. The Commission in order dated 5th September 2020, after due diligence and deliberations in Consequential order in petition no.1628 of 2016 dated 09.06.2017, has adjudged as follows:

"7. We have now calculated the deferred Carrying Cost amounting to Rs.49.01 Crore for TPL-D (Surat) as against Rs.79.77 Crore claimed in their petition in the matter of Truing up of FY 2015-16, Approval of ARR for FY 2016-17 to FY 2020-21 and Determination of Tariff for FY 2017-18.



- 8. We decide to allow the deferred Carrying cost amounting to Rs.49.01 Crore in the next tariff order in accordance with the law. Therefore, TPL-D (Surat) is allowed to claim this amount of carrying cost in their future filings of tariff petitions.
- 9. The directions contained in the judgment of the Hon'ble Tribunal dated 09.06.2020 in Appeal No. 249 of 2017 stand fully implemented by this Order.
- 10. All other terms contained in the Order dated 09.06.2017 in Petition No. 1628 of 2016 shall remain unaltered".

The Commission in order dated 5th September 2020 has approved the carrying cost of Rs.49.01 crore against Rs.79.77 crore claimed by the petitioner. This is a settled case and attained irrevocability. TPL-D (Surat) shall claim Rs.49.01 crore in the present petition in accordance with the orders.

The Commission has considered the carrying cost of Rs.49.01 crore as approved in order dated 05.09.2020 and adjusted the same to arrive at the revenue (gap)/Surplus for FY 2019-20 in true up.

The revenue (Gap)/Surplus claimed and approved for TPL-D (Surat) for FY 2019-20 is detailed in the Table below:

Table 4.51: Approved Revenue (Gap)/Surplus for TPL-D (Surat) for FY 2019-20 (Rs. Crore)

SI. No.	Particulars	Claimed by the Petitioner	Approved in truing up
Α	Trued up ARR	2238.13	2237.81
В	Revenue from sale of power	2326.15	2326.15
С	Revenue (Gap)/Surplus (B-A)	88.02	88.15
D	Add: Revenue gap approved in true up for FY 2017- 18 Order dated 24.04.2019 (Gap Rs.28.91 crore + carrying cost of Rs.4.62 crore)	(113.46)	(33.53)
E	Add: Carrying cost allowed in order dated 05.09.2020 in APTEL judgement in Appeal No.249 of 2017	,	(49.01)
F	True up (Gap)/Surplus for FY 2019-20 (C+D+E)	(25.44)	5.61

The Commission, accordingly, considers the trued-up Revenue Surplus of Rs. 5.61 Crore for FY 2019-20, for determination of tariff for FY 2021-22.



5. Aggregate Revenue Requirement (ARR) and determination of tariff for FY 2021-22

The control period is defined at Regulations 2 (17) of GERC (MYT) Regulations, 2016 to mean 1st April, 2016 to 31st March, 2021. The Commission vide its Order dated 22nd December, 2020 has directed the utilities to file the Petition for truing up of FY 2019-20, ARR of FY 2021-22 and determination of tariff for FY 2021-22 as per provisions of MYT Regulations, 2016. The Petitioner TPL has filed Petition No. 1927 of 2021 on 8th January, 2021 for determination of ARR as well as tariff for the FY 2021-22 for Surat Supply Area. The Commission has analyzed the proposal of TPL taking into consideration the comments and suggestions from the stakeholders, GERC (MYT) Regulations, 2016 and other relevant Regulations which include the GERC (Conduct of Business) Regulations, 2004, RPO Regulations, Distribution Licensee Regulations, etc.

5.1. Energy sales

It is necessary to have a category-wise energy sales projection for estimating the probable revenue from the sales and assess the quantum of power purchase. Realistic estimation of energy sales is, therefore, an important requirement. This section examines in detail the consumer category-wise sales projected by TPL in its petition for FY 2021-22 for approval of ARR.

5.1.1 Category-wise consumers

The consumers in Surat supply area is broadly categorized as under:

Residential- Domestic (RGP)	Applicable to lights, fans, appliances etc in residential	
	premises –	
	Single Phase Supply – Aggregate load up to 6 kW	
	Three phase supply – Aggregate load above 6 kW	
Commercial (Non RGP)	Applicable to lights, fans, appliances etc in commercial,	
	industrial premises (other than residential). Load upto	
	and including 15 KW	
LTMD	Applicable to installations above 15 KW	
HT	Applicable to High tension consumers for maximum	
	demand of 100 kVA and above	
HTMD-2 (Pumping Station)	Applicable for supply consumers contracting maximum	
	demand of 100 kVA	
Others	Applicable to installations for temporary requirement	
	of electricity. Agriculture, EV Charging Stations.	



5.1.2 Historical data of energy sales

TPL has furnished the category wise historical data of sales as given in the Table below.

Table 5.1: Historical data of energy sales in TPL – D (Surat) supply area

(MUs)

Consumer Category	FY 2015-16	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20
HTMD-1	246.92	252.53	276.44	282.61	281.72
HTMD-2	52.52	46.48	44.87	42.82	45.23
HTMD-3		0.04	-	0.05	-
RGP	770.78	772.33	815.56	809.33	811.86
NRGP	1,247.65	1,194.98	1,218.53	1,209.29	1,204.16
LTMD	965.92	914.82	917.96	904.82	915.88
GLP	25.98	26.45	25.14	24.96	24.91
AGP	1.05	1.02	0.95	1.02	0.93
TEMP	0.35	0.38	0.37	0.28	0.24
DOE	1.54	1.51	1.07	0.98	1.08
Total	3,312.69	3,210.54	3,300.89	3,276.15	3,286.01

5.1.3 Overall approach to sales projections

TPL has submitted that the sales of Surat Supply Area are principally driven by major industrial segments namely textile, diamond & other allied industries. The growth in commercial and residential segments generally depends on the weather condition and development of colonies in certain pockets of the license area. Further, the Commission has notified the Net Metering Regulations, 2016 for rooftop solar projects which encourages residential & non-residential consumers to set up rooftop solar projects. The surge in solar rooftop installations witnessed in the later part of the 3rd control period is likely to affect the sales going forward. The Covid-19 pandemic has impacted the sales across all the industrial and commercial categories during FY 2020-21 and the resultant slowdown in economy shall continue to affect the sales of all categories.

TPL has submitted that for FY 2021-22, it may also be noted that Covid-19 pandemic has impacted the sales across all the industrial and commercial categories during FY 2020-21 and the resultant slowdown in economy shall continue to affect the sales of all categories. Hence, for FY 2021-22, sales are worked out considering 5 Year CAGR (FY 2013-14 to FY 2018-19) over gross sales of FY 2018-19 for all categories. Further, sales in DOE category have been excluded to arrive at CAGR figures.



5.1.4 Projected energy sales

The category wise energy sales forecast for FY 2021-22 is as follows:

5.1.5 Residential (RGP)

Petitioner's submission

The category-wise sales forecast has been arrived at as follows:

- i. This category consists of Residential consumers considering the effect of Covid-19 and resultant slowdown coupled with labor migration, the sales of RGP category is showing a declining trend in FY 2020-21.
- ii. The 5 Year CAGR for the RGP category considering FY 2018-19 as base is 3.92%. The gross sales thus projected for FY 2021-22 is adjusted with estimated rooftop solar units of FY 2021-22 of 44.71 MUs to arrive at the net RGP sales of FY 2021-22 for the category as shown in the table below.

Table 5.2: Energy sales in RGP category projected for FY 2021-22

Category	Sales in FY 2018-19 (MU)	CAGR	Extended Rooftop Solar	Sales for FY 2021-22 (MU)
RGP (Residential)	814.77	3.92%	44.71	802.02

Commission's analysis

The Commission, on alalysing the actual sales of RGP Category for FY 2018-19 found that the Petitioner has incorrectly considered sales for RGP category for FY 2018-19 as 814.77 MUs. In fact, it is 809.33 Mus. Accordingly, 5 year CAGR works out to 3.78%. The Commission applies this 5 year CAGR of 3.78% on sales of FY 2018-19 and has approved 795.24 Mus as RGP category sales for FY 2021-22 as tabulated below;

Table 5.3: Energy sales approved by the Commission for the residential category (RGP) for FY 2021-22

Category	Sales in FY 2018-19 (MU)	CAGR	Extended Rooftop Solar	Sales for FY 2021-22 (MU)
RGP (Residential)	809.33	3.78%	44.71	795.24

5.1.6 Non RGP Category

Petitioner's submission



- i. In this category, sales contribution is from industrial and non-industrial services. Further, industrial services comprise of textile, diamond & embroidery segments whereas non-industrial services comprise of shops, showrooms, offices, etc. TPL-D does not expect any incremental activity due to reduction in new commercial projects, within the licensed area. Further, due to the effect of Covid-19 and resultant slowdown, the sales of Non RGP category is showing a declining trend in FY 2020-21.
- ii. TPL-D (Surat) does not expect any incremental activity due to reduction in new commercial projects within the licensed area. Further, due to the effect of Covid-19 and resultant slowdown, the sales of Non RGP category is showing a declining trend in FY 2020-21.

Table 5.4: Energy sales in Commercial (Non RGP) category projected for FY 2021-22

Category	Sales in FY 2018-19 (MU)	CAGR	Sales for FY 2021-22 (MU)
Non-RGP	1209.29	-0.16%	1207.36

The Commission considers the forecast made by the Petitioner and approves the same as given in the Table below.

Table 5.5: Energy sales approved by the Commission for commercial (Non RGP) category for FY 2021-22

Particulars	Projected by Petitioner	Approved by Commission
Energy Sales (MU)	1207.36	1207.36

5.1.7 Low Tension Maximum Demand (LTMD)

This category includes sales contribution from industrial and non-industrial services. Further, industrial services comprise of textile, diamond & embroidery segments whereas non-industrial services comprise of shops, showrooms, offices, etc.

Petitioner's submission

De-growth is witnessed in this category and same is aggravated by COVID-19 impact. The 5 Year CAGR considering FY 2018-19 as base is -1.57%. Accordingly, the sales forecast for FY 2021-22 for this category is shown in the table below.



Table 5.6: Energy sales in LTMD category projected for FY 2021-22

Category	Sales in FY 2018-19 (MU)	CAGR	Sales for FY 2021-22 (MU)
LTMD	904.82	-1.57%	890.62

The Commission considers the forecast as projected by the Petitioner and approves the same as given in the Table below.

Table 5.7: Energy sales approved by the Commission for LTMD category for FY 2021-22

Particulars	Projected by Petitioner	Approved by Commission
Energy Sales (MU)	890.62	890.62

5.1.8 HT Maximum Demand (HTMD)

The sales in the HTMD category is attributable to the textile, diamond industries, and commercial establishment in the HTMD - 1 category and water works and pumping stations run by local authority in the HTMD- 2 category.

Petitioner's submission

- i. There is a trend of the textile process houses shifting to the outskirts of the city which is expected to continue for the future years. This is driven by stringent pollution norms and economic consideration like higher valuation of land. The consumption would be affected because these textile houses of higher load factor are likely to get replaced by occupants of lower load factor. Additionally, COVID-19 pandemic has also affected the sales in the category.
- ii. Further, in the last few years, HT customers have set up the renewable energy generation and have availed the set-off of such generation against their consumption in the license area. This has impacted the sales of this category. For FY 2021-22, Petitioner does not expect any incremental RE capacity addition.
- iii. The 5 Year CAGR for this category considering net sales of FY 2018-19 as base is 3.97%. The net sales forecasted for FY 2021-22 for this category based on 5 Year CAGR is shown in the table below.



Table 5.8: Energy sales in HTMD Category projected for FY 2021-22

Category	Sales in FY 2018-19 (MU)	CAGR	Sales for FY 2021-22 (MU)
HTMD	325.47	3.97%	338.38

The Commission considers the forecast made by the Petitioner and approves the same as given in the Table below.

Table 5.9: Sales approved by the Commission for HTMD category FY 2021-22

Particulars	Projected by Petitioner	Approved by Commission
Energy Sales (MU)	338.38	338.38

5.1.9 Others

This category contains the sales to the GLP category, LTP (AG), Streetlight, and LT & HT-Temporary.

Petitioner's submission

- i. This category contains the sales to the GLP category, LTP (AG), and Temporary Units. The sales for this category are likely to follow the past trends and being of very low proportion does not have major correction factors to be accounted for. The forecast for this category has been made using the individual 5 Year CAGR considering FY 2018-19 as base, of each sub-category.
- ii. The sales forecasted for FY 2021-22 for the category is shown in the table below.

Table 5.10: Projected energy sales to others for FY 2021-22

SI. No	Category	Sales in FY 2018-19 (MU)	CAGR	Sales for FY 2021-22 (MU)
1	General	24.96	1.36%	25.30
2	Agriculture	1.02	5.25%	1.09
3	Temporary	0.28	-3.49%	0.29
	Total	26.26		26.64

Commission's analysis

The Commission considers the forecast made by the Petitioner and approves the same as given in the table below:

Table 5.11: Sales approved by the Commission for others for FY 2021-22

Particulars	Projected by Petitioner	Approved by Commission
Energy Sales (MU)	26.64	26.64



5.1.10 Summary of Energy sales

Commission's analysis:

The category-wise energy sales for FY 2021-22 for each of the categories as approved by the Commission is given in the Tables below:

Table 5.12: Approved Energy sales for TPL – D (Surat) area for FY 2021-22

(Mus)

Category	Projected by Petitioner	Approved by Commission
RGP	802.02	795.24
Non RGP	1,207.36	1,207.36
LTMD	890.62	890.62
HT	338.38	338.38
Others	26.64	26.64
Total	3,265.01	3258.24

5.1.11 Distribution losses

Petitioner's submission

The Petitioner submitted that the Commission in its order dated 22nd December, 2020 has directed the utilities to consider principles and methodology as provided in the MYT Regulations, 2016.

