GUJARAT ELECTRICITY REGULATORY COMMISSION

Tariff Order

Truing up for FY 2015-16,

Approval of Final ARR for FY 2016-17,

Approval of Multi-Year ARR for FY 2016-17 to 2020-21

and Determination of Tariff for FY 2017-18

For

Torrent Power Limited – Distribution

Dahej

Case No. 1629 of 2016

9th June, 2017

6th Floor, GIFT ONE, Road 5C, GIFT City
Gandhinagar-382 335 (Gujarat), INDIA
Phone: +91-79-23602000 Fax: +91-79-23602054/55
E-mail: gerc@gercin.org : Website www.gercin.org

सत्यमेव जयते

GUJARAT ELECTRICITY REGULATORY COMMISSION (GERC)

GANDHINAGAR

Tariff Order

Truing up for FY 2015-16,

Approval of Final ARR for FY 2016-17,

Approval of Multi-Year ARR for FY 2016-17 to 2020-21

and Determination of Tariff for FY 2017-18

For

Torrent Power Limited – Distribution

Dahej

Case No. 1629 of 2016

9th June, 2017

CONTENTS

LIST OF TABLES

ABBREVIATIONS

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
GIS	Geographical Information System
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 Fibre Communication
ONGC	Oil & Natural Gas Corporation

PF	Power Factor
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 Contribution
TEL	Torrent Energy Limited
TPL	Torrent Power Limited
TPL-D (D)	Torrent Power Limited – Distribution, Dahej
UUWA	Utility Users' Welfare Association

Before the Gujarat Electricity Regulatory Commission at Gandhinagar

Case No. 1629 of 2016

Date of the Order:09.06.2017

CORAM

Shri Anand Kumar, Chairman

Shri K. M. Shringarpure, Member

Shri. P.J. Thakkar, Member

ORDER

1 Background and brief history

1.1 Background

Torrent Power Limited (hereinafter referred to as 'TPL' or the 'Petitioner') has filed petition on 30th November, 2016 under Section 62 of the Electricity Act, 2003, read with Gujarat Electricity Regulatory Commission (Multi-Year Tariff) Regulations, 2011, for the Truing up of FY 2015-16 and Gujarat Electricity Regulatory Commission (Multi-Year Tariff) Regulations, 2016 for determination of final ARR for FY 2016-17, determination of ARR for the Control Period i.e. FY 2016-17 to FY 2020-21 and determination of tariff for FY 2017-18.

After technical validation of the petition, it was registered on 3rd December, 2016 and as provided under Regulation 29.1 of GERC (MYT) Regulations, 2016, the Commission has proceeded with the tariff order.

1.2 Torrent Power Limited (TPL)

Torrent Energy Limited (TEL) is a Special Purpose Vehicle (SPV), promoted by Torrent Power Limited (TPL), to fulfil its commitment to generate and distribute power as a co-developer of the Dahej Special Economic Zone.

Dahej SEZ (DSEZ) is being developed by Government of Gujarat through Gujarat Industrial Development Corporation (GIDC) and Oil and Natural Gas Corporation (ONGC). The DSEZ has been notified by the Ministry of Commerce and Industry, Government of India, vide Notification No. 2131 (E) dated 20th December, 2006, as a Multi-Product SEZ.

The Government of Gujarat has “In-principle” approved Torrent Energy Limited as the Co-developer in DSEZ area for the purpose of establishing generation and distribution facilities. Accordingly, TEL has entered into the Co-developer agreement with Dahej SEZ Ltd. (DSL), an SPV created for developing the DSEZ.

The Ministry of Commerce and Industry, Government of India, has approved TEL as a Co-developer to set up generation and distribution infrastructure in DSEZ.

The Gujarat Electricity Regulatory Commission, vide its order dated 17th November, 2009, issued orders for issue of distribution license to TEL as a second distribution licensee as per the provisions of Section 14 of the Electricity Act, 2003 for distribution of electricity in the DSEZ area. Accordingly, the Gujarat Electricity Regulatory Commission, vide its letter dated 29th December, 2009, issued the distribution license dated 18th December, 2009 to TEL.

TEL started commercial operations from 4th April, 2010 and is in the process of establishing the distribution network for power distribution to various SEZ units. The Hon’ble High Court of Gujarat vide its Order dated 13th August, 2015, has sanctioned the Composite Scheme of Amalgamation (“Scheme”) of Torrent Energy Limited (TEL) and Torrent Cables Limited (TCL) with Torrent Power Limited (TPL) under Sections 391 to 394 and other applicable provisions of the Companies Act, 1956 (“the Act”) with effect from Appointed Date of 1st April, 2014. Accordingly, the Scheme has become operational on 1st October, 2015 with effect from 1st April, 2014, being the Appointed Date. The distribution business of Dahej SEZ area is hereinafter referred to as Petitioner or TEL-D where matter under reference is related to period prior to 1st April, 2014, and referred as petitioner or TPL-D (D) where matter under reference is related to period after 1st April, 2014 for the sake of brevity.

1.3 Commission's Order for the Second Control Period

Gujarat Electricity Regulatory Commission issued the GERC (Multi-Year Tariff) Regulations, 2011 on 22nd March, 2011. Regulation 1.4 (a) of GERC (Multi-Year Tariff) Regulations, 2011 reads as under:

"These Regulations shall be applicable for determination of tariff in all cases covered under these Regulations from 1st April, 2011 and onwards."

TPL filed its petition under the Multi-Year Tariff Framework for the control period from FY 2011-12 to FY 2015-16 on 14th July, 2011, in accordance with the Gujarat Electricity Regulatory Commission (Multi-Year Tariff) Regulations, 2011.

The Commission, in exercise of the powers vested in it under Sections 61, 62 and 64 of the Electricity Act, 2003, and all other powers enabling it in this behalf and after taking into consideration the submissions made by TPL-D (D), the objections by various stakeholders, response of TPL-D (D), issues raised during the public hearing and all other relevant material, issued the Multi-Year Tariff Order on 12th December, 2011 for the control period comprising FY 2011-12, FY 2012-13, FY 2013-14, FY 2014-15 and FY 2015-16, based on the GERC (MYT) Regulations, 2011.

1.4 Commission's Orders for Mid-term Review of Business plan for TPL-D (Dahej)

TPL-D (D) filed its petition for Mid-term Review of Business Plan and revision of ARR for balance years for FY 2014-15 and FY 2015-16 of the control period in terms of Regulation 16.2 (i) of GERC (MYT) Regulations, 2011 and the same was registered by the Office on 4th December, 2013.

The Commission in exercise of the powers vested in it under Section 61, 62 and 64 of the Electricity Act, 2003 and all other powers enabling it in this behalf and after taking into consideration the submission made by TPL-D (D), the objections by various stakeholders, response of TPL-D (D), issues raised during public hearing and all other relevant material, approved the revised ARR for FY 2014-15 and FY 2015-16 in the Mid-term Review of Business Plan order for TPL-D (D) issued on 29th May, 2014.

The Commission issued the order for truing up for FY 2012-13 and determination of Tariff for FY 2014-15 on 29th May, 2014.

The Commission issued the order for truing up for FY 2013-14 and determination of Tariff for FY 2015-16 on 31st March, 2015.

1.5 Commission's Order for tariff of FY 2016-17

The Commission in its order dated 2nd December, 2015, in the Suo Motu Petition No. 1534/2015, decided that the approved ARR of FY 2015-16 of the licensees / generating companies concerned be considered as provisional ARR of the licensees / generating companies for FY 2016-17.

The Commission also decided that the licensees / generating companies shall file the ARR for FY 2016-17 based on the MYT Regulations for FY 2016-17 to FY 2020-21 and the true-up for the same shall be governed as per the new MYT Regulations. It was also decided that the licensees / generating companies shall file the petition for determination of ARR and tariff for FY 2016-17 and true-up for FY 2014-15 within 3 weeks from the date of issuance of this order for Commission's consideration and decision.

Accordingly, the petitioner filed its petition for Truing-up of FY 2014-15 and determination of tariff for FY 2016-17. The petition was registered on 28th December, 2015. The Commission vide Order dated 31st March, 2016 approved the provisional ARR and the tariff for FY 2016-17 was determined accordingly.

1.6 Background for the present petition

Gujarat Electricity Regulatory Commission notified the GERC (Multi-Year Tariff) Regulations, 2016 on 29th March, 2016 which shall be applicable for determination of tariff in all cases covered under the Regulations from 1st April, 2016 onwards. Regulation 17.2 provides for submission of detailed Multi-Year Tariff application comprising truing up for FY 2015-16 to be carried out under GERC (Multi-Year Tariff) Regulations, 2011, Multi-Year Aggregate Revenue Requirement for the entire Control Period with year-wise details, Revenue from the sale of power at existing tariffs and charges and projected revenue gap or revenue surplus, for the second year of the Control Period under these Regulations, viz., FY 2017-18 and application for determination of final ARR for FY 2016-17 and determination of tariff for FY 2017-18.

1.7 Registration of the present petition and the public hearing process

The Petitioner submitted the present petition for Truing–up of FY 2015-16, determination of final ARR for FY 2016-17, determination of ARR for the 3rd Control Period from FY 2016-17 to FY 2020-21 and determination of tariff for FY 2017-18 on 30th November, 2016. The Office registered the above Petition (Case No. 1629 of 2016) on 3rd December, 2016.

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

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

Table 1-1: List of newspapers

Sr. No.	Particulars	Language	Date of Publication
1	DNA (All Gujarat)	English	10.12.2016
2	Sandesh (Vadodara)	Gujarati	10.12.2016

The Petitioner also placed the public notice and the petition on its website (www.torrentpower.com) for inviting objections and suggestions on the petition. The interested parties / stakeholders were asked to file their objections / suggestions on the petition on or before 9th January, 2017.

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 date for public hearing for the petition on 10th February, 2017 at the Commission's Office, Gandhinagar and subsequently a communication was sent to the objectors to take part in the public hearing process for presenting their views in person before the Commission. The Commission received request from one stakeholder to postpone the date of public hearing and considering the request, the Commission fixed second date of public hearing for the petition on 14th February, 2017. The public hearing was conducted in the Commission's Office at Gandhinagar as scheduled on the above dates.

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 1-2: List of stakeholders

Sr. No.	Name of Stakeholders	Written Submission	Oral Submission	Present on 10.02.2017	Present on 14.02.2017
1.	Jankalyan Foundation	Yes	No	No	No
2.	Laghu Udyog Bharti - Gujarat	Yes	Yes	No	Yes
3.	Aam Aadmi Party, Gujarat	Yes	Yes	No	Yes
4.	Utility Users' Welfare Association	Yes	Yes	Yes	No

A short note on the main issues raised by the objectors in the submissions with respect to the petition along with the response of TPL-D (D) and the Commission's views on the response are briefly given in Chapter 3.