In its Order dated 9th June, 2017 for ARR for FY 2016-17 to FY 2020-21, the Commission has stipulated trajectory of Distribution Loss with 0.05% reduction each year. Accordingly, the Petitioner has extended the same trajectory for projecting the Distribution loss for FY 2021-22.

Table 5.13: Projected Distribution Loss for TPL – D (Surat) supply area for FY 2021-22

Particulars	FY 2021-22
Distribution Loss	3.54%

Commission's analysis

The Commission has noted that he percentage of distribution loss in TPL-D (S) supply area is gradually reducing year on year as given in the Table below:

Table 5.14: Past period distribution loss in TPL-D (S) supply area

Supply	FY 2015-16	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20
Approved Distribution Loss (%) in T.O	5.15%	3.89%	3.74%	3.69%	3.64%
Actual Distribution Loss (%) achieved	3.89%	3.92%	3.59%	3.40%	3.43%



The Commission has also observed that against the distribution loss of 3.64% approved for FY 2019-20 in the MTR Order, TPL-D (S) has actually reduced the loss upto 3.43% i.e. a reduction of 0.21%. The Commission appreciates the utility for its sustained efforts for bringing down the loss levels. TPL has proposed 3.54% distribution loss considering a reduction of 0.05% over 3.59% distribution loss approved for FY 2020-21 in the MTR Order.

The Commission worked out an average of actual distribution loss for FY 2016-17 to FY 2018-19 considering FY 2019-20 as an exceptional year on account of COVID-19 pandemic, which is 3.6366%. However, the Petitioner has proposed 3.54% distribution loss which is lower than the three years average.

Accordingly, the Commission approves distribution loss for FY 2021-22 for TPL- D (S) as 3.54%.

Table 5.15: Distribution losses approved by the Commission for TPL-D (Surat) area for FY 2021-22

Particulars	Actuals in FY	Projected by	Approved by
	2019-20	Petitioner	Commission
Distribution Losses	3.43%	3.54%	3.54%

5.1.12 Energy Requirement

Petitioner's submission

Based on the energy sales forecast, distribution loss and transmission loss in the EHV network, the total energy requirement for the FY 2021-22 is estimated. The total energy requirement thus arrived is shown in the table below:

The Petitioner has also submitted that the estimated energy requirement and corresponding power purchase cost is arrived at on pooled basis keeping in mind the overall demand requirement of Ahmedabad & Surat Supply Areas.

Table 5.16: Energy requirement projected by TPL-D for FY 2021-22

(MU)

Particulars	FY 2021-22
Ahmedabad Supply Area	
Total Sales	7,528.30



Particulars	FY 2021-22
Distribution Loss (%)	6.40%
Distribution Loss	514.76
Energy Required at Distribution periphery	8,043.06
220 kV/Transmission Loss	81.44
Energy Requirement of TPL-D (A)	8,124.49
Surat Supply Area	
Total Sales	3,265.01
Distribution Loss (%)	3.54%
Distribution Loss	119.82
Energy Required at Distribution periphery	3,384.84
220 kV/ Transmission Loss	39.64
Energy Requirement of TPL-D (S)	3,424.48
Total Energy required by TPL-D	11,548.98

Based on the energy sales approved in Table 5.12 and percentage of distribution losses as approved in Table 5.15 and the percentage of transmission loss based on true up for FY 2019-20. The Commission has computed the energy requirement of TPL distribution area and at its periphery as given in Table below:

Table 5.17: Energy requirement approved by the Commission for TPL-D for FY 2021-22 (MU)

Particulars	Projected by Petitioner	Approved by Commission
Ahmedabad Supply Area		
Total Sales	7,528.30	7528.30
Distribution Loss (%)	6.40%	6.24%
Distribution Loss	514.76	501.03
Energy Required at Distribution periphery	8,043.06	8029.33
220 kV/Transmission Loss (%)		0.50%
220 kV/Transmission Loss	81.44	40.35
Energy Requirement of TPL-D (A)	8,124.49	8069.68
Surat Supply Area		
Total Sales	3,265.01	3258.24
Distribution Loss (%)	3.54%	3.54%
Distribution Loss	119.82	119.57
Energy Required at Distribution periphery	3,384.84	3377.81
220 kV/ Transmission Loss (%)		0.83%
220 kV/ Transmission Loss	39.64	28.27
Energy Requirement of TPL-D (S)	3,424.48	3406.08
Total Energy required by TPL-D	11,548.98	11475.76

The Commission approves the energy requirement of TPL-D supply area at its periphery as shown in the Table 5.17 above.



5.1.13 Energy Availability

Petitioner's submission

The Petitioner has submitted that the energy sourcing is planned from two types of sources, i.e., (a) Long Term Sources and (b) Short Term Sources. The long term sources include TPL – G (APP) sources, SUGEN, UNOSUGEN and Renewable Energy sources. The short term sources include bilateral sources/power exchange.

The Commission has specified the Renewable Purchase Obligation (RPO) as per the GERC (Procurement of Energy from Renewable Sources) Regulations, 2010 read with the Amendment to the GERC (Procurement of Energy from Renewable Sources) Regulations, 2010. Accordingly, the Petitioner has estimated the renewable energy for FY 2021-22 from the tied up capacities of RE Power.

The balance power would be sourced from short-term sources as and when required. Further, the Petitioner has planned to source the power for the FY 2021-22 subject to minimum technical/MUst run criteria while ensuring reliability of power giving due consideration to optimization of cost.

Based on the above, the Petitioner submitted to the Commission to approve the power purchase quantum as proposed in the Table below.

Table 5.18: Energy availability as projected by Petitioner for FY 2021-22

(MU)

	(
Particulars	FY 2021-22
TPL-G(APP)	2,451.59
SUGEN	5,193.04
UNOSUGEN	2,017.57
Bilateral/ Power Exchange	580.70
Renewable Energy	1,306.09
Total	11,548.98

Commission's analysis

As per GERC (MYT) Regulation, 2011, the Distribution Licensees are required to project the power purchase requirement based on the Merit Order Despatch principles of all generating stations considered for power purchase, RPO and the targets set if any, for Emergency Efficiency and DSM schemes.

TPL-D has projected power purchase requirement of 11548.98 MU whereas the Commission has approved 11475.76 MU based on the approved energy sales,



transmission and distribution losses for FY 2021-22. Accordingly, the quantum of energy purchase is regulated as detailed below:

The Commission has considered the quantum of energy availability from TPL – G(APP) as approved in the Order of TPL – G(APP), for FY 2021-22 in Petition. No. 1925 of 2021.

The quantum of purchase from UNOSUGEN is considered as projected by TPL, since the variable cost is lesser than from any other sources projected.

RPO targets approved by the Commission as per GERC (Procurement Energy from Renewable Sources) (Second Amendment) Regulations, 2018 for FY 2021-22 are as given in the Table below:

Table 5.19: RPO targets approved for FY 2021-22

Description	FY 2021-22
Solar	8.0%
Wind	8.25%
Others (Biomass, Bagasse, MSW and Hydro)	0.75%
Total RPO	17.00%

The quantum of purchase from Wind Energy and Solar Energy sources has been considered in accordance with RPO targets. No purchase of RECs has been considered in view of the prevailing low rates of renewable power discovered through competitive biddings.

The remaining required power purchase is considered from SUGEN. Power purchase from bilateral on power exchange is not considered to match the Energy Balance.

In case, if there is any shortfall of energy in the procurement of power through tied up sources the same shall be made by TPL-(D) through power exchange or e-bid procurement through MSTC.

The energy availability projection as approved by the Commission for FY 2021-22 is given in the Table below:

Table 5.20: Energy availability approved by the Commission for TPL-D (Surat) area for FY 2021-22

(Mus)

Source of Power	Projected by Petitioner	Approved by Commission
TPL – G (APP)	2451.59	2451.59
SUGEN	5193.04	5055.72



Torrent Power Limited – Distribution, (Surat) Truing up for FY 2019-20 and Determination of Tariff for FY 2021-22

Source of Power	Projected by Petitioner	Approved by Commission
UNOSUGEN	2017.57	2017.57
Bilateral	580.70	0
Power Exchange		
Non-Solar	1306.09	1032.82
Solar	1306.09	918.06
Total	11548.98	11475.76

TPL-D is advised to adhere to the above power procurement sources and quantum as approved by the Commission. The Commission is of the view that in case of urgent requirement of fulfilling its USO, TPL-D (Surat) is entitled to change the source of power supply. However, on completion of such event TPL-D (Surat) shall require post facto approval from the Commission for change in quantum and source of energy supply and the power procurement cost.

5.1.14 Power Purchase Cost

Petitioner's submission

The Petitioner has submitted that based on the energy quantum estimated in table above, the power purchase cost for each of the sources is computed. The source-wise estimated power purchase cost is provided hereunder:

- TPL-G (APP) The power purchase cost is based on the costing arrived at from the ARR computation in the petition filed for TPL-G (APP).
- SUGEN Plant The power purchase cost is as per the CERC approved tariff and operating norms.
- UNOSUGEN The power purchase cost is as per the Commission adopted tariff and operating norms.
- Bilateral Sources/ Power Exchange The power purchase rate for bilateral sources/power exchange is arrived at by considering the likely short term market conditions.
- Renewable Power Purchase Cost-The Petitioner has estimated the purchase of power from the tied up capacity of renewable energy sources to fulfil the Renewable Power Purchase Obligation in accordance with the GERC (Procurement of Energy from Renewable Sources) Regulations, 2010 read with the Amendment to the Regulations. Accordingly, the Petitioner has arrived at the renewable power



purchase cost.

The power purchase cost projected by the Petitioner is as given in the table below.

Table 5.21: Power Purchase Cost Projected by TPL-D for FY 2021-22

(Rs. Crore)

SI. No	Source of Power (Station wise)	FY 2021-22
1	TPL-G(APP)	1,199.68
2	SUGEN	2,689.20
3	UNOSUGEN	869.37
4	Bilateral/ Power Exchange	243.89
5	Renewable Energy	714.94
6	Total	5,717.09

Commission's analysis

The power procurement cost of TPL varies from source to source. In case of procurement of TPL-G (APP), the same has been derived from the power generation cost as determined by the Commission for FY 2021-22 in Tariff Petition No. 1925 of 2021.

SUGEN tariff has been determined by the CERC and the Commission has adopted the same and factored in the power procurement cost. SUGEN cost also consists of the fixed cost as well as variable cost. Considering the availability of this plant to be more than 85% during FY 2021-22 TPL-D Ahmedabad needs to pay fixed charge for the whole year if the generator declare availability based on gas availability. The Commission has considered the same as payable to SUGEN. TPL has proposed variable charges of Rs 3.90/kWh as a weighted average cost of fuel from different sources for SUGEN plant. The Commission has accordingly considered Rs 3.90/kWh as the variable charges for SUGEN plant.

UNOSUGEN tariff has been determined by the CERC and the Commission has adopted the same and factored in the power procurement cost. UNOSUGEN cost also consists of the fixed cost as well as variable cost. Considering the availability of this plant to be more than 85% during FY 2021-22, TPL-D needs to pay fixed charge for the whole year if the generator declare availability based on gas availability. The Commission has considered the same as payable to UNOSUGEN. TPL has proposed variable charges of

Rs 3.14/kWh as a weighted average cost of fuel from different sources for UNOSUGEN plant. The Commission has accordingly considered Rs 3.14/kWh as the variable charges for UNOSUGEN plant.

On the fixed cost component of SUGEN Plant, the Petitioner vide additional information dated 11.02.2021 submitted the details of Annual Fixed Charges for SUGEN at Rs. 820.16 Crore for FY 2021-22 including water charges and TPL-D's share as Rs. 613.68 Crore for FY 2021-22. TPL-D vide additional detail dated 29.03.2021 has clarified that an estimated Transmission Charge of Rs. 48 Crore is required to be added in the SUGEN fixed cost of Rs. 613.68 Crore to arrive at SUGEN fixed cost to TPL-D as Rs. 661.68 Crore.

Regarding the fixed cost of UNOSUGEN Plant, the Petitioner vide additional information dated 11.02.2021 submitted that the Annual Fixed Charges approved by CERC is higher than the ceiling allowed by the Commission and hence the Annual Fixed Charges for UNOSUGEN for FY 2021-22 is considered at Rs. 228.00 Crore plus estimated water charges of Rs. 8.26 Crore totaling Rs 236.26 Crore.

Accordingly, the Commission has considered the capacity charges payable to SUGEN and UNOSUGEN at Rs. 613.68 Crore and 236.26 Crore respectively for FY 2021-22.

As regards renewable energy power, TPL –D has submitted the details of tied up sources vide additional information dated 06.02.2021, according to which 909.14 MU of Solar Energy at Wt. Avg tariff of Rs.4.34 per kWh and 1022.78 MU of Non-Solar energy at Wt. Avg tariff of Rs.4.00 per kWh will be available in FY 2021-22. The Commission has considered the cost of Purchase of balance requirement of Renewable energy to meet RPO requirement at the Green Market Power Price available on Power Exchange for FY 2020-21 for the purpose of Power Purchase cost estimation. Since, the Power Purchase Cost is an estimate and therefore, the Licensee shall take due care to procure all additional Renewable Power Requirement through competitive bidding to pursue that the power purchase cost is optimized. The break-



up of power purchase cost from Renewable Energy sources for FY 2021-22 is shown in the Table below.

Table 5.22: Cost of Renewable Power Purchase for TPL- D for FY 2021-22

SI. No	Source	Quantum (MU)	Rate (Rs/kWh)	Cost (Rs. Crore)
Α	Solar Energy			
1	Power contracted in preferential Tariff	269.19	8.33	224.24
2	Power procurement for fulfillment of RPO	648.87	4.00	259.55
3	Total Solar purchase	918.06	5.27	483.78
В	Non-Solar Energy			
1	Power contracted in preferential Tariff	962.01	4.10	394.42
2	Power procurement for fulfillment of RPO	70.81	4.00	28.32
3	Total Solar purchase	1032.82	4.09	422.75
	Total Renewable Purchase	1950.88	4.65	906.53

Considering above, the total procurement cost for power from different sources for TPL-D during FY 2021-22 works out as given in the table below:

Table 5.23: Summary of approved power procurement sources with cost/kWh for FY 2021-22

Power Sources	Energy Sources	Capacity	Variable Cost per	Total Variable	Total Cost	Unit/ Cost (Rs/kWh)
Sources	(MU)	charges payable	Cost per unit	charges	of Energy purchased	(NS/KVVII)
	, -,	by utility	(Rs/kWh)	(Rs.	(Rs. Crore)	
		(Rs.		crore)		
		Crore)				
AMGEN	2451.59	319.51	3.42	837.84	1157.34	4.72
SUGEN	5055.72	661.68	3.90	1971.73	2633.41	5.21
UNOSUGEN	2017.57	236.26	3.14	633.52	869.78	4.31
Bilateral through competitive						
bidding						
Power Exchange						
Non Solar	1032.82		4.09	422.75	422.75	4.09
Solar	918.06		5.27	483.78	483.78	5.27
Total	11475.76	1217.45		4349.62	5567.06	4.851
Energy Requirement TPL- D (A)	8069.68					
Ahmedabad % Share					70.32%	
Total Power Purchase Cost of					3914.72	
TPL- D (A)					3314.72	
Energy Requirement TPL- D (S)	3406.08					
Surat % of share					29.68%	
Total Energy Requirement TPL -D	11475.76					

Power Sources	Energy Sources (MU)	Capacity charges payable by utility (Rs. Crore)	Variable Cost per unit (Rs/kWh)	Total Variable charges (Rs. crore)	Total Cost of Energy purchased (Rs. Crore)	Unit/ Cost (Rs/kWh)
(A & S)						
Total Power Purchase Cost of TPL- D (S)					1652.34	
Total Power Purchase Cost of TPL- D (A & S)					5567.06	

The above power procurement cost is reflective of power requirement of both Ahmedabad and Surat area. For arriving at individual power purchase cost, the total power purchase cost is apportioned in the ratio of power requirement between the two cities. The following table depicts the power purchase cost of Surat area for FY 2021-22.

Table 5.24: Approved Power Purchase Cost for TPL-D (Surat)

(Rs. Crore)

	(1.0. 0.0.0)		
Particulars	Projected by	Approved by	
	Petitioner	Commission	
Power Purchase Cost	1695.22	1652.34	

5.2. Fixed Charges

5.2.1 Operation and Maintenance (O&M) Expenses

Petitioner's submission

The Petitioner has submitted that the Commission in order dated 22nd December, 2020 has noted that it would be difficult to make realistic projection and accordingly directed the utilities to consider principles and methodology as provided in the MYT Regulations, 2016. It is stated that the Commission in Order dated 9th June, 2017 has stipulated trajectory of O&M expenses with escalation of 5.72% for each year and accordingly, extended the trajectory and projected the O&M expenses for FY 2021-22 as detailed in the Table below:

Table 5.25: O&M expenses claimed by TPL- D (Surat) for FY 2021-22

(Rs. Crore)

	· · · · · · · · · · · · · · · · · · ·
Particulars	Projected by the
	petitioner
O&M Expenses	149.01

The Petitioner has submitted that the variation in O&M expenses does not take into



account the uncontrollable expenses such as the wage revision, change in law, change in levies/ duties/ taxes and charges, etc. and requested these components of uncontrollable factors and any such expenses on account of these factors are to be allowed over and above the normal allowable components.

Commission's analysis

The Petitioner has projected the O&M expenses for FY 2021-22 based on the O&M expenses approved (Rs.140.94 crore) for FY 2020-21 in MTR order with escalation of 5.72% in terms of Regulation 86.2 (b) and accordingly projected O&M expenses of Rs.149.01 crore (140.94*1+5.72%) for FY 2021-22.

The Commission in the MYT Order had approved O & M Expenses for the ensuing years based on the average of actual O & M expenses for the previous three years escalated @ 5.72%. Accordingly, the Commission considering the actual O&M expenses approved for FY 2017-18 to FY 2019-20 and computed the O&M expenses at Rs.152.83 crore for FY 2021-22. However, the Petitioner has proposed Rs. 149.01 Crore as O & M Expenses for FY 2021-22 and therefore, the Commission considers the same.

The Commission, accordingly, approves the O&M expenses for FY 2021-22 as given hereunder.

Table 5.26: O&M Expenses approved by the Commission for FY 2021-22

(Rs. Crore)

		(1.131 0.10.0)	
Particulars	Projected by the	Approved by	
	petitioner	Commission	
O&M Expenses	149.01	149.01	

5.2.2 Capital Expenditure, Capitalization and Sources of Funding

a) Capital Expenditure

Petitioner's submission

The petitioner has projected capital expenditure of Rs.221.34 Crore for FY 2021-22 as per the details given in the Table below:



Table 5.27: Capital expenditure claimed by TPL-D (A) for FY 2021-22

(Rs. Crore)

Particulars	Projected by the petitioner
EHV Network	61.20
HT Network	37.40
LT Network	35.54
Special projects	57.69
Meter management	10.64
Customer care	10.46
IT	2.12
Others	6.30
Total	221.34

It is submitted that Surat city is considered as the hub for textile and diamond industries and demand for electricity has increased at a 3 Yr CAGR rate of about 3% and is likely to increase in the coming years. Urbanisation of the city has resulted in increasing issues of availability of corridor for creation of evacuation network. Further, new initiatives such as Smart City, infrastructure projects like BRTS/Metro, modern water/sewage systems necessitate creation of state-of-the-art electrical network with ability of handling large quantum of power at the highest levels of reliability. It is planned to undertake capital expenditure for augmentation and upgradation of distribution network to meet the future load growth while ensuring reliability & quality of power along with safety measures.

The capital expenditure in planning redundancy and reliability in EHV network to provide un-interrupted supply, additional EHV & HV substations to cater to the load growth, LT network to meet the consumer connectivity and other special projects and miscellaneous items such as automation, IT etc. TPL-D (Surat) has furnished the details of major capital expenditure as detailed below:

(a) EHV Network:

 Periodic expansion of the existing distribution network to cater to the existing demand. Modernize and overhaul the EHV network due to aging, optimal loading levels, growing demand, challenging physical environment and high reliability requirements have put strain on the existing network.



- New 220 kV GIS SS at C station along with 220 kV line connectivity: Commissioning of 220 kV C-GIS project along with 220kV & 66kV inter connectivity was approved in 3rd MYT control period. Major activities associated with the project are expected to be completed by FY 2020-21 except installation work of 220 kV reactor which is expected to be completed by FY 2021-22.
- New 66 kV Substations: During 3rd MYT control period, new 66/11 kV substation were proposed at Katargam and Bhathena area. However, due to non-availability of land at reasonable rate, the project has been rescheduled during FY 2021-22.
- Additional 66 kV connectivity to cater to load growth: During 3rd MYT control period, additional 66 kV connectivity between different substations were proposed to cater to future load growth and to maintain n-1 redundancy. Connectivity work between 220 kV Bhatar to 66 kV H substation is proposed to be carried out during FY 2020-21
- Additional/Augmentation/Replacement of Power Transformer: Based on projected loading and n-1 criteria, power transformer capacity enhancement is planned at B substation
- Renovation and Replacement: Replacement of equipment like Relay, VCB,
 Capacitor, CT, LA, Isolator, Control Panel, Battery Charger, etc. have been considered based on aging, obsolete technology, frequent breakdown, and maintenance problems.
- <u>Supporting Infrastructure:</u> Major cost involved in this head pertains to ABT and SCADA system replacement. In addition, provisions are being kept for replacement/ new requirement of EHV/ ABT meters, MRI, RF amplifier & modem, UPS battery & other hardware for SCADA, Testing, measuring equipment. Further, it is proposed to install ladder on 220 kV tension tower to enhance safety to working on tower during preventive/ breakdown maintenance.

(b) HT Network

• 11 kV network development & modification: 11 kV new feeders have been considered to mitigate the future load growth of surrounding area, relieving existing feeders and power transformers, creating redundancy, and to reduce long length of network. Network development and ring modification are proposed based on load



balancing of existing feeders, creating of ready to serve network, and enhancement of load transfer flexibility.

- Replacement/Shifting of HT network: Based on aging of existing PILC network, infrastructure projects like BRTS/smart city work proposed by local authority, and reliability requirements, it is proposed to replace/shift HT cable on the route. Accordingly, the cost of replacement/shifting has been considered.
- <u>Distribution substation automation</u>: Automation of distribution substation facilitates remote load transfer of 11 kV feeders in case of 66 kV SS failure and 11 kV feeder tripping, which reduces the restoration time and enhances customer satisfaction. It enables remote identification of faulty feeder section and effective load management of 11 kV feeders. During FY 2021-22, the Petitioner has proposed distribution automation of an approximate 100 nos. of distribution substation.
- New distribution substations: To meet the additional load requirement of existing as well as new consumers the distribution transformers (DT's) need to be upgraded and new DT's need to be installed at the load centre. The substation needs to be planned in load centre to ensure lower LT length of lines to maintain the existing level of losses. This also involves the development of necessary network by laying new 11 kV cable and installation of switchgear/breaker/LT panels.
- New HT consumers: Based on the expected number of new HT consumers, the Petitioner has proposed expenditure for processing 11 nos. of HT consumer connections during FY 2021-22.
- Additional/Augmentation/Replacement of Distribution transformer: In order to relieve overloaded distribution transformers and for creating margin for catering to the future load growth, 5 nos. of augmentation of distribution transformers are considered in FY 2021-22. Further, based on internal physical condition, frequent problem, test results, 20 nos. of distribution transformers are proposed to be replaced. Additionally, 5 nos. installation of Compact substation is considered by dismantling existing DSS in which deteriorated civil structure/deteriorated DSS equipment are found.
- Installation/Replacement of 11 kV switchgear/LT panel/Breaker and Accessory for Safety: As part of replacement of deteriorated and unsafe



switchgear/panels/breakers, it is proposed to carry out replacement of 7 nos. of switchgear/BMC and 40 nos. of LT FSP replacement.

- <u>Distribution substation asset strengthening for safety</u>: Distribution substation (DSS) exists in public domain surrounded by residential/commercial/industrial area. Distribution substation are usually oil type distribution transformers and 11 kV RMUs which are susceptible to fire and safety hazard in public area and operational safety. To identify the critical distribution substation locations for replace and reduce safety hazard, distribution asset survey has been carried out based on geographical location, public movements and criticality of asset. Additionally, new earthing system is also proposed.
- <u>Reactive Power Compensation</u>: In order to maintain power factor and to reduce export kVAr in system, it is proposed to install 40 nos. of Automatic Power Factor Correction Panels (APFC).
- <u>Supporting Infrastructure</u>: This includes expenses related to establishment of testing facility, procurement of equipment such as Meter Reading Instrument, Earth Tester, Power Quality analyzer, Cable identifier/ Cable nailing hydraulic tools, insulation measurement equipment and other Testing/ Measuring equipment.

c) LT Network:

- New Connection/Load Extension: To provide network for the last mile connectivity
 as well as for maintaining "ready to serve" network. Around 20,800 applications for
 new connection/extension are expected to be released.
- <u>LT network development and modification</u>: LT network is required to be developed and modified suitably to cater to load growth, create branch network to reduce faults, balancing network to relieve distribution transformer and shifting network & related accessories for rerouting/replacement of cable due to infrastructure projects like BRTS/smart city, etc.
- Replacement of MSP/MB for Safety & Reliability: LT network exists in public domain surrounded by residential / commercial / industrial area. To enhance safety as well as to improve power reliability, MSP and Meter Box which are found in critical condition will be replaced/ renovated. This will also include revamping of unsafe



and deteriorated Meter boxes/services which are found susceptible to fire/repeated faults.