The Commission also note that the Utility Users' Welfare Association (UUWA) and others have separately filed the petition regarding admissibility and maintainability of this MYT Petition. The Commission initiated hearing in the matters filed by UUWA and others.

During preliminary hearing on 24th March, 2017, it is observed that the issues raised by UUWA and others were also represented by the various stakeholders in the MYT proceedings.

Further, as per Section 64 of the Act, the Commission is required to pass the tariff orders within 120 days from the receipt of the tariff petitions. It is also necessary as per GERC (MYT) Regulations, 2011 and 2016 notified by the Commission.

Moreover, the Hon'ble APTEL vide order dated 11th November, 2011 in OP No. 1 of 2011 decided and directed to all SERCs that "*It should be the endeavour of every State Commission to ensure that the tariff for the financial year is decided before 1st April of every tariff year.*"

In view of the above, we decide to issue Orders in this MYT petition of TPL subject to final outcome of the petition filed by UUWA and others.

1.8 Approach of this Order

The GERC (MYT) Regulations, 2011, provide for "Truing up" of the previous year and determination of tariff for the ensuing year. The Commission has approved ARR for five years of the control period of FY 2011-12 to FY 2015-16 in the MYT Order dated 12th December, 2011 and the revised ARR for FY 2014-15 and FY 2015-16, based on Mid-term Review of the Business Plan vide MTR Order dated 29th May, 2014.

The Commission, vide suo-motu order dated 2nd December, 2015 in Petition No. 1534/2015 decided to consider approved ARR of FY 2015-16 in Mid-Term Review order dated 29th April, 2014 as provisional ARR for FY 2016-17 for determination of tariff for FY 2016-17 in view of delay in finalization of final GERC (Multi-Year Tariff) Regulations for the third Control Period i.e. FY 2016-17 to FY 2020-21. It was also decided in the said order that Generating Companies, Transmission Licensees and Distribution Companies shall file final ARR for FY 2016-17 based on the new GERC (Multi-Year Tariff)

Regulations, 2016 and truing up of the same shall be governed in accordance with new GERC (Multi-Year Tariff) Regulations, 2016.

The GERC (Multi-year Tariff) Regulations, 2016 provides for determination of ARR for the third Control Period i.e. FY 2016-17 to FY 2020-21 and determination of tariff for FY 2017-18.

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

In this Order, the Commission has considered the "Truing up" for the FY 2015-16, as per GERC (MYT) Regulations, 2011.

The Commission has undertaken "Truing up" for the FY 2015-16, based on the submissions of the Petitioner. The Commission has undertaken the computation of gains and losses for the FY 2015-16, based on the audited annual accounts.

While truing up of FY 2015-16, 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 2015-16 has been considered, based on the GERC (MYT) Regulations, 2011.

The Approval of Final ARR for FY 2016-17, Approval of Multi-Year ARR for FY 2016-17 to FY 2020-21 and Determination of Tariff for FY 2017-18 have been considered as per the GERC (Multi-Year Tariff) Regulations, 2016.

1.9 Contents of this order

This order is divided into **nine** chapters as under:

1. The **First Chapter** provides the background of the Petitioner, the Petition and details of the public hearing process and the approach adopted for this order.
2. The **Second Chapter** outlines the summary of TPL-D (D)'s petition.
3. The **Third Chapter** provides a brief account of the public hearing process, including the objections raised by various stakeholders, TPL-D (D)'s response and the Commission's views on the response.
4. The **Fourth Chapter** deals with the 'Truing up' for FY 2015-16.
5. The **Fifth Chapter** deals with the Aggregate Revenue Requirement (ARR) for FY 2016-17 to FY 2020-21.
6. The **Sixth Chapter** deals with the determination of Tariff for FY 2017-18.
7. The **Seventh Chapter** deals with the compliance of directives.
8. The **Eight Chapter** deals with FPPPA.
9. The **Ninth Chapter** deals with determination of the wheeling charges and cross-subsidy surcharge.

2 Summary of Truing up for FY 2015-16, ARR for FY 2016-17 to FY 2020-21 and Tariff for FY 2017-18

2.1 Introduction

This chapter deals with highlights of the petition as submitted by MUPL for truing up of FY 2015-16, determination of final ARR for FY 2016-17, determination of ARR for third Control Period i.e. FY 2016-17 to FY 2020-21 and determination of tariff for FY 2017-18.

2.2 True up for FY 2015-16

The details of expenses under various components of ARR for FY 2015-16 submitted by TPL-D (D) in comparison to those approved in the MTR order for FY 2015-16 are given in the table below. Further, the item-wise gain/ loss computations as submitted by TPL-D (D) are also shown:

Table 2-1: True-up proposed by TPL-D (D) for FY 2015-16

(Rs. Crore)

Particulars	Approved in the MTR Order for 2015-16	Actual submitted for 2015-16	Over (+) / Under (-) Recovery	Gain/ (Loss) due to Controllable factor	Gain/ (Loss) due to Uncontrollable factor
Power purchase cost	56.02	76.68	(20.66)	-	(20.66)
O&M expense	2.82	7.96	(5.14)	-	(5.14)
Depreciation	6.01	5.58	0.43	-	0.43
Interest and finance charges	6.07	8.94	(2.87)	-	(2.87)
Interest on security deposit	3.47	2.26	1.22	-	1.22
Interest on working capital	-	-	-	-	-
Provision for Bad Debts	-	-	-	-	-

Particulars	Approved in the MTR Order for 2015-16	Actual submitted for 2015-16	Over (+) / Under (-) Recovery	Gain/ (Loss) due to Controllable factor	Gain/ (Loss) due to Uncontrollable factor
Contingency reserve	0.65	0.65	-	-	-
Income Tax	-	-	-	-	-
Return on Equity	5.04	4.82	0.21	-	0.21
Less: Non-tariff income	0.98	3.10	(2.12)	-	(2.12)
Aggregate revenue requirement	**79.10**	**103.79**	**(24.69)**	**-**	**(24.69)**

2.3 Summary of ARR, Revenue at Existing Tariff and Proposed Revenue Gap

The table below summarizes the proposed ARR claimed by TPL-D (D) for truing up.

Table 2-2: True up for FY 2015-16 as submitted by TPL-D (D)

(Rs. Crore)

Particulars	Actual submitted for 2015-16
a) ARR approved in MTR order for 2015-16	79.10
b) Gains/(Losses) due to Uncontrollable Factors	(24.69)
c) Gains/(Losses) due to Controllable Factors	-
d) Pass through as tariff [d= -(1/3rd of c+ b)]	24.69
e) Trued -up ARR (e=a+d)	103.79

The table below summarizes the trued up ARR, revenue from sale of power, resultant gap / (surplus) and consolidated gap / (surplus) for FY 2015-16.

Table 2-3: Derivation of consolidated revenue gap / (surplus) submitted by TPL-D (D) for FY 2015-16

(Rs. Crore)

Particulars	Actual submitted for 2015-16
1. Trued-up ARR	103.79
2. Revenue from Sale of Energy	122.78
3. Less: Revenue towards recovery of Earlier Years' approved Gap/ (Surplus)	(3.06)

Particulars	Actual submitted for 2015-16
4. Resultant Revenue (2 - 3)	125.84
5. Resultant Gap/ (Surplus) for FY 2015-16 (1 - 4)	(22.05)

2.4 ARR for the MYT control period FY 2016-17 to FY 2020-21

TPL-D (D) has also sought approval for final Aggregate Revenue Requirement for FY 2016-17, Aggregate Revenue Requirement for the third Control Period i.e. FY 2016-17 to FY 2020-21 and determination of tariff for FY 2017-18 in its petition. The Multi-Year Aggregate Revenue Requirement of TPL-D (D) for the third control period FY 2016-17 to FY 2020-21 is given in the Table below:

Table 2-4: ARR projected by TPL-D (D) for FY 2016-17 to FY 2020-21

(Rs. Crore)

Particulars	2016-17	2017-18	2018-19	2019-20	2020-21
Power Purchase Expenses	91.91	120.63	150.05	169.02	180.86
O&M Expenses	6.61	6.99	7.39	7.81	8.25
Depreciation	5.88	6.57	7.41	7.69	7.78
Interest & Finance Charges	7.07	7.58	7.94	7.53	6.90
Interest on security deposit	2.33	2.61	2.87	3.09	3.20
Interest on Working Capital	-	-	-	-	-
Bad Debts written off	-	-	-	-	-
Contribution to contingency reserves	0.68	0.76	0.87	0.92	0.94
Return on equity	5.06	5.70	6.32	6.55	6.68
Income Tax	-	-	-	-	-
Less: Non-Tariff Income	2.00	2.70	3.35	3.76	4.04
ARR	**117.54**	**148.13**	**179.49**	**198.84**	**210.57**

2.5 Revenue Gap/ (Surplus) for FY 2017-18

Based on the ARR for FY 2017-18 given in the table above, the estimated revenue gap/ (surplus) for FY 2017-18 at existing tariff is shown in the following table.

Table 2-5: Estimated revenue gap / (surplus) of TPL-D (D) for FY 2017-18

(Rs. Crore)

Particulars	2017-18
1. ARR for 2017-18	148.13
2. Revenue Gap/ (Surplus) from True up of FY 2015-16	(22.05)
3. Carrying cost on revenue gap/ (surplus) from True up of FY 2015-16	(5.95)
3. Total Aggregate Revenue Requirement for FY 2017-18 (1 + 2 + 3)	**120.13**
4. Revenue from sale of power at existing tariff rates including FPPPA revenue @ Rs. 0.62 per unit	155.37
5. Gap/ (Surplus) for 2017-18 (3 - 4)	**(35.25)**

2.6 Request of TPL-D (D)

TPL-D (D) has prayed the Commission to:

a) Admit the petition for truing up of FY 2015-16, Aggregate Revenue Requirement for MYT 3rd Control Period, and determination of tariff for FY 2017-18.

b) Approve the trued up gap/ (surplus) of FY 2015-16.

c) Approve the sharing of gains/ losses as proposed by The Petitioner for FY 2015-16.

d) Approve the Aggregate Revenue Requirement for MYT 3rd Control Period (FY 2016-17 to FY 2020-21).

e) Approve the cumulative gap/ (surplus).

f) Approve the wheeling ARR and corresponding charges for wheeling of electricity with effect from 1st April, 2017.

g) Approve the retail supply tariff for FY 2017-18 and refund of surplus by way of Regulatory Charge for FY 2017-18.

h) Allow recovery of the costs as per the Judgments of the Hon'ble Tribunal on the Appeals 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 Commission deems fit to be issued.

l) Condone any inadvertent omissions/ errors/ rounding off difference/ shortcomings.