- <u>Earthing of LT assets for Safety</u>: New earthing system in LT asset is proposed to enhance safety based on measurement and physical condition of existing earthing system
- <u>Supporting Infrastructure</u>: Replacement/new requirement of LT Cable fault locator,
 Insulation resistance tester, Earthing resistance meter and other Testing /
 Measuring equipment.

d) Special Project:

- Shifting of Network due to Metro project: Surat City Metro rail project has been planned on Elevated Bridge and Underground by local authority. Based on preliminary joint route survey carried out with Authority, it is envisaged that some of TPL's network in the route of metro project is required to be shifted/ removed/ rerouted. Accordingly, requisite provision is being made for network shifting to be initiated from FY 2021-22.
- Infrastructure development of PSC and Offices: The Power Supply Centre (PSC) have been proposed to improve efficiency in operation and enhance customer services through reducing time to attend complaints, releasing connections, approaching consumer's request etc. Since it is difficult to get new land at cheaper rate in the license area, it is decided to establish PSC in TPL's existing premises at three strategic locations viz. B, C & E stations by creating space through redesigning existing infrastructure. The PSC and other office buildings will be established with state-of-the-art infrastructure facilities.

e) Meter management:

Metering system is an important facet of any electricity distribution utility. Capital expenditure is planned for purchasing Meters, CT/Seals etc. for the following activities:

- Meters for providing new electric connections/modification of load, etc.
- Meters for replacing defective energy meters based on the past trend of defective meters replaced.



- Meters for replacing old electromechanical meters in a phased manner
- Meters for replacing static electronic meters which are vulnerable to theft
- Technology upgradation of existing meter testing laboratory infrastructure through procurement of automatic testing bench, tools/instruments
- f) <u>Customer service</u>: To enhance customer satisfaction, it is proposed to implement the single window concept along with que management system. This also necessitates requirement of basic amenities like seating arrangement, writing desk, drinking water, etc. Accordingly, it is planned to develop new plug points at B, C and E Station along with premise development plan. Also, it is proposed to implement Automatic Metering Infrastructure (AMI) system initially for LTMD services with Smart meters at consumer end. Provision is made for MRI (Meter Reading Instruments)/ Optical Port and testing/ measuring instruments like Accu-check machine for onsite testing of meters, Clamp on Meters, PF Measuring Instrument, etc.
- g) <u>IT & related expenses</u>: Hardware replacement, software upgradation, fibre network enhancement, network security, network monitoring and additional SAP licenses.

h) Others:

- Replacement/New requirement/Modification related to fire & safety assets.
- Replacement/new requirement of testing/measuring equipment to check quality parameters of material.
- Extension & Enhancement of GIS enterprise solution with upgradation and provision for new/replacement of hardware and software, RTS for energy conservation.
- RFID enabled identification Tags / Inlays / Labels procurement for asset tracking and material issue as well as provision for various stores related assets.
- Expenditures for Refurbishment of EHV SS, Dist. SS, etc. and routine need based civil related work.
- Provision for expenses related to fire safety and further modification in existing premises to enhance safety.
- Comprehensive Contract Labour management System (CLMS) to be implemented from FY 2021-22. Provision for Hi-Tech Training classroom with all ultra-modern



amenities and state of the art infrastructure along with premise development project, Safety Gallery.

 CCTV Surveillance system along with IT set-up to enhance safety of premises, strengthening security at all stations, provision for new / replacement / upgradation of other supporting assets/vehicles, etc.

Commission's analysis

The Petitioner has projected CAPEX of Rs.221.34 Crore for FY 2021-22 as detailed above. The Petitioner has furnished the project/work-wise justification for the capex projected for FY 2021-22.

The Commission opines that in order to meet the load growth, system demand and to provide reliable quality supply has provisionally approved the CAPEX OF Rs.221.34 crore for FY 2021-22 as projected by the Petitioner.

The Commission, accordingly, approves the Capital expenditure (Capex) at Rs.221.34 crore for FY 2021-22.

b) Capitalization and Gross Fixed Assets

Petitioner's submission

TPL-D (Surat) has projected Rs.168.41 Crore towards capitalization for FY 2021-22 and furnished the project/work-wise details of capitalisation in Form 4.3 to the Petition.

Commission's analysis

The Commission has observed (from Form 4.3) that the Petitioner has proposed capitalisation of capex relating schemes as given hereunder:

Table 5.28: Projected Capex, capitalisation by TPL-D (Surat) for FY 2021-22 (Rs. Crore)

Project/schemes	Сарех	Capitalisation	% of capitalisation to Capex
1	2	3	4=(3/2)
EHV network	61.21	61.21	100.00%
HV network	37.40	37.40	100.00%
LT Network	35.53	35.53	100.00%
Special projects	57.69	4.00	6.93%
Meter management	10.64	10.64	100.00%
Customer care	10.46	10.46	100.00%
IT	2.12	2.12	100.00%
Others	6.30	7.05	111.90%



Project/schemes	Сарех	Capitalisation	% of capitalisation to Capex
Total	221.35	168.41	76.08%

It is observed by the Commission that average capitalization over approved CAPEX for last four years i.e. from FY 2016-17 to FY 2019-20 works out to 48.03%. Accordingly, for FY 2021-22 the Commission approves capitalization of Rs. 106.31 Crore (221.35*48.03%).

The Commission has approved closing GFA at Rs.1920.37 crore in true up for FY 2019-20 and the same is considered as opening GFA for FY 2019-20. Further, the Commission has considered capitalisation of Rs.167.92 crore as approved in MTR order dated 24.04.2019 for FY 2020-21 and arrived at the closing GFA for FY 2020-21 at Rs.2088.29 crore (1920.37+167.92) and the same is considered as opening GFA for FY 2021-22.

The Commission, as deliberated above has considered the opening GFA, additions during the year and closing GFA for FY 2021-22 as given in the table below:

Table 5.29: Gross Fixed Assets approved for FY 2021-22 for TPL-D (Surat)

(Rs. Crore)

SI. No.	Particulars	Approved by Commission
1	Opening GFA	2088.29
2	Asset additions during the year	106.31
3	Closing GFA (1+2)	2194.60

The Commission, accordingly, approves the GFA for FY 2021-22 as detailed in the table above.

c) Funding of CAPEX

Petitioner's submission

TPL-D (Surat) has submitted the capitalisation and funding of CAPEX, as detailed in the Table below:

Table 5.30: Funding of capitalization projected by TPL-D (Surat) for FY 2021-22

(Rs. Crore)

Particulars	Projected by the Petitioner
Opening GFA	2100.32



Particulars	Projected by the Petitioner
Addition to GFA	168.41
Deletion from GFA	_
Closing GFA	2268.73
Less: SLC Additions	13.80
Balance Capitalization	154.61
Normative Debt @ 70%	108.23
Normative Equity @ 30%	46.38

Commission's analysis

The Commission as deliberated in earlier paragraph has considered the opening GFA, addition to GFA and Closing GFA as approved above. The Commission has considered the SLC addition as projected by the Petitioner, since these SLCs are received from the consumers and relates to service connections and not attributable to EHV schemes (i.e. EHV SS) for which capitalisation is regulated and not considered.

The Commission in terms of GERC (MYT) Regulations 2016 has approved the funding of capitalisation for normative debt-equity as shown in the Table below for FY 2021-22:

Table 5.31: Funding of capitalization approved for FY 2021-22

(Rs. Crore)

		(113: 61016)
Particulars	Projected by the	Approved by
	Petitioner	Commission
Opening GFA	2100.32	2088.29
Addition to GFA	168.41	106.31
Deletion from GFA		
Closing GFA	2268.73	2194.60
Less: SLC Additions	13.80	13.80
Balance Capitalization	154.61	92.51
Normative Debt @ 70%	108.23	64.76
Normative Equity @ 30%	46.38	27.75

The Commission approves the funding of capitalization for FY 2021-22 as shown in the above Table.

5.2.3 Depreciation

Petitioner's submission

TPL-D (Surat) has projected Rs.78.46 Crore towards depreciation for FY 2021-22 as shown in the Table below:



Table 5.32: Depreciation projected by TPL-D (Surat) for FY 2021-22

(Rs. Crore)

Particulars	Projected by the Petitioner
Depreciation	78.46

Commission's analysis

The Commission has approved the closing value of depreciable GFA at Rs.1888.90 crore in truing up for FY 2019-20 and the same is considered as opening depreciable GFA for FY 2020-21. The GFA is further updated with the capitalisation approved for FY 2020-21 in the MTR order dated 24.04.2019 and the addition approved for FY 2021-22.

The weighted average rate of depreciation on assets and SLC is considered based on the actual of FY 2019-20 and accordingly computed the depreciation for FY 2021-22 as given in the table below:

Table 5.33: Depreciation approved for FY 2021-22

(Rs. Crore)

SI. No.	Particulars	Projected by the Petitioner (Form 5)	Approved by Commission
1	Opening value of depreciable GFA	2024.82	2024.82
2	Additions during the year	168.41	106.31
3	Closing GFA (1+2)	2193.23	2131.13
4	Average depreciable assets (1+3)/2	2109.03	2077.98
5	Weighted average rate of depreciation	4.22%	3.91%
6	Depreciation (4*5)	89.10	81.15
7	Depreciation on assets created out of SLC	10.64	9.98
8	Depreciation allowed in ARR (6-7)	78.46	71.17

The Commission approves the depreciation for FY 2021-22 as shown in the above Table.

5.2.4 Interest and Finance Charges

Petitioner's submission

TPL-D (Surat) has claimed a sum of Rs.35.59 Crore towards interest on loans for FY 2021-22 as detailed in the Table below.

The Petitioner has submitted that interest is calculated on normative loans in terms of the GERC (MYT) Regulations, 2016 by applying estimated opening Weighted



Average Rate of interest of the actual loan portfolio of the Petitioner at the beginning of the year while repayment has been considered equal to the depreciation of the assets for the year.

Table 5.34: Interest on loans projected by TPL-D (Surat) for FY 2021-22

(Rs. Crore)

Particulars	Projected by the Petitioner
Opening Balance of Loans	380.58
Loan addition during the year	108.23
Repayments	78.46
Closing Balance of Loans	410.34
Average Loan	395.46
Weighted average rate of interest	9.00%
Interest Expense	35.59

Commission's analysis

The Commission has approved the normative closing loan balance at Rs.329.96 crore in truing up for FY 2019-20 and same is considered as opening loan for FY 2020-21. Additions to loan is further updated with the normative loan based on capitalisation approved for FY 2020-21 in the MTR order dated 24.04.2019 and the capitalisation approved for FY 2021-22.

The rate of interest is considered as projected by the petitioner and accordingly computed the interest on loan for FY 2021-22 as given in the table below:

Table 5.35: Interest on loans approved for FY 2021-22

(Rs. Crore)

Particulars	Projected by the	Approved by
	Petitioner	Commission
Opening Balance of Loans	380.58	384.21
Loan addition during the year	108.23	64.76
Repayments	78.46	71.17
Closing Balance of Loans	410.34	377.80
Average Loan	395.46	381.01
Weighted average rate of interest	9.00%	9.00%
Interest Expense	35.59	34.29

The Commission, accordingly, approves the interest on loan for FY 2021-22 as detailed in the table above.

5.2.5 Return on Equity

Petitioner's submission

TPL-D (Surat) has projected Rs.103.66 Crore towards Return on Equity @ 14% for



FY 2021-22 as detailed in the Table below:

Table 5.36: Return on Equity projected by TPL-D (Surat) for FY 2021-22

(Rs. Crore)

Particulars	Projected by the Petitioner
Opening Equity	717.21
Equity addition during the year	46.38
Closing Equity	763.59
Average of Opening and Closing Equity	740.40
Rate of Return on Equity	14%
Return on Equity on average equity	103.66

Commission's analysis

The Commission has approved the closing equity at Rs.665.86 crore in truing up for FY 2019-20 and the same is considered as opening equity for FY 2020-21. The addition to equity is further updated based on capitalisation approved for FY 2020-21 in the MTR order dated 24.04.2019 and the capitalisation approved for FY 2021-22.

The Commission accordingly computed the Return on equity for FY 2021-22 as given in the table below:

Table 5.37: Return on Equity approved by the Commission for FY 2021-22

(Rs. Crore)

SI. No.	Particulars	Projected by the Petitioner	Approved by Commission
1	Opening Equity	717.21	713.91
2	Equity addition during the year	46.38	27.75
3	Closing Equity	763.59	741.66
4	Average of Opening and Closing Equity	740.40	727.79
5	Rate of Return on Equity	14%	14%
6	Return on Equity on average equity	103.66	101.89

The Commission, accordingly, approves the Return on Equity for FY 2021-22 as detailed in the table above.

5.2.6 Interest on Consumer's Security Deposit

Petitioner's submission

TPL-D (Surat) has projected interest on security deposit at Rs.15.88 Crore for FY 2021-22. It is submitted that interest rate of 4.65% is considered on the average estimated balance of security deposit for FY 2021-22 as given in the Table below.



Table 5.38: Interest on Security Deposit projected for FY 2021-22

(Rs. Crore)

Particulars	Actual
Interest Rate	4.65%
Interest on Security Deposit	15.88

Commission's analysis

The Commission observed that the Petitioner has not considered Security Deposit amount envisaged for FY 2020-21 while arriving at opening balance of Security Deposit amount for calculation of Interest on Security Deposit for FY 2021-22. The Commission has corrected the error and accordingly, has worked out Interest on Security Deposit as Rs. 16.96 Crore.

The Commission, accordingly, approves the interest on security deposit at Rs. 16.96 Crore for FY 2021-22.

5.2.7 Income Tax

Petitioner's submission

The Petitioner has projected the Income tax at Rs.22.19 crore based on the actual tax paid for FY 2019-20 and in proportion to the PBT of TPL-D (Surat).

Table 5.39: Income tax projected by TPL-D (Surat) for FY 2021-22

(Rs. Crore)

		(1.5. 6. 6. 6,
	Particulars	Projected by the Petitioner
Income Tax		22.19

Commission's analysis

The Commission has approved Rs. 22.19 crore towards income tax in true up for FY 2019-20. The Commission, accordingly, in terms of regulation 41.1 has provisionally considered Rs. 22.19 crore towards income tax for FY 2021-22 subject to true up based on the actual tax paid for the relevant year as specified in regulation 41.2 of the GERC (MYT) Regulations 2016 as given in the Table below:

Table 5.40: Income Tax approved for FY 2021-22

(Rs. Crore)

Particulars	Projected by the Petitioner	Approved by Commission
Income Tax	22.19	22.19



The Commission, accordingly, approves the income tax for FY 2021-22 as detailed in the table above.

5.2.8 Bad Debts Written Off

Petitioner's submission

The Petitioner has projected bad debts of Rs.0.51 Crore based on the trend of amount written off in previous years as shown in the Table below.

Table 5.41: Bad Debts Written-off projected by TPL-D (Surplus) for FY 2021-22

(Rs. Crore)

	(1.0.0.0)
Particulars	Projected by the Petitioner
Bad Debts Written off	0.51

Commission's analysis

Regulation 94.9 of the GERC (MYT) Regulations, 2016 specify that bad debts written off may be allowed as a pass through in the ARR subject to prudence check based on the trend of write off of bad debts in the previous years. The Commission has approved Rs.0.51 crore towards bad debts written off for FY 2019-20 in truing up based on the available audited annual accounts for FY 2019-20. The Commission, accordingly has considered bad debts written off at Rs.0.51 crore at the same level for FY 2021-22 as shown in the Table below:

Table 5.42: Bad Debts Written off approved for FY 2021-22

(Rs. Crore)

Particulars	Projected by the Petitioner	Approved by Commission
Bad Debts Written off	0.51	0.51

The Commission, accordingly, approves the Bad debts written off for FY 2021-22 as given in the table above.

5.2.9 Contingency Reserve

Petitioner's submission

The Petitioner has submitted that the Commission had allowed contingency reserve for each year of the previous control period and based on the same principle has proposed the same amount towards contingency reserve for FY 2021-22 as shown in the Table below.:



Table 5.43: Contingency Reserve projected by TPL-D (Surplus) for FY 2021-22

(Rs. Crore)

Particulars	Projected by the Petitioner
Contingency Reserve	0.40

Commission's analysis

Regulation 86.3.1 of GERC (MYT) Regulations 2016 specify the Distribution Licensee may make an appropriation to the Contingency Reserve of a sum not exceeding 0.5 per cent of the original cost of fixed assets at the beginning of the year, for each year, which shall be allowed in the calculation of aggregate revenue requirement:

The Commission has approved opening GFA at Rs.2088.29 crore for FY 2021-22 and the contingency reserve at 0.5% of Original cost of GFA at the beginning of the year works out to Rs.10.44 crore. However, the Petitioner has projected Rs.0.40 crore towards contingency reserve for FY 2021-22.

The Commission, accordingly considers contribution to Contingency Reserve at Rs.0.40 crore for FY 2021-22 as shown in the table below.

Table 5.44: Contingency Reserve approved for FY 2021-22

(Rs. Crore)

Particulars	Projected by the Petitioner	Approved by Commission
Contingency Reserve	0.40	0.40

The Commission, accordingly, approves the contingency reserve for FY 2021-22 as shown in the table above.

5.2.10 Non-Tariff Income

Petitioner's submission

The Petitioner has projected Non-Tariff Income at Rs.10.24 Crore for FY 2021-22 based on the current trend and stated that variation in actual non-tariff income except bad debt recovery shall be considered as uncontrollable during truing up exercise. The Petitioner has requested the Commission to approve the non-tariff income for FY 2021-22 as estimated and shown in the table below.



Table 5.45: Non-Tariff Income projected by TPL-D (Surat) for FY 2021-22

(Rs. Crore)

	(1.01 -01 -01 -07
Particulars	Projected by the Petitioner
Non-Tariff Income	10.24

Commission's analysis

The Commission in the MYT Order had approved Non-Tariff Income for ensuing years equal to the actual Non-Tariff Income approved in latest True Up. The Commission, accordingly approves Non-Tariff Income as Rs. 10.15 Crore for FY 2021-22 at the same level as approved for FY 2019-20 in the Truing up.

Table 5.46: Non-Tariff Income approved for FY 2021-22

(Rs. Crore)

Particulars	Projected by the Petitioner	Approved by Commission
Non-Tariff Income	10.24	10.15

5.2.11 Interest on Working Capital

Petitioner's submission

The working capital requirement is arrived at as per the GERC (MYT) Regulations, 2016. As the working capital requirement is negative, the Petitioner has not claimed any interest on working capital.

The Petitioner has submitted that interest on working capital is computed as per the MYT Regulations, 2016 and the interest rate of 10.25%, being the SBI MCLR rate on 1st April, 2020 plus 250 basis points, is applied on the working capital requirement arrived at in accordance with the Regulations.

The Petitioner has computed the working capital requirement and interest on working capital as shown in the table below.

Table 5.47: Interest on Working Capital projected by TPL-D (Surat) for FY 2021-22

(Rs. Crore)

Particulars	Projected by the Petitioner
O&M Expense for 1 month	12.42
1 % of GFA for Maintenance Spares	21.00
Receivables for 1 month	174.22
Less: Security Deposit	341.56
Working Capital Requirement	-
Interest Rate (%)	10.25%
Interest on Working Capital	-



Commission's analysis

The Commission has computed the working capital requirement of TPL-D (Surat) as specified in Regulation 40.4 and Regulation 40.5 of the GERC (MYT) Regulations 2016 read in conjunction with the GERC (MYT) (First Amendment) Regulations, 2016 after considering the security deposit amount available during the year.

The Petitioner has considered rate of interest @10.25% p.a. for computing interest on working capital for FY 2021-22. The Commission has verified the 1-year SBI MCLR as on 1st April 2020 is at 7.75%. Accordingly, the rate of interest (including 250 basis) as per regulations works out to 10.25% (7.75%+2.50%) for computation of interest on working capital for FY 2021-22.

The working capital requirement and the interest on working capital computed for FY 2021-22 is as shown in the Table below:

Table 5.48: Interest on Working Capital approved for FY 2021-22

(Rs. Crore)

SI. No.	Particulars	Projected by the Petitioner	Approved by Commission
1	O&M exp. (1 month)	12.42	12.42
2	Maintenance spares @1% of opening GFA	21.00	20.88
3	Receivables for 1 month	174.22	169.88
4	Sub-total (1+2+3)	207.52	203.18
	Less: Amount held as Security deposit from		
5	Distribution system users	341.78	364.75
6	Working capital requirement (4-5)	-	_
7	Rate of interest (%)	10.25%	10.25%
8	Interest on working capital (6 * 7)	_	_

The Commission, accordingly, approves interest on working capital as NIL for FY 2021-22.

5.2.12 Aggregate Revenue Requirement (ARR) for FY 2021-22

Petitioner's submission:

The Petitioner has projected the ARR for FY 2021-22 as given in the table below:

Table 5.49: ARR projected by the Petitioner for FY 2021-22

(Rs. Crore)

Particulars	Projected by the Petitioner
Power purchase	1695.22
O & M expenses	149.01



Particulars	Projected by the Petitioner
Depreciation	78.46
Interest on loans	35.59
Interest on working capital	
Interest on SD	15.88
Bad debts written off	0.51
Contingency reserve	0.40
Return on Equity	103.66
Income tax	22.19
Less: Non-tariff income	10.24
ARR	2090.69

Commission's analysis:

The Commission based on the costs/expenses approved in the preceding paragraphs has computed the ARR as given in the Table below:

Table 5.50: ARR approved in respect of TPL-D (A) for FY 2021-22

(Rs. Crore)

SI. No.	Particulars	Projected by the Petitioner	Approved by Commission
1	Power purchase	1695.22	1652.34
2	O & M expenses	149.01	149.01
3	Depreciation	78.46	71.17
4	Interest on loans	35.59	34.29
5	Interest on Security deposits from consumers	15.88	16.96
6	Interest on working capital		
7	Bad debts written off	0.51	0.51
8	Contribution to contingency reserve	0.40	0.40
9	Return on Equity	103.66	101.89
10	Income tax	22.19	22.19
11	Total ARR	2100.93	2048.76
12	Less: Non-tariff income	10.24	10.15
13	Net ARR	2090.69	2038.61

5.2.13 Revenue from Sale of Power

Petitioner's submission

The Petitioner has projected the revenue from sale of power at Rs.2100.57 crore for FY 2021-22 considering the sales and existing tariff rates for different category of consumers. It is further submitted that the revenue from sale of power arrived at



with existing tariff includes the revenue from FPPPA Charges at Rs.1.38 per unit.

The Petitioner has submitted the revenue from sale of power for FY 2021-22 as given in the Table below.

Table 5.51: Revenue from Sale of Power projected by TPL-D (Surat) for FY 2021-22

(Rs. Crore)

	(113: 61016)
Particulars	Projected by the Petitioner
Revenue from Sale of Power	2100.57

Commission's analysis

The Commission in accordance with the GERC (MYT) Regulations, 2016 approves the Revenue from sale of power at Rs.2100.57 Crore for FY 2021-22 with existing tariff i.e.as applicable for each category of consumer (slab-wise) as per the tariff (including Fuel surcharge) notified by the Commission for FY 2020-21 as given in the Table below.

Table 5.52: Revenue from Sale of Power approved for FY 2021-22

(Rs. Crore)

Particulars	Projected by the Petitioner	Approved by Commission
Revenue from Sale of Power	2100.57	2100.57

5.2.14 Trued up net Revenue (Gap)/Surplus of FY 2019-20

The Commission has approved the net revenue surplus in true up for FY 2019-20 including the gains/losses shared on account of controllable and uncontrollable factors in accordance with Regulation 23 and 24 of the GERC (MYT) Regulations, 2016 as detailed in the Table below:

Table 5.53: Approved Revenue (Gap)/ Surplus for TPL-D (Surat) for FY 2019-20

(Rs. Crore)

SI. No.	Particulars	Claimed by the Petitioner	Approved in truing up
Α	Trued up ARR	2238.13	2237.81
В	Revenue from sale of power	2326.15	2326.15
С	Revenue (Gap)/Surplus (B-A)	88.02	88.15
	Add: Revenue gap approved in true up for FY 2017-18		
D	(incl. carrying cost of Rs.4.62 crore)	(112.46)	(33.53)
	Add: Carrying cost allowed in order dated	(113.46)	
	05.09.2020 in APTEL judgement in Appeal No.249		
Е	of 2017		(49.01)



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SI. No.	Particulars	Claimed by the Petitioner	Approved in truing up
F	True up (Gap)/Surplus for FY 2019-20 (C-D-E)	(25.44)	5.61

The Commission, accordingly, considers the trued-up Revenue Surplus of Rs. 5.61 Crore for FY 2019-20, for determination of tariff for FY 2021-22.

Regulation 21.6 (c) of the MYT Regulations, 2016 specify that carrying cost is to be allowed on the amount of revenue (gap) / surplus for the period from the date on which such (gap) / surplus has become due, calculated on the simple interest basis at the weightage average SBI Base Rate for the relevant year, subject to prudence check and submission of documentary evidence for having incurred the carrying cost in the years prior to the year in which the which revenue gap is addressed.

It is pertinent to mention that the trued-up surplus of FY 2019-20 consists of unrecovered gap/ FPPPA amount of Rs. (-) 56.72 Crore as certified by the Petitioner's Statutory Auditor. That means the total Revenue Surplus of Rs. 5.61 Crore for FY 2019-20 as shown in table above has two components viz. (i) Rs. (-) 56.72 Crore of unrecovered gap/FPPPA and (ii) Rs. 51.11 Crore on account of Gains/Losses worked out as per MYT Regulations, 2016. FPPPA amount is being recovered as per the practice in vogue. The Commission, keeping in mind the interest of consumers as well as Licensee, allows the amount of FPPPA to be recovered from the consumers on quarterly basis. There are instances where the Commission has allowed the past unrecovered FPPPA in the quarterly revisions of FPPPA. Accordingly, the unrecovered amount of Rs. (-) 56.72 Crore as certified by the Statutory Auditor is the amount gradually accumulated during FY 2019-20. Therefore, the Commission has decided to calculate the carrying cost on the amount of Rs. 5.61 Crore as per Regulations.

The Petitioner has adopted weighted average SBI Base rate of 9.29% for computing the carrying cost. However, the SBI weighted average Base rate during FY 2019-20 works out to 8.83% based on the applicable SBI Base rate for FY 2019-20 is as given hereunder:



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From 01.04.2019 to 09.09.2019	- 9.05%
From 10.09.2019 to 15.12.2019	- 8.95%
From 16.12.2019 to 09.03.2020	- 8.45%
From 10.03.2020 to 31.03.2020	- 8.15%

The Commission accordingly computed the carrying cost on the trued-up revenue (Gap)/Surplus as detailed hereunder:

Table 5.54: Carrying cost approved for Revenue (Gap)/Surplus

Carrying Cost allowed for Years	Wt. Avg. Rate of Interest	Amount in Rs. Crore
Trued up (Gap)/ Surplus of FY 2019-20		5.61
FY 2019-20	8.83%	0.49
FY 2020-21	8.83%	0.49
Total Carrying Cost allowed for FY 2019-20		0.99

5.2.15 Revenue (Gap)/Surplus for FY 2021-22

The Commission has approved the ARR at Rs. 2038.61 crore and revenue from sale of power at Rs. 2100.57 crore and accordingly arrived revenue surplus of Rs. 61.96 crore for FY 2021-22.