3 Brief outline of objections raised, response from TPL-D (D) and Commission's view

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

In response to the Public Notice inviting objections/ suggestions from stakeholders on the petition filed by TPL-D (D) for True up of FY 2015-16, multiyear Aggregate Revenue Requirement (ARR) for FY 2016-17 To FY 2020-21, Determination of Final ARR for FY 2016-17 and Determination of Tariff for FY 2017-18, a number of Stakeholders filed their suggestions/ objections in writing. Some of the Stakeholders participated in the public hearings.

The Commission has considered the objections / suggestions, the issues presented before the commission and the response of TPL-D (D) on the same.

The submissions made by the objectors, response of the petitioner and the views of the Commission are dealt with in the following section.

3.2 Issue wise submissions and replies

Each of the objections submitted, TPL-D (D)'s response and Commission's view has been discussed below in terms of key issues identified.

1. Issue: Maintainability of the Petition and incomplete submission of information

Stakeholders stated that the procedure for admission of the MYT petition is required to be carried out first before initiating hearing on merit. They have also represented that the Petitioner has not provided sufficient information or details with the MYT petition.

Response of TPL

The MYT Regulations are required to be followed for registration and further process for determination of tariff. Further, the Petitioner submitted that the information as required under the MYT Regulations 2016 are provided with the MYT petition.

Commission's view:

It is noted that the registration and publication of notices of the MYT petition have been carried out in accordance with the GERC MYT Regulations. Further, based on the representation of the stakeholders and as required for proper scrutiny of the information submitted with the MYT petition, the Petitioner was asked to submit additional details and clarifications. The details in this regard are covered under the Commission's analysis part of this Tariff Order.

2. Issue: Higher tariff rates in lower demand scenario and lower fuel price

The Objectors have questioned the high price of power when fuel prices have reduced in the market and also huge surplus power available in the state of Gujarat.

Response of TPL:

The Petitioner has submitted that it is entrusted with the obligation of supplying electricity in its areas of supply. The State and Central Commission's Regulations specified under the EA, 2003 provides for long term arrangement between the generator and distribution licensee for supply of electricity at regulated tariff irrespective of market fluctuations. Accordingly, the Petitioner has long term arrangements for sourcing the power to cater to the demand of its consumers. In the Regulatory regime, the generating station has two-part tariff structure i.e. Capacity Charge and Energy Charge, for recovery of total cost. The distribution licensee is liable to pay the fixed cost spread over its life in accordance with the provisions of the Regulations irrespective of the level of utilization. The Petitioner's gas based plants was not fully utilized because fuel was not allocated by Government of India due to lower availability of domestic gas in the scenario of unexpected reduction in production of gas from KG basin. These are the factors which are beyond the control of the Petitioner. Further, the determination of capacity charges and its payment is in accordance with the Regulations of the Commissions.

Commission's view:

The Commission has noted the submissions of objector and response of TPL. Any variation in fuel cost is adjusted through FPPPA mechanism.

3. Issue: Non segregation of audited accounts

The Objectors have made allegations with respect to accounts and further requested to carry out the CAG audit of the fuel invoices, FPPPA, other records and accounts of the Petitioner.

Response of TPL:

The Petitioner has refuted the objection by stating that it has furnished all the details of the expenses incurred in its petition in line with the GERC MYT Regulations. The Petitioner strongly refutes the allegations made by the Objector. The Petitioner also stated that separate accounts are being maintained for Regulated businesses and the same has been furnished, duly verified by the Statutory Auditors' of the Company. The Petitioner prepares and maintains the accounts in accordance with the Accounting Standards issued by the Institute of Chartered Accountants of India. Further, the Accounting Statement of the Petitioner is prepared in line with the Companies Act and duly verified by the Statutory Auditor of the Company.

Commission's view:

The response of the Petitioner is noted. The Commission is of the opinion that, whenever the licensee engages in any other business whether utilising the regulated assets or not, there needs to be transparency in the accounts so as to obviate any effect of the unregulated business on the regulated business.

4. Issue: Inefficient employees of TPL

The Objectors have alleged that the Petitioner has incurred unnecessary expenditure on unsuitable staff which should be stopped.

Response of TPL:

The Petitioner has submitted that as an organization, it is committed to being at the forefront of efficiency and superior service, the Petitioner incurs necessary expenditure as per market standards to retain and motivate the employees.

Commission's view:

The Commission monitors the performance of licensees in accordance with SOP Regulations.

4 Truing up for FY 2015-16

4.1 Introduction

This chapter deals with the Truing up of FY 2015-16 of TPL-D (D).

While 'Truing up' of various components of ARR for FY 2015-16, the actuals for FY 2015-16 are compared with the approved ARR, as per Mid-term Review Order dated 29th May 2014.

The Commission has analysed each of the components of the Aggregate Revenue Requirement (ARR) in the following sections.

4.2 Energy sales

Petitioner's submission:

The Petitioner has submitted that the actual energy sales for FY 2015-16 are 206.98 MUs, as against the approved sales of 140.61 MUs in the MTR Order dated 29th May, 2014.

Table 4-1: Energy sales submitted by TPL-D (D) for FY 2015-16

(MUs)

Particulars	Approved in the MTR Order for 2015-16	Actual submitted for 2015-16
Non RGP	0.74	0.45
LTMD	0.00	0.53
HTP-I	130.12	120.81
HTP-II	0.14	0.44
HTP-III	8.72	84.15
SL	0.12	0.22
Temporary	0.67	0.37
WWSP	0.10	0.00
Total Sales	**140.61**	**206.98**

TPL-D (D) submitted that, based on the past trends, the load factor of leading categories i.e. HTP-I and HTP-III was estimated at lower level for FY 2015-16 at the time of submission of projection for MTR petition, whereas actual load factor recorded was higher. This has resulted in to higher sales compared to estimated sales. Thus, the actual sales in FY 2015-16 is higher than the sales approved in the MTR order.

Commission's analysis

The Commission has reviewed the above submissions and found them to be satisfactory. Accordingly, the energy sales for FY 2015-16 are approved as follows.

Table 4-2: Energy sales approved by the Commission for truing up for FY 2015-16

(MUs)

Particulars	Approved in the MTR Order for 2015-16	Actual submitted for 2015-16	Approved in truing up for 2015-16
Energy sales	140.61	206.98	206.98

The Commission approves energy sales of 206.98 MUs for truing up for FY 2015-16.

4.3 Distribution losses

Petitioner's submission

TPL-D (D) has submitted that the actual distribution losses at Dahej was assessed at 0.77% as against 2.00% in the MTR Order. The distribution losses as against the loss approved in MTR order is given below. TPL-D (D) submitted that it had made consistent efforts to reduce the distribution losses.

Table 4-3: Distribution losses submitted by TPL-D (D) for FY 2015-16

(%)

Particulars	Approved in the MTR Order for 2015-16	Actual submitted for 2015-16
Distribution losses	2.00%	0.77%

The Petitioner has also submitted that the variation in the distribution losses compared to the approved value is considered as controllable as per MYT regulations. However, as the network is yet to be established and load is to be stabilized, the distribution losses have been considered as uncontrollable.

TPL-D (D) has not computed any gain due to reduction in distribution losses for Dahej area.

Commission's analysis

The distribution losses as claimed by TPL-D (D) at 0.77% is approved for the purpose of true-up for FY 2015-16. Any gain / loss on account of distribution losses is controllable as per GERC (MYT) Regulations, 2011. However, in this order, the distribution losses have been considered as uncontrollable for the purpose of sharing of gains/ losses for the present control period as the load is yet to stabilize.

Table 4-4: Distribution losses approved by the Commission for truing up for FY 2015-16

(%)

Particulars	Approved in the MTR Order for 2015-16	Actual submitted for 2015-16	Approved in truing up for 2015-16
Distribution losses	2.00%	0.77%	0.77%

The Commission approves distribution losses of 0.77% for truing up for FY 2015-16.

4.4 Energy requirement

Petitioner's submission

The Petitioner has submitted the actual energy requirement for Dahej Supply area based on the actual energy sales and the transmission & distribution losses. The total energy requirement was met through various sources.

Based on the actual energy sales and the transmission and distribution losses, the actual energy requirement for Dahej area as submitted by TPL-D (D) for FY 2015-16 and as approved in the MTR order dated 29th May, 2014 are given below:

Table 4-5: Energy requirement submitted by TPL-D (D) for FY 2015-16

(MUs)

Particulars	Approved in the MTR Order for 2015-16	Actual submitted for 2015-16
Energy sales	140.61	206.98
Distribution losses (%)	2.00%	0.77%
Distribution losses	2.87	1.60

Particulars	Approved in the MTR Order for 2015-16	Actual submitted for 2015-16
Energy input at distribution level	143.48	208.58
Transmission losses	-	8.01
Energy requirement	**143.48**	**216.59**

Commission's analysis

The Commission has approved the distribution losses at 0.77% above. The Commission computed the energy requirement with distribution losses of 0.77% (1.60 MUs) and transmission losses of 8.01 MUs for FY 2015-16 based on actuals.

Table 4-6: Energy requirement approved by the Commission for truing up for FY 2015-16

(MUs)

Particulars	Approved in the MTR Order for 2015-16	Actual submitted for 2015-16	Approved in truing up for 2015-16
Energy sales	140.61	206.98	206.98
Distribution losses (%)	2.00%	0.77%	0.77%
Distribution losses	2.87	1.60	1.60
Energy input at distribution level	143.48	208.58	208.58
Transmission losses	-	8.01	8.01
Energy requirement	**143.48**	**216.59**	**216.59**

The Commission approves total energy requirement of 216.59 MUs for truing up for FY 2015-16.

4.5 Power purchase cost

Petitioner's submission

TPL-D (D) has submitted that it sourced power from Essar, NTPC Vidyut Vitran Nigam Limited and IEX. The details of power procured for Dahej supply area are provided in the table below:

Table 4-7: Energy availability (net) from various sources of power submitted by TPL-D (D) for FY 2015-16

(MUs)

Particulars	Approved in the MTR Order for 2015-16	Actual submitted for 2015-16
Bilateral/ Other	132.00	215.25
Power Exchange	-	1.86
Wind	8.97	-
Solar	1.79	-
Biomass/ Others	0.72	-
Sub-Total	**143.48**	**217.11**
Add: Sale of Surplus Power/ UI	-	(0.52)
Total energy availability (net)	**143.48**	**216.59**

Power purchase cost

TPL-D (D) has submitted the actual power purchase cost for FY 2015-16 as provided in the table below.

Table 4-8: Power purchase cost submitted by TPL-D (D) for FY 2015-16

(Rs. Crore)

Particulars	Approved in the MTR Order for 2015-16	Actual submitted for 2015-16
Bilateral/ Other	50.16	71.97
Power Exchange	-	0.51
Wind	3.78	-
Solar	1.72	-
Biomass/ Others	0.36	-
REC	-	4.21
Total power purchase cost	**56.02**	**76.69**

TPL-D (D) has submitted that the variation in the power purchase cost from the MTR Order is on account of variation in sales and distribution losses and variation in actual cost with respect to the base power purchase rate during the year. As per MYT regulations, the variation in power purchase cost is uncontrollable except on account of variation in distribution losses and hence the same needs to be allowed in truing up exercise. However, the Petitioner has proposed to pass on the entire gain on account of distribution losses reduction to consumers as its operations are still in developing stage.

Renewable power purchase obligation

The Petitioner has submitted that Regulation 4.1 of the GERC (Procurement of Energy from Renewable Energy Sources) Regulations, 2010 specifies the Renewable Power Purchase Obligation (RPPO) for FY 2010-11, FY 2011-12 and FY 2012-13. The Commission vide Amendment to the GERC (Procurement of Energy from Renewable Energy Sources) Regulations, 2010 has specified the RPO target for the period FY 2015-16 to FY 2016-17. The Petitioner has made all efforts to fulfil its RPPO.

The Petitioner has submitted that it has duly complied with the RPO target for the FY 2015-16 in accordance with the provision of the regulations. The compliance against the renewable power purchase obligation as submitted by TPL-D (D) for FY 2015-16 is as under:

Table 4-9: Renewable power purchase obligation submitted by TPL-D (D) for FY 2015-16 (MUs)

Particulars	Actual submitted for 2015-16
Energy Requirement	**216.59**
Obligation	
Wind energy to be procured (@ 7.00%)	15.16
Solar energy to be procured (@ 1.50%)	3.25
Biomass/Bagasse/Others (@ 0.50%)	1.08
Total (9.00%)	19.49
Compliance (Non-Solar)	
Wind	-
Non Solar-REC	16.85
Compliance	16.85
Compliance (as % of Energy Requirement)	7.78%
Compliance (Solar energy)	
Solar	-
Solar-REC	3.35

Particulars	Actual submitted for 2015-16
Compliance	3.35
Compliance (as % of Energy Requirement)	1.55%
Shortfall/ (Excess) for FY 2015-16	
Non-Solar	(0.61)
Solar	(0.10)
Total	**(0.71)**

Commission's analysis

As verified from the Annual Accounts for FY 2015-16, TPL-D (D) has incurred power purchase cost of Rs. 76.68 Crore including REC of Rs. 4.21 Crore during FY 2015-16.

The Commission, accordingly, approves total power purchase cost of Rs. 76.68 Crore for truing up for FY 2015-16.

As per GERC (MYT) Regulations, 2011 variation in the price of fuel and/ or price of power purchase are uncontrollable factors. Accordingly, the Commission has approved the gains / (losses) as shown in the table below:

Table 4-10: Gains / (losses) on account of power purchase cost in the Truing up for FY 2015-16

(Rs. Crore)

Particulars	Approved for 2015-16 in MTR Order	Approved in Truing up	Deviation + / (-)	Gains / (Losses) due to controllable factor	Gains / (Losses) due to uncontrollable factor
Power purchase cost	56.02	76.68	(20.66)	0.00	(20.66)

4.6 Fixed Cost

4.6.1 Operations and Maintenance (O&M) expenses

Petitioner's submission

TPL-D (D) has claimed Rs. 7.96 Crore on O&M expenses against Rs. 2.82 Crore of composite O&M expenses approved for FY 2015-16 in the MTR order as detailed in the table below:

Table 4-11: O&M expenses submitted by TPL-D (D) for FY 2015-16

(Rs. Crore)

Particulars	Approved in the MTR Order for 2015-16	Actual submitted for 2015-16
Operations & Maintenance Expenses	2.82	7.96

The Petitioner has submitted that the O&M expenses in the MTR order were approved considering past data. However, the network has increased and O&M expenses have also increased due to increase in Repairs & Maintenance activities. Therefore, the actual O&M expenses incurred are higher than the approved.

Further, the Petitioner has stated that the SEZ is still in development stage and demand is yet to be stabilized. Accordingly, the Petitioner has submitted that the variation in O&M expenses should be considered as uncontrollable. Hence, in the present petition, the Petitioner has considered the entire O&M expenses as uncontrollable for sharing of gains/ losses and has requested the Commission to approve the same.

Commission's analysis

The Commission notes that the O&M expenses for FY 2015-16, as per annual accounts, are Rs. 7.96 Crore. However, this includes Rs. 0.26 Crore of expenses on account of Loss on sale/ discarding of fixed assets. Such expenses cannot be considered as part of the O&M expenses. Accordingly, this expense has been deducted.

Table 4-12: Operation and Maintenance expenses approved by the Commission for truing up for FY 2015-16

(Rs. Crore)

Particulars	Approved in the MTR Order for 2015-16	Actual submitted for 2015-16	Approved in truing up for 2015-16
O&M expenses	2.82	7.96	7.70

The Commission approves the O&M expenses at Rs. 7.70 Crore for truing up for FY 2015-16.

As per GERC (MYT) Regulations, 2011 variation in the operations and maintenance expenses is a controllable factor. Accordingly, the Commission has approved the gains / (losses) as shown in the table below:

Table 4-13: Gains / (losses) on account of O&M expenses in the Truing up for FY 2015-16

(Rs. Crore)

Particulars	Approved for 2015-16 in MTR Order	Approved in Truing up	Deviation + / (-)	Gains / (Losses) due to controllable factor	Gains / (Losses) due to uncontrollable factor
O&M Expenses	2.82	7.70	(4.88)	(4.88)	0.00

4.6.2 Capital expenditure, capitalization and funding of capex

Petitioner's submission

TPL-D (D) has furnished the actual capital expenditure at Rs. 5.13 Crore in the truing up for FY 2015-16 as against Rs. 10.08 Crore approved in the MTR order for FY 2015-16 as detailed in the table below:

Table 4-14: Capital expenditure submitted by TPL-D (D) for FY 2015-16

(Rs. Crore)

Particular	Approved in the MTR Order for 2015-16	Actual submitted for 2015-16
EHV	0.79	0.01
HT Network	8.78	4.44

Particular	Approved in the MTR Order for 2015-16	Actual submitted for 2015-16
Metering	0.02	0.02
Others	0.49	0.66
Total capital expenditure	**10.08**	**5.13**

Capital Expenditure

The reasons for the major variances in the actual expenditure against the approved expenditure are enumerated hereunder:

a) EHV: The Commission had approved the expenditure of Rs. 0.79 Crore for switchyard enhancement related work in 220 KV East & 220 KV West substations. The actual expenditure incurred during the year was Rs. 0.01 Crore due to deferment of 220 kV switchyard related expenditure on account of lower than expected increase in demand.

b) HT Network: The Commission had approved an expenditure of Rs. 8.78 Crore whereas the actual expense incurred was Rs. 4.44 Crore. The variation is mainly on account of deferment of expenditure due to lower than anticipated growth and lesser number of consumers. During FY 2015-16, the Petitioner Torrent Power Ltd. transferred existing 33/11kV 20 MVA transformer from 33kV West to 33kV East to meet the load demand of East phase whereas 2 Nos. 33/11kV 10 MVA transformers were installed at 33kV West substation.

c) Metering: The Commission had approved an expenditure of Rs. 0.02 Crore whereas the actual expense incurred was Rs. 0.016 Crore which is in line with the approved expenses.

d) Others: In this category, the actual expenditure incurred was Rs. 0.66 Crore against the approved expenditure of Rs. 0.49 Crore. The major CAPEX incurred is towards procurement of thermograph camera and other tools/ tackles. Certain projects like GIS were deferred, whereas expenditure was incurred for OFC network development, PC-Hardware, miscellaneous items.

Capitalization

TPL-D (D) has claimed a sum of Rs. 4.82 Crore towards net capitalization during FY 2015-16 as derived in the table below.

Table 4-15: Capitalization submitted by TPL-D (D) for FY 2015-16

(Rs. Crore)

Particulars	Actual
a. Opening GFA	130.56
b. Addition to GFA	5.18
c. Deletion to GFA	0.36
d. Closing GFA (a + b - c)	135.38
e. SLC addition	2.53
f. Capitalization (b - c - e)	2.29
g. Normative debt @ 70% (f * 70%)	1.61
h. Normative equity @ 30% (f * 30%)	0.69

Commission's analysis

The Commission has verified the amounts claimed by TPL-D (D) for FY 2015-16 towards opening GFA, addition of assets, deduction of assets, closing GFA and SLC addition with the annual accounts and found them to be true. Further, the Commission observed that the petitioner has incurred lower capex as compared to the value approved in MTR order but capitalized a higher amount. Accordingly, the Commission approves the capex, capitalization and funding of capex for the purpose of truing up for FY 2015-16 as follows:

Table 4-16: Capital expenditure, capitalization and funding of capex approved by the Commission for truing up for FY 2015-16

(Rs. Crore)

Particulars	Approved in the MTR Order for 2015-16	Actual submitted for 2015-16	Approved in truing up for 2015-16
Capex	10.08	5.13	5.13
Capitalization	3.02	4.82	4.82
Less: SLC	1.00	2.53	2.53
Balance Capitalization	2.02	2.29	2.29
Normative Debt (70%)	1.41	1.61	1.61
Normative Equity (30%)	0.61	0.69	0.69

4.6.3 Depreciation

Petitioner's submission

TPL-D (D) has claimed an amount of Rs. 5.58 Crore towards depreciation in the truing up for FY 2015-16, against Rs. 6.01 Crore approved in the MTR Order for FY 2015-16, as shown in the Table below. It has applied depreciation rates in accordance with the GERC MYT Regulations on the opening GFA and for the assets capitalized during the year:

Table 4-17: Depreciation submitted by TPL-D (D) for FY 2015-16

(Rs. Crore)

Particulars	Approved in the MTR Order for 2015-16	Actual submitted for 2015-16
Depreciation	6.01	5.58

Commission's analysis

The Commission has verified the asset-wise effective depreciation rates used by TPL-D (D) in light of the rates specified in the GERC (MYT) Regulations, 2011. The rates for all assets are in line with the regulatory rates. The Commission further verified from the annual accounts that the depreciation amount has been claimed after reducing the corresponding depreciation on assets created using the service line contribution.