The Commission had approved revenue surplus of Rs. 5.61 crore for FY 2019-20 in truing up and the carrying cost of Rs. 0.99 crore totaling to Rs. 6.60 crore.

The Petitioner has submitted that the Commission had approved Rs. 5.70 Crore towards DSM plan expenses in terms of GERC (Demand Side Management) Regulations 2012 for TPL-D Surat supply area. The Petitioner has submitted that Rs.0.16 crore is incurred towards DSM expenses (incl. DELP programme) during FY 2019-20. The Commission has considered Rs.0.54 crore towards DSM charges in truing up for FY 2019-20.

The Commission accordingly, compute the revenue (Gap) / Surplus for FY 2021-22 as given in the table below:



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Table 5.55: Revenue (Gap) / Surplus approved for FY 2021-22

(Rs. Crore)

Particulars	Projected by TPL-D (Surat)	Approved by Commission
ARR for the year	2090.69	2038.61
Revenue from sale of power for the year	2100.57	2100.57
Revenue (Gap) / Surplus for the year	9.88	61.96
Add: Revenue (Gap) / Surplus approved for FY 2019-20 (incl.		
carrying cost)	(39.27)	6.60
Less: DSM charges	0.54	0.54
Net revenue (Gap) / Surplus for the year FY 2021-22	(29.93)	68.01

Accordingly, the Commission has worked out Surplus of Rs. 68.01 Crore for FY 2021-22 which includes the trued up Surplus of Rs. 6.60 (Rs. 5.61 Crore + Rs. 0.99 carrying cost) Crore for FY 2019-20. The Commission has taken appropriate decision in the Chapter 9 of this Order about addressing the Surplus of Rs. 68.01 Crore.



6. Compliance of Directives

6.1. Earlier Directives

The Commission had issued directives to the Petitioner in its order dated 31st March, 2020 in Case No. 1845/2019.

The status on compliance of the directives issued and the comments of the Commission are given below:

Directive 1: Power Purchase Strategy (Planning):

The Commission had directed the Petitioner to submit a quarterly note, detailing the approach taken for quarterly Power Purchase.

Compliance submitted by TPL-D (S)

TPL-D (S) has stated that it has been submitting its note on power purchase stage on quarterly basis.

Commission's view

The Commission has noted the submission of the Petitioner.

Directive 2: Details of Capital Expenditure and Capitalization:

The Commission had directed the Petitioner to submit a quarterly report of actual Capex for EHV scheme.

Compliance submitted by TPL-D (S)

TPL-D (S) has stated that it has been submitting its report on actual capital expenditure incurred for EHV schemes on quarterly basis.

Commission's view

The Commission has noted the submission of the Petitioner.

Directive No. 3: Controlling the Price of Power Purchase

The Commission had directed the Petitioner to submit its plan for the next year and submit quarterly report on the purchase of imported fuel along with the necessary documents.



Compliance submitted by TPL-D (S)

TPL-D (S) has stated that it has been submitting the relevant details as required.

Commission's view

The Commission has noted the submission of the Petitioner.

Directive No. 4: Load Flow for Validation of Capital Expenditure and Capitalization

The Commission had directed the Petitioner to keep a proper record of all the EHV assets which is approved for capitalization during FY 2019-20 along with the necessary details. The Petitioner is required to submit the progress and details to the Commission every quarter.

Compliance submitted by TPL-D (S)

TPL-D (S) has stated that it has been submitting its report on actual capital expenditure incurred for EHV schemes on quarterly basis.

Commission's view

The Commission has noted the submission of the Petitioner.

Directive No. 5: Long-term Power Procurement Plan along-with RPO Commitments

The Commission directed the Petitioner to carry out a detailed study of the load growth and power requirement for the next decade and accordingly strategy to meet the requirement from conventional and RE sources till FY 2029- 30.

Compliance submitted by TPL-D (S)

TPL-D (S) has stated that Petitioner shall submit the details in due course.

Commission's view

The Commission had noted the submission. The Commission reiterates the directive and directs TPL to submit the study report at the earliest.



6.2. Fresh Directives

6.2.1 Directive:

Voltage wise Cost of Supply

TPL is directed to conduct a study to assess technical losses of all the voltage class feeders and some selected LT lines and compute voltage wise cost of supply using above data for FY 2020-21.



7. Fuel and Power Purchase Price Adjustment

7.1. Fuel Price and Power Purchase Price Adjustment

The Commission in Case No. 1309 of 2013 and 1313 of 2013 vide its order dated 29th October, 2013 has revised the formula for Fuel Price and Power Purchase Cost Adjustment (FPPPA) as mentioned below:

7.2. Formula FPPPA = [(PPCA-PPCB)]/ [100-Loss in %]

wnere,

	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
PPCA	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.
	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
PPCB	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.
	is the weighted average of the approved level of Transmission and
	Distribution losses (%) for the four DISCOMs / GUVNL and TPL applicable for
Loss in	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.



7.2.1 Base Price of Power Purchase (PPCB)

The Commission has approved the total energy requirement and the total Power Purchase Cost for TPL-D including fixed cost, variable cost, etc. from the various sources for FY 2021-22 in this Order as given in the Table below:

Table 7.1: Approved power purchase cost per unit for FY 2021-22

Year	Total Energy	Approved	Power Purchase
	Requirement Power Purchase		Cost per unit
	(MUs)	Cost (Rs. Crore)	(Rs./kWh)
FY 2021-22	11475.76	5567.06	4.85

Thus, the base Power Purchase cost for TPL-D is Rs. 4.85 / kWh for FY 2021-22.

The Commission notes that in the last tariff order, the Commission had kept based FPPPA of Rs. 1.38/kWh for TPL-D (S) for FY 2020-21 considering the surplus of Rs. 51.49 Crore for FY 2020-21. The Commission notes that this time also, there is urplus of Rs. 62.99 Crore which includes an estimated surplus of Rs. 61.96 Crore for FY 2021-22. Therefore, the Commission decides to maintain the base FPPPA for FY 2021-22 at Rs. 1.38/kWh.

TPL-D (S) 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 in para 7.2 above.

Information regarding FPPPA recovery and the FPPPA calculations shall be kept on the website of TPL.

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 end of the relevant quarter.



8. Wheeling Charges and Cross Subsidy Surcharge

8.1. Wheeling Charges

Petitioner's submission

The Petitioner has submitted that Regulation 87 of the GERC (MYT) Regulations, 2016 stipulates that the ARR be segregated as per the allocation matrix for segregation of expenses between Distribution Wires Business and Retail Supply Business for determination of wheeling charges. The allocation of expenditure to wheeling and retail supply business is based on the consideration that the distribution infrastructure up to the service line is part of the wheeling business and the distribution infrastructure from service line to consumer premises is a part of the retail supply business.

The allocation matrix as specified by the Commission for segregation of expenses between Wires and Supply business is as shown in the Table below:

Table 8.1: Allocation Matrix for segregation of Wheeling and Retail Supply submitted by the Petitioner for FY 2021-22

SI.	Particulars	Wires	Retail
No.		Business (%)	Business (%)
1	Power Purchase Expenses	0%	100%
2	Employee Expenses	60%	40%
3	Administration and General Expenses	50%	50%
4	Repairs and Maintenance Expenses	90%	10%
5	Depreciation	90%	10%
6	Interest on Long term Loan Capital	90%	10%
7	Interest on Working Capital and Security Deposits	10%	90%
8	Bad Debts Written off	0%	100%
9	Income Tax	90%	10%
10	Contribution to Contingency Reserve	100%	0%
11	Return on Equity	90%	10%
12	Non-Tariff Income	10%	90%

Based on the above allocation matrix TPL-D (S) has segregated the ARR of Surat Supply Area for Wires and Supply business as under:

Table 8.2: Segregation of ARR into Wires and Supply Business for FY 2021-22 (Rs. Crore)

Particulars	Wires Business	Retail Business
Power Purchase Expenses	-	1,695.22
Employee Expenses	38.10	25.40
Administrative & General Expenses	20.63	20.63
Repair & Maintenance Expenses	39.83	4.43
Depreciation	70.62	7.85
Interest on Loan	32.03	3.56
Interest on Security Deposit	1.59	14.29
Interest on Working Capital	-	-
Bad Debts Written off	-	0.51
Income Tax	19.97	2.22
Contingency Reserve	0.40	-
Return on Equity	93.29	10.37
Less: Non-Tariff Income	1.02	9.21
Aggregate Revenue Requirement	315.43	1,775.26

The Petitioner has submitted that the above segregated ARR has been considered to determine the Wheeling Charges and Cross-Subsidy Surcharge for FY 2021-22.

Commission's analysis

The Commission, in order to compute the Wheeling Charges and Cross-Subsidy Surcharge, has considered the allocation matrix between the Wheeling and Retail Supply Business as per the GERC (MYT) Regulations, 2016.

Based on the ARR approved by the Commission, the allocation matrix thereof as provided in the GERC (MYT) Regulation, 2016, the ARR approved for Wires and Retail Supply Business for FY 2021-22 is shown in the Table below:

Table 8.3: Approved Segregation of ARR into Wires and Supply Business for FY 2021-22 (Rs. Crore)

Particulars	ARR approved for TPL-D (Surat)	Approved for Wire business	Approved for Retail business
Power purchase	1652.34	0.00	1652.34
Employee expenses	63.50	38.10	25.40
Administration & General expenses	41.26	20.63	20.63
Repairs & Maintenance expenses	44.25	39.82	4.42
Depreciation	71.17	64.05	7.12
Interest and finance charges	34.29	30.86	3.43
Interest on Security deposits from consumers	16.96	1.70	15.26
Interest on working capital	0.00	0.00	0.00



Particulars	ARR approved for TPL-D (Surat)	Approved for Wire business	Approved for Retail business
Bad debts written off	0.51	0.00	0.51
Contribution to contingency reserve	0.40	0.40	0.00
Return on Equity	101.89	91.70	10.19
Income tax	22.19	19.97	2.22
Less: Non-tariff income	10.15	1.02	9.14
Aggregate Revenue Requirement (ARR)	2038.61	306.22	1732.39

8.1.1 Determination of Wheeling Charges

Petitioner's submission

The Petitioner has submitted that the GERC (MYT) Regulations, 2016 specifies that the Wheeling Charges shall be determined based on the ARR allocated to the Wheeling Business. The Petitioner has computed the Wheeling Charges based on the allocation of ARR of distribution business, in accordance with the GERC (MYT) Regulations, 2016.

The Petitioner submitted that Distribution Wires are identified as carrier of electricity from generating station or transmission network to consumer point. The consumption at a particular voltage level requires network at that voltage level and also at all higher voltage levels. Thus, consumption at the lower voltages should contribute to the cost of the higher voltage levels also. However, the consumers connected to the higher voltages would not be utilizing the services of the lower voltage level and hence, would not be required to contribute to the recovery of cost of lower voltage level.

Based on the above approach, the ARR for the Wheeling Business has been apportioned to HT and LT voltage in two steps as under:

- Apportioning the ARR of Wheeling Business to HT and LT voltage level based on ratio of GFA;
- Apportioning the ARR of the HT voltage level again between HT and LT voltage level based on respective contributions in the system peak demand.

The ARR is apportioned between the HT and LT Voltage level in proportion to the



ratio of the closing GFA for FY 2019-20. Further, the HT voltage level ARR is further proposed to be segregated between HT and LT voltage levels.

The Petitioner has submitted that the GFA (excluding assets related to retail supply i.e. SLC and Meters) for Surat Supply Area as on 31st March, 2020 is Rs.1618.77 Crore and the GFA identified for HT & LT business are Rs.1253.73 Crore & Rs.365.04 Crore, respectively. The ratio of HT assets to LT assets is 77:23, which is considered for the apportionment of ARR for the wheeling business into HT and LT businesses.

Further as the HT level assets cater to the requirement of customers at both HT and LT levels, the ARR for HT is again apportioned between HT and LT voltage based on their ratio of contribution to the peak.

The system peak demand for Surat Supply Area for FY 2019-20 was 695 MW. In case of Surat Supply Area, the contract demand for all the HT consumers is about 114.06 MW. Assuming that 85% of the contract demand of HT consumers contributes to the system peak demand, the total demand of LT contributing to the system peak is computed as 598.05 MW.

To determine the wheeling charges for the HT & LT voltage levels, the ARR of the respective voltage level is divided by the sales handled at the respective voltage level. Accordingly, the wheeling charges determined in terms of Rs/kWh/Month has been tabulated as below:

Table 8.4: Wheeling Charges proposed by TPL-D (S) for FY 2021-22

Particulars	Value
First Level Segregation of ARR (in Rs. Crore)	
HT Voltage	244.30
LT Voltage	71.13
Total	315.43
Second Level Segregation of ARR (in Rs. Crore)	
HT Voltage	34.08
LT Voltage	281.35
Total	315.43
Wheeling Charge (in Rs/ kWh)	
HT Voltage	1.01
LT Voltage	0.96



The Petitioner has further submitted that an open access consumer will also have to bear the following wheeling losses in addition to the wheeling charges:

Table 8.5: Proposed Wheeling Losses for TPL-D (S) for FY 2021-22

Category	Value
HT Category	3.50%
LT Category	4.50%

Commission's analysis

The Commission has determined the ARR of the Wires Business for FY 2021-22 in the earlier section, as Rs.311.88 Crore.

The ARR is apportioned between the HT and LT Voltage level in the ratio of 77.45:22.55, which is the ratio of GFA of HT: LT for FY 2019-20.

The system peak demand for TPL-D (S) for FY 2019-20 was 695 MW. The contract demand for all the HT consumers is about 114.06 MW. Assuming that 85% of the contract demand of HT consumers contributes to the system peak demand, the HT demand contributing to the system peak works out to 96.95 MW. The balance contribution to the system peak has been considered against LT demand, which works out to 598.05 MW.

To determine the Wheeling Charges for the HT and LT voltage levels, the ARR of the respective voltage level is divided by the sales handled at the respective voltage level. Accordingly, the Wheeling Charge determined in terms of Rs/kWh is shown in the Table below:

Table 8.6: Wheeling Charges for TPL-D (S) for FY 2021-22

Particulars	Approved
First Level Segregation of ARR (in Rs. Crore)	
HT Voltage	237.17
LT Voltage	69.05
Total	306.22
Second Level Segregation of ARR (in Rs. Crore)	
HT Voltage	33.08
LT Voltage	273.14
Total	306.22
Wheeling Charge (in Rs/ kWh)	
HT Voltage	0.98
LT Voltage	0.94

The Commission has accordingly approved the wheeling charges for HT and LT voltages as shown in the Table above.

The Commission approves the following losses for Open Access consumers in addition to the Wheeling Charges:

Table 8.7: Wheeling Losses approved for Open Access consumers for TPL-D (S)

Category	Wheeling Losses (%)	
HT Category	3.50%	
LT Category	4.50%	

8.2. Cross Subsidy Surcharge

Petitioner's submission

The Petitioner has submitted that as per the principles enunciated in the Tariff Policy, the cross subsidy surcharge is to be computed based on Pooled Power Purchase cost. Further, the principles laid out in the Tariff Policy amply clarify to compensate the distribution licensee for the existing level of cross- subsidization.

The Petitioner has proposed the cross subsidy for HTMD-1, HTMD-2 and HT-Metro category consumer as shown in the Table below.

Table 8.8: Proposed Cross Subsidy Surcharge payable by Open Access Consumers in TPL-D

(S) for FY 2021-22

Particulars	HTMD-1	HTMD-2	HT Metro
T - Tariff for HT Category (Rs./kWh)*	7.03	7.41	6.19
PPC - Wt. Avg. Power Purchase Cost (Rs./kWh)	5.13	5.13	5.13
L - Loss for HT Category (%)	3.50%	3.50%	3.50%
Avg W – Average wheeling charges for HT category	1.01	1.01	1.01
(Rs./kWh)			
Cross Subsidy Surcharge (Rs./kWh)	0.89	1.28	0.05

Note: * Including Regulatory Charge

Commission's analysis

The Hon'ble APTEL in its judgement on the issue of formula for calculation of Cross-subsidy has endorsed the use of the formula depicted in the Tariff Policy. The Central Government has issued Tariff Policy, 2016 wherein the formula for Cross Subsidy Surcharge is given as under;



S = T - [C / (1 - L/100) + D + R]

Where,

S is the surcharge

T is the tariff payable by the relevant category of consumers, including reflecting the Renewable Purchase Obligation

C is the per unit weighted average cost of power purchase by the Licensee, including meeting the Renewable Purchase Obligation

D is the aggregate of transmission, distribution and wheeling charge applicable to the relevant voltage level

L is the aggregate of transmission, distribution and commercial losses, expressed as a percentage applicable to the relevant voltage level

R is the per unit cost of carrying regulatory assets

Further, the Tariff Policy, 2016 also stipulates that the surcharge shall not exceed 20% of the tariff applicable to the category of consumers seeking Open Access.

The Commission has considered average tariff rate for HTMD-1 and HTMD-2 as per the existing average tariff rates.

Accordingly, the Commission has determined the Cross-Subsidy Surcharge based on the formula stipulated in the Tariff Policy, as shown in the Table below:

Table 8.9: Approved Cross Subsidy Surcharge payable for open access consumers in TPL-D

(S) for FY 2021-22

SI.	Particulars	HTMD-1	HTMD-2
No.			
1	T - Tariff for HT Category (Rs./kWh)	6.94	7.32
2	C - Wt. Avg. Power Purchase Cost (Rs./kWh)	4.85	4.85
3	D - Wheeling Charges (Rs./kWh)	0.98	0.98
4	L – Loss for HT Category (in %)	3.50%	3.50%
5	R - per unit cost of carrying Regulatory Assets (Rs./kWh)		
6	S = Cross Subsidy Surcharge (Rs./kWh)	0.93	1.32

Thus, Cross Subsidy Surcharge as per formula in Tariff Policy, 2016 works out to Rs.



0.93/kWh for HTMD-1, Rs. 1.32/kWh for HTMD-2. The cross subsidy surcharge for HT-Metro category shall be approved once the category is actually operationalised.

The Tariff Policy, 2016 provides that the surcharge shall not exceed 20% of the tariff applicable to the category of the consumers seeking open access. However, the cross subsidy surcharge values computed are less than 20% of the applicable tariff for the categories.

Accordingly, Cross Subsidy Surcharge for FY 2021-22 is determined as given in the table below;

Consumer Category	Cross Subsidy Surcharge for FY 2021-22 (Rs./unit)
HTMD-1	0.93
HTMD-2	1.32

8.3. Additional Surcharge

Petitioner's submission

The Petitioner has submitted that as per Regulation 25 of the GERC (Terms & Conditions of Intra-State Open Access) Regulations, 2011, the OA consumer will also be required to pay an Additional Surcharge as per Section 42 (4) of the Electricity Act, 2003.

Commission's analysis

The Petitioner should submit the requisite data and justification separately for determination of Additional Surcharge.



9. Tariff Philosophy and Tariff Proposals

9.1. Introduction

The Commission is guided by the provisions of the Electricity Act, 2003, the National Electricity Policy, 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 subsidy amongst categories within a period to be specified by the Commission.

9.2. Proposal of TPL for increase in Retail Tariffs for TPL-D (S) for FY 2021-22 Background

The Petitioner has computed the cumulative (gap) / surplus for FY 2019-20 FY 2021-22 and carrying cost as detailed in the earlier chapters.

The Petitioner has proposed to:

- a) Recover the accumulated (gap)/ surplus by way of Regulatory Charge
- b) Recover the Gap/ Carrying cost for matters pending with Hon'ble GERC / APTEL within the FPPPA ceiling of Rs. 2.21 per unit

Tariff Philosophy

The Petitioner has submitted that the Commission has approved the existing tariff structure based on widely recognized best practices in accordance with the legal framework as detailed hereunder:

- A. Consumers' capacity to pay
- B. Principles of cross subsidy prescribed by Tariff Policy
- C. Incentivizing energy conservation
- D. Demand Side Management
- E. Promotion of efficient use of electricity



The Petitioner has also submitted that same tariff structure and philosophy is maintained while designing the tariff for FY 2021-22

Determination of Retail Tariff

The Petitioner has submitted that the cumulative gap of Rs. 29.93 Crore is arising mainly on account of past years' under-recovery. Therefore, the Petitioner is not proposing any increase in tariff and is proposing to recover this cumulative gap by way of a time bound Regulatory Charge at the rate of Rs. 0.09 per unit during FY 2021-22.

Further, the Petitioner has proposed to recover the Gap/Carrying cost for matters pending with Hon'ble GERC / APTEL within the FPPPA ceiling of Rs. 2.21 per unit.

The Petitioner has also submitted that any variation in recovery of the said gap shall be dealt with during Truing up exercise for FY 2021-22.

The Petitioner further submitted that, if for any reason, the Commission does not allow the recovery of part of the gap by way of Regulatory Charge w.e.f. 1st April, 2021, the tariff rates need to be appropriately adjusted to allow the Petitioner to recover the cumulative gap of Rs. 29.93 Crore entirely during 2021-22.

It is also submitted that the Petitioner is not requesting a permanent increase in tariff and is proposing to recover the past-period under-recoveries through a Regulatory Charge. The approval of Regulatory Charge is essential so as to liquidate under recoveries and enable the Petitioner to maintain and further improve its high standards of quality, reliability and customer services.

9.3. Commission's Ruling on Retail Tariffs for TPL-D (S) for FY 2021-22

The Commission has in the past Orders, rationalised the tariffs in order to ensure that the tariffs reflect, as far as possible, the cost of supply. The Commission has also tried to address operational and field issues, keeping in view the interest of the consumers, while rationalising the tariff structure.



TPL-D (S) has proposed to recover cumulative revenue gap of Rs. 29.93 Crore with effect from 1st April, 2021, by way of Regulatory charge at the rate of Rs. 0.09 per unit during FY 2021-22.

However, as discussed earlier, the Commission has approved a cumulative revenue surplus of Rs. 68.01 Crore during FY 2021-22 in Chapter 5. It is also required to appreciate that the actual trued up Surplus of the Petitioner for FY 2019-20 along with the carrying cost in accordance with the Regulations is only Rs. 6.60 Crore (Rs. 5.61 Crore+ Rs. 0.99 Crore carrying cost). Remaining Rs. 61.96 Crore is the estimated Surplus for FY 2021-22 worked out based on the estimated parameters. The trued up Surplus of Rs. 5.61 Crore is a meagre amount to be addressed by revising the tariff. As stated earlier remaining Surplus of Rs. 61.96 Crore is the amount worked out based on estimated parameters, therefore, the Commission feels that it woud not be right to address the estimated Surplus at this point of time, as it may vary based on the actual parameters and therefore, the actual (gap)/ surplus will be taken care of at the time of truing up of FY 2021-22.



COMMISSION'S ORDER

The Commission approves the Aggregate Revenue Requirement (ARR) for TPL-D (Surat) for FY 2021-22 as shown in the Table below:

Approved ARR for TPL-D (Surat) for FY 2021-22

(Rs. Crore)

SI. No.	Particulars	ARR approved for TPL-D (Surat) for FY 2021-22
1	Power purchase	1652.34
2	Employee expenses	63.50
3	Administration & General expenses	41.26
4	Repairs & Maintenance expenses	44.25
5	Depreciation	71.17
6	Interest and finance charges	34.29
7	Interest on Security deposits from consumers	16.96
8	Interest on working capital	0.00
9	Bad debts written off	0.51
10	Contribution to contingency reserve	0.40
11	Return on Equity	101.89
12	Income tax	22.19
13	Less: Non-tariff income	10.15
14	Aggregate Revenue Requirement (ARR)	2038.61

The retail supply tariffs for Surat distribution area for FY 2021-22 determined by the Commission are annexed to this order.

This order shall come into force with effect from 1st April, 2021.

Sd/- Sd/- Sd/S. R. Pandey Mehul M. Gandhi ANAND KUMAR
Member Member Chairman

Place: Gandhinagar

Date: 31.03.2021



ANNEXURE: TARIFF SCHEDULE

TARIFF SCHEDULE FOR SURAT LICENSE AREA OF TORRENT POWER

LIMITED-SURAT

TARIFF FOR SUPPLY OF ELECTRICITY AT LOW TENSION, HIGH TENSION AND EXTRA HIGH TENSION

Effective From 1st April, 2021

GENERAL CONDITIONS

- 1. This tariff schedule is applicable to all the consumers of TPL in Surat Area.
- 2. All these tariffs for power supply are applicable to only one point of supply.
- 3. 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.
- 4. The charges specified in the tariff are on monthly basis; TPL may decide the period of billing and adjust the rates accordingly.
- 5. 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.
- 6. 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.
- 7. The billing of fixed charges based on contracted load or maximum demand shall be done in multiples of 0.5 (one half) Horse Power, kilo -Watt, kilo- Volt -Ampere (HP, kW, kVA), as the case may be. The fraction of less than 0.5 shall be rounded to next 0.5. The billing of energy charges will be done on complete 1.0 (one) kilo- watt-hour (kWh) or kilo-volt-ampere-hour (kVAh) or kilo-volt-ampere-reactive hour (kVARh), as the case may be.
- 8. Contract Demand shall mean the maximum kW or kVA for the supply of which TPL undertakes to provide facilities to the consumer from time to time.
- 9. Maximum Demand in a month means the highest value of average kVA or kW as the case may be, delivered at the point of supply of the consumer during any consecutive 15/30 minutes in the said month.
- 10. TPL may install kWh and kVARh meter for ascertaining power factor, reactive units and kWh units.



- 11. 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.
- 12. 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.
- 13. ToU charges wherever applicable unless otherwise notified shall be levied for the energy consumption during the period between 07.00 hours and 11.00 hours; and between 18.00 hours and 22.00 hours, termed as PEAK HOURS. Night hours concession wherever applicable will be given for the energy consumption during the period between 22.00 hours and 06.00 hours next day, termed as 'OFF PEAK HOURS'.
- 14. Fuel Price and Power Purchase Adjustment (FPPPA) charges shall be applicable in accordance with the formula approved by the Gujarat Electricity Regulatory Commission from time to time.

15. Delayed Payment Charges

- a. No delayed payment charges will be levied if the bill is paid on or before due date indicated in the bill.
- b. Delayed payment charges, if the bill is paid after due date, will be levied at the rate of 15% per annum (computed on daily basis) on the outstanding bill from the due date till the date of payment.
- 16. Statutory Levies: These tariffs are exclusive of Electricity Duty, Tax on Sales of Electricity, Taxes and other Charges levied/may be levied or such other taxes as may be levied by the Government or other Competent Authorities on bulk/retail supplies from time to time.
- 17. 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 TPL shall be entitled to take any other action deemed necessary and authorized under the Act.