Based on the foregoing analysis, the Commission approves the depreciation as shown in the table below:

Table 4-18: Depreciation expense approved by the Commission for truing up for FY 2015-16

(Rs. Crore)

Particulars	Approved in the MTR Order for 2015-16	Actual submitted for 2015-16	Approved in truing up for 2015-16
Depreciation on entire assets	-	6.55	6.55
Less: Depreciation on SLC assets	-	0.97	0.97
Net depreciation	**6.01**	**5.58**	**5.58**

The Commission approves Rs. 5.58 Crore depreciation for the purpose of truing up for FY 2015-16.

With regard to the computation of Gains / (Losses), Regulation 23.2 of GERC (MYT) Regulations, 2011 considers variations in capitalisation on account of time and/or cost overruns / efficiencies in the implementation of a 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. If the gain is on account of lesser capital expenditure and capitalisation, it cannot be attributed to the efficiency of the utility to allow one-third of gain to the utility. Similarly, if the loss is on account of higher capital expenditure and capitalisation due to bonafide reasons, the utility cannot be penalised by allowing only two-thirds of the loss in the ARR. Hence, Commission considers the variation in capitalization as uncontrollable. This applies to debt and equity in allowing Gains / (Losses) on account of interest and return on equity too. Accordingly, the Commission has approved the gains / (losses) as shown in the table below:

Table 4-19: Gains / (losses) on account of depreciation in the Truing up for FY 2015-16

(Rs. Crore)

Particulars	Approved for 2015-16 in MTR Order	Approved in Truing up	Deviation + / (-)	Gains / (Losses) due to controllable factor	Gains / (Losses) due to uncontrollable factor
Depreciation	6.01	5.58	0.43	0.00	0.43

4.6.4 Interest and finance charges

Petitioner's submission

TPL-D (D) has considered the interest expenses as per the GERC (MYT) Regulations, 2011 on normative loans. It has calculated the interest expenses by applying the opening Weighted Average Rate of interest of actual loan portfolio at the beginning of the year (i.e. 01.04.2015) on the loan component, while repayment has been considered equal to the depreciation of the assets for the year.

TPL-D (D) has submitted the interest and finance charges for FY 2015-16 as shown in the table below:

Table 4-20: Interest and finance charges submitted by TPL-D (D) for FY 2015-16

(Rs. Crore)

Particulars	Actual submitted for 2015-16
Addition to GFA	5.18
Less: Deletions from GFA	0.36
Less: SLC additions	2.53
Capitalisation for Debt	2.29
Normative Debt @ 70%	1.61
Opening Balance of Loans	66.30
Repayments	5.58
New Borrowings	1.61
Closing Balance of Loans	62.32
Average Loan	64.31
Interest Expense @ 13.50%	**8.68**
Other Borrowing Cost	0.26

Accordingly, TPL-D (D)'s claim under interest and finance charges for FY 2015-16 as compared to that approved under the MTR order is summarized below:

Table 4-21: Interest and finance charges submitted by TPL-D (D) for FY 2015-16

(Rs. Crore)

Particulars	Approved in the MTR Order for 2015-16	Actual submitted for 2015-16
Interest charges	6.07	8.68
Other borrowing costs	0.00	0.26
Interest and finance charges	**6.07**	**8.94**

Commission's analysis

TPL-D (D) has claimed interest at 13.50%, as against 10.50% approved in the MTR order. The Commission asked TPL-D (D) to furnish evidence supporting the claimed interest rate. In its reply, TPL-D (D) submitted a copy of letter dated 27th February, 2017 from Bank of Baroda sanctioning the loan at the rate of 13.50%.

Accordingly, the Commission has recomputed the interest and finance charges for

FY 2015-16 as detailed in the Table below:

Table 4-22: Interest and finance charges computed by the Commission for FY 2015-16

(Rs. Crore)

Particulars	Actual submitted for 2015-16	Approved in truing up for 2015-16
Opening Balance	66.30	66.30
Addition of Loan due to capitalisation during the year	1.61	1.61
Repayment of loan during the year	5.58	5.58
Closing Balance of Loan	62.32	62.32
Average Balance of Loan	64.31	64.31
Weighted average Rate of Interest on actual Loans (%)	13.50%	13.50%
Interest expenses (@ 13.50%)	**8.68**	**8.68**
Finance charges	0.26	0.26
Interest and Finance charges	**8.94**	**8.94**

The Commission accordingly approves interest and finance charges of Rs. 8.94 Crore for truing up for FY 2015-16.

As per the GERC (MYT) Regulations, 2011, the Commission is of the view that the parameters which affect interest and finance charges should be treated as uncontrollable. Accordingly, the Commission has approved the gains / (losses) as shown in the table below:

Table 4-23: Gains / (losses) on account of interest and finance charges in the Truing up for FY 2015-16

(Rs. Crore)

Particulars	Approved for 2015-16 in MTR Order	Approved in Truing up	Deviation + / (-)	Gains / (Losses) due to controllable factor	Gains / (Losses) due to uncontrollable factor
Interest and finance charges	6.07	8.94	(2.87)	0.00	(2.87)

4.6.5 Interest on working capital

Petitioner's submission

TPL-D (D) has submitted that the working capital requirement is arrived at as per the GERC (MYT) Regulations, 2011. As working capital requirement works out to be negative, the TPL-D (D) has not claimed any interest on working capital. The computation is provided in the table below.

Table 4-24: Interest on working capital submitted by TPL-D (D) for FY 2015-16

(Rs. Crore)

Particulars	Approved in the MTR Order for 2015-16	Actual submitted for 2015-16
O&M expenses (1 month)	0.24	0.66
Maintenance spares (1% of opening GFA)	1.30	1.31
Receivables (1 month)	6.64	10.23
Less: Security Deposit	36.57	27.18
Normative Working Capital	-	-
Interest Rate (%)	14.45%	14.75%
Interest on Working Capital	**-**	**-**

Commission's analysis

The Commission has reviewed the working capital requirement in terms of the component wise values approved in preceding sections. The security deposit amount has been verified from annual accounts.

Regulation 41.3 (b) and 41.4 (b) of GERC (MYT) Regulations, 2011 specify that interest shall be allowed at a rate equal to the State Bank Advance Rate (SBAR) as on 1st April of the financial year in which the petition is filed. Accordingly, the interest rate taken into consideration is the SBAR existing as on 1st April, 2015 i.e. 14.75%.

The Commission now approves the interest on working capital as shown in the Table below.

Table 4-25: Interest on working capital approved by the Commission for truing up for FY 2015-16

(Rs. Crore)

Particulars	Approved in the MTR Order for 2015-16	Actual submitted for 2015-16	Approved in truing up for 2015-16
O&M expenses (1 month)	0.24	0.66	0.64
Maintenance spares (1% of opening GFA)	1.30	1.31	1.31
Receivables (1 month)	6.64	10.23	10.23
Less: Security Deposit	36.57	27.18	27.18
Normative Working Capital	(28.39)	(14.98)	(15.00)
Interest Rate (%)	14.45%	14.75%	14.75%
Interest on Working Capital	**-**	**-**	**-**

The Commission approves the interest on working capital as "Nil" for the truing up for FY 2015-16.

The Commission considers the Interest on working capital as uncontrollable, since the components forming part of the working capital are mostly uncontrollable. Accordingly, the Commission has approved the gains / (losses) as shown in the table below:

Table 4-26: Gains / (losses) on account of interest on working capital in the Truing up for FY 2015-16

(Rs. Crore)

Particulars	Approved for 2015-16 in MTR Order	Approved in Truing up	Deviation + / (-)	Gains / (Losses) due to controllable factor	Gains / (Losses) due to uncontrollable factor
Interest on working capital	0.00	0.00	0.00	0.00	0.00

4.6.6 Interest on security deposit

Petitioner's submission

TPL-D (D) has submitted that the Commission in its MTR order had approved the interest on security deposit considering 9.50% interest rate on the average balance of security deposit for FY 2015-16. TPL-D (D) has now submitted the actual interest expense on security deposit considering the rate of interest of 8.50% paid to consumers based on Bank Rate as submitted in the table below

Table 4-27: Interest on security deposit submitted by TPL-D (D) for FY 2015-16

(Rs. Crore)

Particulars	Approved in the MTR Order for 2015-16	Actual submitted for 2015-16
Interest rate	9.50%	8.50%
Interest on security deposit	3.47	2.26

Commission's analysis

The Commission has scrutinized the annual accounts and observed that the opening and closing values of security deposit are Rs. 26.89 Crore and Rs. 27.47 Crore respectively, leading to a security deposit value of Rs. 27.18 Crore for the FY 2015-16. However, the actual interest paid as per annual accounts is found to be Rs. 2.26 Crore. Accordingly, the Commission approves this value as per actuals.

Table 4-28: Interest on security deposit approved by the Commission for truing up for FY 2015-16

(Rs. Crore)

Particulars	Approved in the MTR Order for 2015-16	Actual submitted for 2015-16	Approved in truing up for 2015-16
Interest on security deposit	3.47	2.26	2.26

The Commission approves interest on security deposit at Rs. 2.26 Crore for truing up for FY 2015-16.

The factor which affects security deposit is the number of consumers. As per GERC (MYT) Regulations, 2011 variation in the number of consumers is an uncontrollable factor. Accordingly, the Commission has approved the gains / (losses) as shown in the table below:

Table 4-29: Gains / (losses) on account of interest on security deposit in the Truing up for FY 2015-16

(Rs. Crore)

Particulars	Approved for 2015-16 in MTR Order	Approved in Truing up	Deviation + / (-)	Gains / (Losses) due to controllable factor	Gains / (Losses) due to uncontrollable factor
Interest on security deposit	3.47	2.26	1.21	0.00	1.21

4.6.7 Bad debts written off

Petitioner's submission

TPL-D (D) has not claimed any amount towards bad debts written off in the truing up for FY 2015-16 against a zero value approved in the MTR Order for FY 2015-16 as mentioned in the Table below:

Table 4-30: Bad debts written off submitted by TPL-D (D) for FY 2015-16

(Rs. Crore)

Particulars	Approved in the MTR Order for 2015-16	Actual submitted for 2015-16
Bad debts written off	NIL	NIL

Commission's analysis

The Commission has verified from the annual accounts for FY 2015-16 that bad debts written off are zero.