PART-I

RATE SCHEDULE - LOW / MEDIUM TENSION 230/400 VOLTS

1. RATE: RGP

This tariff is applicable for supply of electricity to residential premises.

Single-phase supply - Aggregate load up to 6 kW

Three-phase supply - Aggregate load above 6 kW

1.1 FIXED CHARGE:

For Other than BPL consumers

(6	a)	Single Phase Supply	Rs. 25 per installation per month
(1	b)	Three Phase Supply	Rs. 65 per installation per month

For BPL household consumers*

(a)	Fixed Charges	Rs. 5.00 per installation per month
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PLUS

1.2 ENERGY CHARGE:

For Other than BPL consumers

(a)	First 50 units during the month	320 Paise/unit
(b)	Next 50 units during the month	365 Paise/unit
(c)	Next 150 units during the month	425 Paise/unit
(d)	Above 250 units during the month	505 Paise/unit

For BPL household consumers*

(a)	First 50 units consumed per month	150 Paise per Unit
(b)	For remaining units consumed per month	Rate as per Residential

^{*} 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 zonal office of the Distribution Licensee. The concessional tariff is only for 50 units per month.



2. RATE: GLP

This tariff will be applicable for use of energy for lights, fans, heating, general load and motive power in premises:

- i. Crematoriums and Government and Municipal Hospitals.
- ii. Charitable Institutions like hospital, dispensary, educational and Research Institute and Hostel attached to such Institution, religious premises exclusively used for worship or community prayers, registered with Charity Commissioner and specifically exempted from levy of general tax under section 2 (13) of Bombay Trust Act, 1950 read with section 9 of The Income Tax Act, 1961.
- iii. Public Streets Light, gardens and conveniences.
- iv. Water works and sewerage pumping services operated by Municipal Corporations.

Note: Halls or gardens or any portion of the above premises let out for consideration or used for commercial activities at any time shall be charged at Non-RGP tariff.

Single-phase supply- Aggregate load up to 6 kW

Three-phase supply- Aggregate load above 6 kW

2.1 FIXED CHARGES:

Fixed Charges	Rs. 55.00 per installation per month
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PLUS

2.2 ENERGY CHARGES:

Energy Charges	405 Paise/unit
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3. RATE: NON-RGP

This tariff is applicable for supply of electricity to premises which are not covered in any other LT tariff categories, up to and including 15 kW of connected load.

3.1 FIXED CHARGES:

(a)	First 10 kW	Rs. 70 Per kW per month
(b)	Next 5 kW	Rs. 90 Per kW per month



3.2 ENERGY CHARGES:

(a)	For installations having connected load up to 10 kW	435 Paise/unit
(b)	For installations having connected load above 10 kW and up to 15 kW	455 Paise/unit

4. RATE: LTMD

This tariff is applicable for supply of electricity to premises which are not covered in any other LT tariff categories, having connected load above 15 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.

4.1 DEMAND CHARGES:

(a)	Up to 20 kVA of billing demand	Rs. 115 per kVA /month
(b)	Above 20 kVA & up to 60 kVA billing demand	Rs. 155 per kVA /month
(c)	Above 60 kVA of billing demand	Rs. 225 per kVA /month
(d)	In excess of contract demand	Rs. 250 per kVA /month

Note: BILLING DEMAND: Billing demand during the month shall be the highest of the following:

- i. Maximum demand recorded during the month
- ii. 85% of the contract demand
- iii. 6 kVA

PLUS

4.2 ENERGY CHARGES:

Energy charges	485 Paise/unit
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PLUS

4.3 REACTIVE ENERGY CHARGES (kVARh UNITS):

For installation having contracted load of 40 kVA and above

For all the reactive units drawn during the month 10 Paise/kVARh
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5. RATE: TMP

Applicable to installations for temporary requirement of electricity supply.

5.1 FIXED CHARGE

Fixed Charge per Installation	Rs.25 per kW per Day
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5.2 ENERGY CHARGE

A flat rate of	500 Paise per Unit
	l

6. RATE: AGP

This tariff is applicable to motive power services used for irrigation purpose. The rates for following group are as under

6.1 FIXED CHARGES:

Fixed Charges		Rs. 20.00 per HP per month
	PLUS	

6.2 ENERGY CHARGES:

Energy Charges	60 Paise/unit
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Note:

- 1. The agricultural consumers shall be permitted to utilize one bulb or CFL up to 40 watts in the Pump House without recovering any charges. Any further extension or addition of load will amount to unauthorized extension.
- 2. No machinery other than pump for irrigation will be permitted under this tariff.

7. 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, NRGP, LTMD etc.

7.1 FIXED CHARGE

Rs. 25 per month per installation	

PLUS

7.2 ENERGY CHARGE

Energy Charge	410 Paise per Unit
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PART-II

RATE SCHEDULE FOR SERVICE AT HIGH TENSION

8 RATE: HTMD-1

This tariff shall be applicable for supply of energy to consumers at 3.3 kV and above for contracting the demand of 100 kVA and above for purposes other than pumping stations run by Local Authorities.

8.1 DEMAND CHARGES:

8.1.1 For billing demand up to contract demand

(a)	First 500 kVA of billing demand	Rs. 170 per kVA
(b)	Above 500 kVA	Rs. 285 per kVA

8.1.2 For billing demand in excess over contract demand

For billing demand in excess over contract demand	Rs.395/- per kVA
I for billing defination in excess over contract defination	113.333/- PCI KVA

Note:

BILLING DEMAND: Billing demand shall be the highest of the following:

- i. Actual maximum demand established during the month
- ii. 85 per cent of the Contract Demand, and
- iii. 100 kVA

PLUS

8.2 ENERGY CHARGES:

(a)	First 400 units per kVA billing demand per month	480 Paise/unit
(b)	Remaining units consumed per month	470 Paise/unit

PLUS

8.3 TIME OF USE CHARGE:

For energy consumption during the two peak periods, Viz., 0700 Hrs. to 1100 Hrs.		
and 1800 Hrs. to 2200 Hrs.		
For Billing Demand up to 500kVA	65 Paise per Unit	
For Billing Demand above 500kVA 100 Paise per Unit		

PLUS



8.4 POWER FACTOR:

8.4.1 Power Factor Adjustment Charges:

- 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 8.2 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 8.2 of this schedule, will be charged.

8.4.2 Power Factor Adjustment Rebate:

If the average 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 1% 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 7.2 of this schedule, for every 1% rise or part thereof in the average power factor during the month above 95%.

8.5 NIGHT TIME CONCESSION:

The energy consumed during night hours between 22.00 hours and 06.00 hours next day (recorded by the tariff meter operated through time switch or built in feature of time segments, if incorporated) shall be eligible for concession of 30 Paise per kWh. The meter and time switch shall be procured and installed by consumer at his cost, if required by TPL-Surat. In such case, TPL-Surat will seal the metering equipment.

8.6 REBATE FOR SUPPLY AT EHV:

SI. No.	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 %



9 RATE: HTMD-2

This tariff shall be applicable for supply of energy at 3.3 kV and above and contracting for demand of 100 kVA and above for water works and pumping stations run by Local Authorities.

9.1 DEMAND CHARGES:

A. For billing demand up to contract demand

(a)	First 500 kVA of billing demand	Rs. 140/- per kVA per month
(b)	Above 500 kVA of billing demand	Rs. 225/- per kVA per month

B. For billing demand in excess of contract demand

For Billing demand in excess over Contract	Rs. 360/- per kVA per month
demand	

Note:

BILLING DEMAND: Billing demand shall be the highest of the following:

- i. Actual maximum demand established during the month
- ii. 85% of the Contract Demand, and
- iii. 100 kVA

PLUS

9.2 ENERGY CHARGES:

(a)	First 400 units per kVA billing demand per month	475 Paise/unit
(b)	Remaining units consumed per month	470 Paise/unit

PLUS

9.3 TIME OF USE (ToU) 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	80 Paise per Unit

PLUS



9.4 POWER FACTOR:

Power Factor Adjustment Charge:

- 1. 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 9.2 of this schedule, for every 1% drop or part thereof in the average power factor during the month below 90% up to 85%.
- 2. 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 9.2 of this schedule, will be charged.

Power Factor Adjustment Rebate:

If the average 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 1% 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 9.2 of this schedule, for every 1% rise or part thereof in the average power factor during the month above 95%.

9.5 NIGHT TIME CONCESSION:

The energy consumed during night hours between 22.00 hours and 06.00 hours next day (recorded by the tariff meter operated through time switch or built in feature of time segments, if incorporated) shall be eligible for concession of 30 Paise per kWh. The meter and time switch shall be procured and installed by consumer at his cost, if required by TPL-Surat. In such case, TPL-Surat will seal the metering equipment.

9.6 REBATE FOR SUPPLY AT EHV:

SI.	On Energy Charges:	Rebate @
No.		
(a)	If supply is availed at 33/66 kV	0.5 %
(b)	If supply is availed at 132 kV and above	1.0 %



10 RATE: HTMD-3

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.

10.1 FIXED CHARGE

For billing demand up to contract demand	Rs. 25/- per kVA per day
For billing demand in excess of contract demand	Rs. 35/- per kVA per day

Note:

BILLING DEMAND: Billing demand shall be the highest of the following:

- i. Actual maximum demand established during the month
- ii. 85% of the Contract Demand, and
- iii. 100 kVA

PLUS

10.2 ENERGY CHARGE

For all units consumed during the month	695 Paise/Unit
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PLUS

10.3 TIME OF USE (ToU) 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 500kVA	45 Paise per Unit	
(b) For Billing Demand above 500kVA	80 Paise per Unit	

10.4 POWER FACTOR:

Power Factor Adjustment Charges:

- 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 10.2 of this schedule, for every 1% drop or part
 thereof in the average power factor during the month below 90% up to 85%.
- 2. 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 10.2 of this schedule, will be charged.

Power Factor Adjustment Rebate:

If the average 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 1% 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 10.2 of this schedule, for every 1% rise or part thereof in the average power factor during the month above 95%.

10.5 RATE: HTMD- METRO TRACTION

Applicable for supply of energy to Metro traction, contracting for maximum demand of 100 kW and above.

10.6 FIXED CHARGE

A. For Billing Demand up to and including Contract Demand

Fixed Charge per kW of Billing Demand per Month	Rs. 335 per kW
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B. For Billing Demand in excess of the Contract Demand

Fixed Charge per kW of Billing Demand per month	Rs. 385 per kW
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Note: The Billing Demand will be taken as under:

- i. The Maximum Demand recorded during the month OR
- ii. 85% of the Contract Demand OR
- iii. 100 kW Whichever is the highest.

10.7 ENERGY CHARGE

A flat rate of	345 Paise/Unit
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10.8 TIME OF USE (TOU) CHARGE

For the Consumption during specified hours as	
mentioned here below-	
(i) For April to October period- 1200 Hrs. to 1700 Hrs. & 1830	60 Paise per unit
Hrs. to 2130 Hrs.	
(ii) For November to March period- 0800 Hrs. to 1200 Hrs. &	
1800 Hrs. to 2200 Hrs.	

10.9 NIGHT TIME CONCESSION

The energy consumed during night hours between 22.00 hours and 06.00 hours next day recorded by the tariff meter having built in feature of time segments shall be eligible for rebate at the rate of 30 Paise per kWh.

10.10 POWER FACTOR ADJUSTMENT CHARGE

A. Where the average Power Factor during the Billing period exceeds 90%

For each 1% improvement in the Power Factor from	Rebate of 0.15 Paise per
90% to 95%	unit
For each 1% improvement in the Power Factor above	Rebate of 0.27 Paise per
95%	unit

B. Where the average Power Factor during the Billing period is below 90%

For each 1% decrease in the Power Factor below 90%	Penalty of 3.00 Paise per
	unit

11 RATE- NTCT (NIGHT TIME CONCESSIONAL TARIFF)

This is night time concessional tariff for consumers for regular power supply who opt to use electricity **EXCLUSIVELY** during night hours between 22.00 hours and 06.00 hours next day. The consumer shall provide the switching arrangement as shall be acceptable to TPL-Surat to regulate supply hours.

11.1 FIXED CHARGE

Fixed Charges	30% of the Demand Charges under relevant Tariff Category
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11.2 ENERGY CHARGE

A flat rate of	340 Paise per unit
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11.3 POWER FACTOR

Power Factor Adjustment Charges:

- 1 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 12.2 of this schedule, for every 1% drop or part thereof in the average power factor during the month below 90% up to 85 %.
- 2 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 12.2 of this schedule, will be charged.

Power Factor Adjustment Rebate:

If the average 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 1% 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 12.2 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 12.0 above.
- 2. 10% of total units consumed during the billing period can be availed beyond the night hours prescribed as per para 12.0 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 HTMD category demand charge rates given in para 8.1 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 HTMD category energy charge rates given in para 8.2 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 HTMD category demand charge and energy charge rates given in para 8.1 and 8.2 respectively, of this schedule.

- 6. This tariff shall be applicable if the consumer so opts to be charged in place of HTMD tariff by using electricity exclusively during night hours as above.
- 7. The option can be exercised to shift from regular HTMD tariff category to Rate:

 NTCT or from Rate: NTCT to regular HTMD tariff four times in a calendar year by giving not less than 15 days' advance notice in writing before commencement of billing period.

12 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. HTMD-1, HTMD-2, HTMD-3 and NTCT.

12.1 DEMAND CHARGE

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

12.2 ENERGY CHARGE

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Energy Charge	400 Paise per Unit