Table 4-31: Bad debts written off approved by the Commission for truing up for FY 2015-16

(Rs. Crore)

Particulars	Approved in the MTR Order for 2015-16	Actual submitted for 2015-16	Approved in truing up for 2015-16
Bad debts written off	0.00	0.00	0.00

The Commission considers bad debts written off as controllable. Accordingly, the Commission has approved the gains / (losses) as shown in the table below:

Table 4-32: Gains / (losses) on account of bad debts written off in the Truing up for FY 2015-16

(Rs. Crore)

Particulars	Approved for 2015-16 in MTR Order	Approved in Truing up	Deviation + / (-)	Gains / (Losses) due to controllable factor	Gains / (Losses) due to uncontrollable factor
Bad debts written off	0.00	0.00	0.00	0.00	0.00

4.6.8 Contingency Reserve

Petitioner's submission

TPL-D (D) has proposed the contingency reserve at Rs. 0.65 Crore in the truing up for FY 2015-16 in line with the amount approved in the MTR order for FY 2015-16, as shown in the Table below:

Table 4-33: Contingency reserve submitted by TPL-D (D) for FY 2015-16

(Rs. Crore)

Particulars	Approved in the MTR Order for 2015-16	Actual submitted for 2015-16
Contingency reserve	0.65	0.65

Commission's analysis

Regulation 85.6 of the GERC (MYT) Regulations, 2011 specifies that where the Distribution Licensee has made an appropriation to the Contingency Reserve, a sum not more than 0.5 per cent of the original cost of fixed assets shall be allowed annually towards such appropriation in the calculation of aggregate revenue requirement. The contingency reserve at 0.5% of Opening GFA works out to Rs. 0.65 Crore. Further, the Commission has also validated the amount claimed by TPL-D (D) from the annual accounts.

Table 4-34: Contingency reserve approved by the Commission for truing up for FY 2015-16

(Rs. Crore)

Particulars	Approved in the MTR Order for 2015-16	Actual submitted for 2015-16	Approved in truing up for 2015-16
Contingency reserve	0.65	0.65	0.65

The Commission approves contribution to contingency reserve at Rs. 0.65 Crore for truing up for FY 2015-16.

The Commission considers variation in the contribution to contingency reserve as an uncontrollable factor. Accordingly, the Commission has approved the gains / (losses) as shown in the table below:

Table 4-35: Gains / (losses) on account of contribution to contingency reserve in the Truing up for FY 2015-16

(Rs. Crore)

Particulars	Approved for 2015-16 in MTR Order	Approved in Truing up	Deviation + / (-)	Gains / (Losses) due to controllable factor	Gains / (Losses) due to uncontrollable factor
Contingency reserve	0.65	0.65	0.00	0.00	0.00

4.6.9 Return on equity

Petitioner's submission

TPL-D (D) has submitted that the closing balance of equity has been arrived at considering additional equity of 30% of the capitalization during the year. The return on equity has been thus computed applying a rate of 14% on the average of the opening and closing balance of equity for FY 2015-16.

Table 4-36: Return on equity submitted by TPL-D (D) for FY 2015-16

(Rs. Crore)

Particulars	Approved in the MTR Order for 2015-16	Actual submitted for 2015-16
Opening equity	35.67	34.10
Equity addition during the year	0.61	0.69
Closing equity	36.28	34.79
Average equity	35.98	34.44
Return on equity @ 14%	**5.04**	**4.82**

Commission's analysis

The Commission approves return on equity as provided below:

Table 4-37: Return on equity approved by the Commission for truing up for FY 2015-16

(Rs. Crore)

Particulars	Approved in the MTR Order for 2015-16	Actual submitted for 2015-16	Approved in truing up for 2015-16
Opening equity	35.67	34.10	34.10
Equity addition during the year	0.61	0.69	0.69
Closing equity	36.28	34.79	34.79
Average equity	35.98	34.44	34.44
Return on equity @ 14%	**5.04**	**4.82**	**4.82**

The Commission is of the view that Return on Equity depends on the amount of capitalisation during the financial year and that the parameters affecting the capitalisation are uncontrollable in nature, as noted in preceding sections. Accordingly, the Commission has approved the gains / (losses) as shown in the table below:

Table 4-38: Gains/(losses) on account of return on equity in the Truing up for FY 2015-16

(Rs. Crore)

Particulars	Approved for 2015-16 in MTR Order	Approved in Truing up	Deviation + / (-)	Gains / (Losses) due to controllable factor	Gains / (Losses) due to uncontrollable factor
Return on equity	5.04	4.82	0.21	0.00	0.21

4.6.10 Income Tax

Petitioner's submission

The Petitioner has not claimed Income Tax for FY 2015-16.

Commission's analysis

As verified from the annual accounts, income tax is zero.

The Commission approves income tax at Rs. 0.00 Crore for truing up for FY 2015-16.

As per GERC (MYT) Regulations, 2011 variation in the taxes on income is an uncontrollable factor. Accordingly, the Commission has approved the gains / (losses) as shown in the table below:

Table 4-39: Gains / (losses) on account of income tax in the Truing up for FY 2015-16

(Rs. Crore)

Particulars	Approved for 2015-16 in MTR Order	Approved in Truing up	Deviation + / (-)	Gains / (Losses) due to controllable factor	Gains / (Losses) due to uncontrollable factor
Income tax	0.00	0.00	0.00	0.00	0.00

4.6.11 Non-Tariff income

Petitioner's submission

TPL-D (D) has furnished the Non-Tariff income at Rs. 3.10 Crore in the truing up for FY 2015-16 against Rs. 0.98 Crore approved in the MTR order for FY 2015-16 as detailed in the Table below:

Table 4-40: Non-Tariff income submitted by TPL-D (D) for FY 2015-16

(Rs. Crore)

Particulars	Approved in the MTR Order for 2015-16	Actual submitted for 2015-16
Non-tariff income	0.98	3.10

Commission's analysis

The Commission has verified Non-Tariff income from the annual accounts for FY 2015-16 and found the same to be Rs. 3.10 Crore.

The Commission, accordingly, approves the Non-Tariff income at Rs. 3.10 Crore for truing up for FY 2015-16.

The Commission considers variation in the non-tariff income as an uncontrollable factor. Accordingly, the Commission has approved the gains / (losses) as shown in the table below:

Table 4-41: Gains / (losses) on account of non-tariff income in the Truing up for FY 2015-16

(Rs. Crore)

Particulars	Approved for 2015-16 in MTR Order	Approved in Truing up	Deviation + / (-)	Gains / (Losses) due to controllable factor	Gains / (Losses) due to uncontrollable factor
Non-tariff income	0.98	3.10	(2.12)	0.00	(2.12)

4.7 Revenue from sale of power

Petitioner's submission

TPL-D (D) has submitted the revenue from sale of power at Rs. 122.78 Crore in the truing up for FY 2015-16.

Commission's analysis

The Petitioner has submitted revenue from sale of power with existing tariff as Rs 122.78 Crore. However, as per the annual accounts, the revenue is Rs. 94.48 Crore. On a query by the Commission regarding reconciliation of the revenue, the Petitioner submitted that it has paid back regulatory liability of Rs 28.30 Crore to the consumers. Hence, the revenue as per the reconciliatory statement is Rs 94.48 crore.

The Commission has verified that as per Note 8 of the annual accounts the sundry payable liability was Rs 36.34 Crore as on 31st March, 2016 whereas the same was Rs. 9.27 Crore as on 31st March, 2015. Considering the amount of Rs 1.23 Crore for Reversal of FPPPA provision made for payables in Q1 (2015-16), the total sundry payable works out to Rs 28.30 crore which tallies with the amount claimed by the Petitioner as payments made against regulatory adjustments.

Based on the foregoing analysis, the Commission approves revenue with existing tariffs of Rs. 122.78 Crore as claimed by TPL-D (D) for truing up for the year 2015-16.

4.8 Summary of aggregate revenue requirement and sharing of gains/ losses

Petitioner's submission

TPL-D (D) has submitted the comparison of various ARR items and computed the gains/ losses due to controllable and uncontrollable factors as summarized below:

Table 4-42: Controllable & uncontrollable variations for FY 2015-16 as submitted by TPL-D (D)

(Rs. Crore)

Particulars	Approved in the MTR Order for 2015-16	Actual submitted for 2015-16	Over (+) / Under (-) Recovery	Gain/ (Loss) due to Controllable factor	Gain/ (Loss) due to Uncontrollable factor
Power purchase cost	56.02	76.68	(20.66)	-	(20.66)
O&M expense	2.82	7.96	(5.14)	-	(5.14)
Depreciation	6.01	5.58	0.43	-	0.43
Interest and Finance charges	6.07	8.94	(2.87)	-	(2.87)
Interest on security deposit	3.47	2.26	1.21	-	1.21
Interest on working capital	-	-	-	-	-
Provision for Bad Debts	-	-	-	-	-
Contingency reserve	0.65	0.65	-	-	-
Income Tax	-	-	-	-	-
Return on Equity	5.04	4.82	0.21	-	0.21
Less: Non-tariff income	0.98	3.10	(2.12)	-	(2.12)
Aggregate revenue requirement	**79.10**	**103.79**	**(24.69)**	**-**	**(24.69)**

Following is the summary of truing-up ARR to be recovered by TPL-D (D) for FY 2015-16 after inclusion of sharing of gains/ losses.

Table 4-43: Trued up ARR for FY 2015-16 as submitted by TPL-D (D)

(Rs. Crore)

Particulars	Actual submitted for 2015-16
a) ARR approved in MTR order for 2015-16	79.10
b) Gains/ (Losses) due to Uncontrollable Factors	(24.69)
c) Gains/ (Losses) due to Controllable Factors	-
d) Pass through as tariff [-(1/3rd of c+ b)]	24.69
ARR trued up of 2015-16 [(e) = a + d]	**103.79**

TPL-D (D) has submitted that the treatment of revenue towards recovery of earlier years' approved Gap/ (Surplus) has been considered in line with the APTEL's judgement dated 11th December, 2015 in Appeal No. 142, 143 & 145 of 2015. The same works out to surplus of Rs. 3.06 Crore as per the Commission's true-up orders dated 27th May, 2013 and 31st March, 2015 for TPL-D (D).

Based on the above, the gap/ (surplus) for FY 2015-16 is arrived at by equating the trued-up ARR with the revenue from sale of power after adjusting against earlier years' trued-up gap/ (surplus). The summary of the gap/ (surplus) for Dahej Supply area for FY 2015-16 is shown in the table below.

Table 4-44: Revenue Gap/ (Surplus) for FY 2015-16 as submitted by TPL-D (D)

(Rs. Crore)

Particulars	**Actual submitted for 2015-16**
Trued-up ARR	103.79
Revenue from Sale of Energy	122.78
Less: Revenue towards recovery of Earlier Years' approved Gap/ (Surplus)	(3.06)
Balance Revenue	125.84
Gap/ (Surplus)	**(22.05)**

Commission's analysis

The Commission reviewed the performance of TPL-D (D) under Regulation 22 of GERC (MYT) Regulations, 2011 with reference to the Annual Accounts for FY 2015-16. The Commission has computed the sharing of gains and losses for FY 2015-16 based on the truing up for each of the components discussed in the above paragraphs. The ARR approved for FY 2015-16 in the MTR order dated 29th May, 2014, and computed in accordance with GERC (MYT) Regulations, 2011 are given in the table below:

Table 4-45: ARR approved for FY 2015-16 along with impact of controllable/ uncontrollable factors

(Rs. Crore)

Particulars	Approved in the MTR Order for 2015-16	Actual submitted for 2015-16	Approved in truing up for 2015-16	Over (+) / Under (-) Recovery	Gain/ (Loss) due to Controllable factor	Gain/ (Loss) due to Uncontrollable factor
Power purchase cost	56.02	76.68	76.68	(20.66)	0.00	(20.66)
O&M expense	2.82	7.96	7.70	(4.88)	(4.88)	0.00
Depreciation	6.01	5.58	5.58	0.43	0.00	0.43
Interest and finance charges	6.07	8.94	8.94	(2.87)	0.00	(2.87)
Interest on security deposit	3.47	2.26	2.26	1.21	0.00	1.21
Interest on working capital	0.00	0.00	0.00	0.00	0.00	0.00
Provision for Bad Debts	0.00	0.00	0.00	0.00	0.00	0.00
Contingency reserve	0.65	0.65	0.65	(0.00)	0.00	(0.00)
Income Tax	0.00	0.00	0.00	0.00	0.00	0.00
Return on Equity	5.04	4.82	4.82	0.21	0.00	0.21
Less: Non-tariff income	0.98	3.10	3.10	2.12	0.00	2.12
Aggregate revenue requirement	**79.10**	**103.79**	**103.53**	**(24.43)**	**(4.88)**	**(19.55)**

Summary of trued up ARR of FY 2015-16 to be recovered by TPL-D (D) after incorporation of sharing of Gains/ Losses is as detailed in table below:

Table 4-46: Trued up ARR for FY 2015-16 as approved by the Commission

(Rs. Crore)

Particulars	Approved in truing up for 2015-16
ARR approved in MTR order for 2015-16 (a)	79.10
Add: Loss on account of controllable factor to be passed to consumers ($1/3^{rd}$) (b)	1.63
Add: Loss on account of uncontrollable factor (c)	19.55
ARR trued up of 2015-16 [(d)=a+b+c]	**100.28**

4.9 Net revenue Gap / (Surplus)

The Net revenue Gap / (Surplus) approved for FY 2015-16 is given in the table below:

Table 4-47: Net revenue Gap / (Surplus) approved for FY 2015-16

(Rs. Crore)

Particulars	Actual submitted for 2015-16	Approved in truing up for 2015-16
1. Annual Revenue Requirement	103.79	100.28
2. Revenue from Sale of Power	122.78	122.78
3. Less: Revenue towards recovery of Earlier Years' approved Gap/ (Surplus)	(3.06)	(3.06)
4. Balance Revenue	125.84	125.84
5. Net Revenue Gap / (Surplus) (4-1)	**(22.05)**	**(25.56)**

Accordingly, the Commission approves the trued up surplus of FY 2015-16 as Rs. 25.56 Crore against Rs. 22.05 Crore surplus claimed by TPL-D (D). This trued up surplus is considered by the Commission for determination of tariff for FY 2017-18.

5 Approval of ARR for FY 2016-17 to FY 2020-21

5.1 Introduction

In this chapter, the Commission has scrutinized the ARR components of TPL-D (D) for the control period FY 2016-17 to FY 2020-21 with respect to the GERC (MYT) Regulations, 2016 and accordingly determined the ARR for TPL-D (D) for the control period.

5.2 Energy sales

Petitioner's submission

TPL-D (D) has submitted that the license area of Dahej SEZ is still in developmental phase and the industrial development is likely to continue gradually. Thus, it is difficult to carry out sales projections accurately on the basis of any statistical method. In turn, the Petitioner has endeavoured to relate the various factors and available information to estimate the sales projections.

Category-wise consumers

The consumers in Dahej are broadly categorized as under:

Table 5-1: Consumer categories in Dahej

Consumer category	Description
Commercial (Non RGP)	Applicable to lights, fans, appliances etc. in commercial, industrial premises (other than residential)
LTMD	Applicable to motive power installations up to and including 15 HP
	Applicable to motive power installations above 15 HP
HT	Applicable to High tension consumers for maximum demand 100 kVA and above
	Applicable for supply consumers contracting maximum demand of 100 kVA and above not covered under
HT (pumping station)	Applicable for supply to water and sewage pumping stations.

Consumer category	Description
Others	Applicable to motive power for agricultural purpose

Overall approach to sales projections

The sales projections in Dahej SEZ area have been carried out based on projections of demand requirements within the SEZ. Currently, the SEZ has majority industrial consumption with a negligible contribution from other consumer categories. The industrial unit holders initially seek power for construction & testing and later on for production. The Petitioner has considered the inputs received during interaction with some existing as well as prospective consumers. However, the same may vary with pace at which the development of the SEZ takes place based on the economic scenario and the Government policies.

The Demand in MW projection and load factor covering the period FY 2016-17 to 2020-21 is projected as under:

Table 5-2: Demand and load factor projected by TPL-D (D) for FY 2016-17 to FY 2020-21

Particulars	2016-17	2017-18	2018-19	2019-20	2020-21
Demand (MW)	78.99	88.92	99.81	105.39	109.02
Load Factor (%)	34%	40%	45%	48%	49%

Projected energy sales

TPL-D (D) has submitted that the anchor company OPaL has started commercial production in FY 2016-17 and will continue at the same level for the entire MYT Control period. TPL-D has also given due consideration to the extension/ reduction of load planned by major consumers like OPaL, Astra Specialty, etc.

LT sales are submitted based on existing trend of load factor and increase in demand of existing customers and on the basis of inputs received from prospective customers. HT sales is projected based on the rising trend of the load factor of existing customers. The load factor of the envisaged customer is considered based on past experience.

Forecast of sales

TPL-D Dahej has submitted the projected category-wise sales to consumers for the control period FY 2016-17 to FY 2020-21. The sales growth is based on historical trend (CAGR) with some marginal adjustments based on end use survey, etc. The growth in energy consumption is likely to remain normal and any spurt in growth is unlikely. The category-wise sales forecast is as follows:

Table 5-3: Energy sales projected by TPL-D (D) for FY 2016-17 to FY 2020-21

(MUs)

Particulars	2016-17	2017-18	2018-19	2019-20	2020-21
RGP	-	-	-	-	-
Non-RGP	0.60	0.66	0.73	0.78	0.78
LTMD	0.67	0.68	1.37	1.70	2.23
HTP-I	201.87	291.14	375.45	432.44	462.98
HTP-II	0.47	0.37	0.37	0.38	0.37
HTP-III	29.15	14.76	8.30	0.72	0.38
Others	0.67	0.74	0.54	0.54	0.36
Total	**233.43**	**308.35**	**386.77**	**436.55**	**467.10**

Commission's analysis

The Commission has analysed category-wise historical sales.

Table 5-4: Historical data for energy sales to consumers in Dahej supply area

(MUs)

Category	2011-12	2012-13	2013-14	2014-15	2015-16
HT Category					
HTP 1	46.11	54.66	67.65	96.31	121.94
Less: Open Access HTP 1	-	-	*(2.37)*	*(0.63)*	*(1.13)*
HTP 2	-	-	0.00	0.25	0.44
HTP 3	8.71	10.38	17.81	47.48	84.15
Low Voltage Category					
LTMD	-	-	0.13	0.43	0.53
Non-RGP	0.08	0.26	0.24	0.29	0.45
Street Light	0.08	0.11	0.13	0.15	0.22
TMPLT	0.71	1.07	1.46	0.56	0.37
Total	**55.70**	**66.48**	**85.06**	**144.84**	**206.98**

The Commission has reviewed the sales projected by TPL-D (D) in light of historical sales, projected growth in customers and increase in their load factors. As energy sales are difficult to predict given that the SEZ is still under development stage, the Commission accepts submission of TPL-D (D) in terms of energy sales.

The Commission accordingly approves the category-wise sales as shown in the table below:

Table 5-5: Energy sales approved by the Commission for FY 2016-17 to FY 2020-21

(MUs)

Particulars	2016-17	2017-18	2018-19	2019-20	2020-21
RGP	-	-	-	-	-
Non-RGP	0.60	0.66	0.73	0.78	0.78
LTMD	0.67	0.68	1.37	1.70	2.23
HTP-I	201.87	291.14	375.45	432.44	462.98
HTP-II	0.47	0.37	0.37	0.38	0.37
HTP-III	29.15	14.76	8.30	0.72	0.38
Others	0.67	0.74	0.54	0.54	0.36
Total	**233.43**	**308.35**	**386.77**	**436.55**	**467.10**

5.3 Distribution losses

Petitioner's submission

The Petitioner has submitted that the existing distribution losses are in the range of 0.77%. However, the same would gradually increase along with increase in the network loading, development of the network, feeder length, network voltage levels, etc. Thus there will be an increase in the technical losses to the minimum inevitable loss level.

Considering the above facts, the Petitioner proposes to maintain the distribution losses as shown in the table below:

Table 5-6: Distribution losses projected by TPL-D (D) for FY 2016-17 to FY 2020-21

(%)

Particulars	2016-17	2017-18	2018-19	2019-20	2020-21
Distribution losses	2.00%	2.00%	2.00%	2.00%	2.00%

Commission's analysis

The Commission notes the increase in projected distribution losses from the levels of FY 2015-16 as claimed by TPL and the reasons given thereof. The Commission observes that the network is yet to be established and load is yet to be stabilized for the SEZ area. Therefore, the Commission will treat the distribution losses as uncontrollable during the control period FY 2016-17 to FY 2020-21.

Accordingly, the Commission approves the following distribution losses over the third control period as given in the table below.

Table 5-7: Distribution losses approved by the Commission for FY 2016-17 to FY 2020-21

(%)

Particulars	2016-17	2017-18	2018-19	2019-20	2020-21
Distribution losses	2.00%	2.00%	2.00%	2.00%	2.00%

5.4 Energy Requirement

Petitioner's submission

The energy requirement is the sum of total of energy sales and the transmission and distribution losses. Based on the energy sales forecast, distribution losses and transmission losses in the EHV network the total energy requirement for the MYT 3rd Control Period is estimated. The total energy requirement thus arrived is shown in the table below:

Table 5-8: Energy requirement projected by TPL-D (D) for FY 2016-17 to FY 2020-21

(MUs)

Particulars	2016-17	2017-18	2018-19	2019-20	2020-21
Total sales	233.43	308.35	386.77	436.55	467.10
Distribution losses (%)	2.00%	2.00%	2.00%	2.00%	2.00%
Distribution losses	4.76	6.29	7.89	8.91	9.53
Energy required at distribution periphery	238.19	314.64	394.66	445.46	476.63
Transmission losses	11.22	11.17	13.71	15.52	16.73
Energy requirement	**249.42**	**325.81**	**408.38**	**460.98**	**493.37**

Commission's analysis

Based on the energy sales and the distribution losses approved by the Commission, the energy requirement is arrived at, as given in the table below. For projecting transmission losses, the Commission observes that TPL-D (D) has considered transmission losses on purchase from Bilateral and IEX. Accordingly, for FY 2016-17, while the Commission has considered the same effective transmission loss as claimed by TPL-D (D), for FY 2017-18 to FY 2020-21, the Commission has considered the transmission losses approved for GETCO i.e. 3.85% on Bilateral, IEX and RE transactions.

Table 5-9: Energy requirement approved by Commission for FY 2016-17 to FY 2020-21

(MUs)

Particulars	2016-17	2017-18	2018-19	2019-20	2020-21
Total sales	233.43	308.35	386.77	436.55	467.10
Distribution losses (%)	2.00%	2.00%	2.00%	2.00%	2.00%
Distribution losses	4.76	6.29	7.89	8.91	9.53
Energy required at distribution periphery	238.20	314.64	394.66	445.46	476.63
Transmission losses	11.22	12.60	15.80	17.84	19.09
Energy requirement	**249.42**	**327.24**	**410.46**	**463.30**	**495.72**

5.5 Energy availability

Petitioner's submission

As a co-developer of the Dahej SEZ, the Petitioner is mandated to set up its own generating capacity. Accordingly, the Petitioner has set up the DGEN power plant which was commissioned in FY 2014-15. However, as demand in the SEZ area has not reached to required level, the Petitioner has not planned to source power from DGEN during the control period. Therefore, for the MYT control period, the Petitioner has proposed to source power from bilateral sources/power exchange to fulfil the power requirement of the SEZ during the control period.

In terms of RE sources, for FY 2016-17, TPL-D (D) has proposed to procure RECs to fulfil the RPO requirement. For future years, TPL-D (D) has considered RPO at the existing level of FY 2016-17 as per the provision of 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.

Based on all the above, the TPL-D (D) has submitted the following power purchase quantum:

Table 5-10: Energy availability projected by TPL-D (D) for FY 2016-17 to FY 2020-21

(MUs)

Source of Power (Station wise)	2016-17	2017-18	2018-19	2019-20	2020-21
Bilateral/ Power exchange	249.42	288.79	366.84	414.81	442.82
Renewable energy	-	37.03	41.54	46.17	50.55
Total	**249.42**	**325.81**	**408.38**	**460.98**	**493.37**

Commission's analysis

Conventional power sources

The Commission has noted the Petitioner's submission of procuring power through bilateral contracts and the power exchange. In view of uncertain demand visibility, the Commission feels that these sources of power will help eliminate the burden of capacity charges on consumers and hence accepts these sources. The Commission has projected energy availability from these sources after considering the energy requirement fulfilled through RE sources as part of TPL-D (D)'s RPO.

Renewable Purchase Obligation

In accordance with GERC (Procurement of Energy from Renewable Sources) Regulations, 2010 and its Amendment in 2014, the Discoms are obligated to procure electricity (in kWh) from renewable energy sources, at a defined minimum percentage of the total consumption of its consumers including T&D losses during a year. The percentage of procurement is defined from FY 2010-11 to FY 2016-17. The minimum Renewable Energy purchase in FY 2016-17 is 1.75% from Solar, 7.75% from Wind and 0.5% from others sources like Biomass, Bagasse, MSW, etc.

As per the clause 6.4 of the National Tariff Policy 2016, dated 28th January, 2016 the states are required to achieve the target of 8% Solar RPO by FY 2021-22. The relevant extract from the Tariff Policy is given below:

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

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

Since the RPO Target has yet to be decided by the Commission for FY 2017-18 onwards, for projection purposes RPO trajectory has been assumed with gradual increase in each year taking into consideration various directives from MoP, MNRE & NTP amendments etc. The RPO Target trajectory projected has been shown as under:

Table 5-11: RPO trajectory considered by the Commission for FY 2016-17 to FY 2020-21

(%)

Particulars	2016-17	2017-18	2018-19	2019-20	2020-21
Solar	1.75%	3.00%	4.25%	5.50%	6.75%
Wind	7.75%	7.85%	7.95%	8.05%	8.15%

Particulars	2016-17	2017-18	2018-19	2019-20	2020-21
Others (Biomass, Small Hydro, Bagasse, MSW)	0.50%	0.50%	0.50%	0.75%	0.75%
Total	**10.00%**	**11.35%**	**12.70%**	**14.30%**	**15.65%**

Energy availability from all sources

Based on the foregoing analysis, the Commission now approves the energy availability from various sources as follows:

Table 5-12: Energy availability approved by the Commission for FY 2016-17 to 2020-21

(MUs)

Particulars	2016-17	2017-18	2018-19	2019-20	2020-21
Bilateral/ IEX	249.42	290.10	358.33	397.05	418.14
Solar	-	9.82	17.44	25.48	33.46
Wind	-	25.69	32.63	37.30	40.40
Others (Biomass, Small Hydro, Bagasse, MSW)	-	1.64	2.05	3.47	3.72
Total	**249.42**	**327.24**	**410.46**	**463.30**	**495.72**

5.6 Power purchase cost

Petitioner's submission

Based on the source-wise energy quantum estimated, the power purchase cost for each of the sources has been derived by the Petitioner. The source-wise estimated power purchase cost is provided as follows:

- Bilateral Sources/ Power Exchange – The power purchase rate for bilateral sources/ power exchange is arrived at based on estimates of prevalent short term market conditions.
- Renewable Power Purchase Cost – The Petitioner has proposed to fulfill the RPO through procurement of RE power from FY 2017-18 onwards at the Commission determined tariff rates. For FY 2016-17, the cost of REC has been considered at the floor price notified by the CERC.

The power purchase cost as projected by the Petitioner is given below:

Table 5-13: Power purchase cost projected by TPL-D (D) for FY 2016-17 to FY 2020-21

(Rs. Crore)

Particulars	2016-17	2017-18	2018-19	2019-20	2020-21
Bilateral/ Power Exchange	87.30	101.07	128.39	145.18	154.99
Renewable energy	-	19.55	21.66	23.83	25.87
REC	4.61	-	-	-	-
Total power purchase cost	**91.91**	**120.63**	**150.05**	**169.02**	**180.86**

Commission's analysis

The Commission has analyzed per unit cost for each of the power sources.

Conventional power sources

For procurement from bilateral and IEX sources, the Commission has determined the weighted average per unit cost of electricity procured from all sources for the entire FY 2015-16 along with actual data for first three quarters of FY 2016-17. The weighted average cost works out to be **Rs 3.12/kWh**. The Commission has considered this rate for determination of power purchase cost throughout the control period.

Renewable sources

For sources under RPO, the Commission has considered the rates as per the latest GERC preferential tariff orders for Solar, Wind and Other technologies.

Total power purchase cost

Based on the foregoing analysis, the Commission approves the following power purchase cost:

Table 5-14: Power purchase cost approved by the Commission for FY 2016-17 to FY 2020-21

(Rs. Crore)

Particulars	2016-17	2017-18	2018-19	2019-20	2020-21
Bilateral/ IEX	77.76	90.44	111.71	123.78	130.35
Solar	-	5.75	10.22	14.93	19.61
Wind	-	10.76	13.67	15.63	16.93

Particulars	2016-17	2017-18	2018-19	2019-20	2020-21
Others (Biomass, Small Hydro, Bagasse, MSW)	-	1.16	1.45	2.46	2.63
REC	4.61	-	-	-	-
Total power purchase cost	**82.37**	**108.11**	**137.06**	**156.80**	**169.52**

5.7 Fixed Charge

5.7.1 Operation and Maintenance (O&M) expenses

Petitioner's submission

TPL-D (D) has derived O&M Expenses on the average of actual Operation & Maintenance expenses for the three (3) years ending 31st March, 2015 as per GERC (MYT) Regulation, 2016. It has submitted that it has considered this average as O&M Expenses for the financial year ended 31st March, 2014 and escalated year on year at the escalation factor of 5.72% to arrive at O&M Expenses for the 3rd control period up to FY 2020-21 as per GERC (MYT) Regulations, 2016.

Table 5-15: O&M expenses projected by TPL-D (D) for FY 2016-17 to FY 2020-21

(Rs. Crore)

Particulars	2016-17	2017-18	2018-19	2019-20	2020-21
Employee Expenses	0.43	0.46	0.48	0.51	0.54
R&M Expenses	5.32	5.62	5.94	6.29	6.64
A&G Expenses	0.86	0.91	0.96	1.01	1.07
Total Operation & Maintenance Expenses (Net of capitalization)	**6.61**	**6.99**	**7.39**	**7.81**	**8.25**

Commission's analysis

The Commission has examined the O&M expenses proposed by TPL-D (D) on composite basis for the control period for FY 2016-17 to FY 2020-21. The Commission notes that although TPL-D (D) has applied the correct methodology to estimate O&M expenses as per GERC (MYT) Regulations, 2016, it has used a wrong value of O&M expenses for FY 2014-15. For FY 2014-15, TPL-D (D) has used a value of Rs. 12.12 Crore while truing up for FY 2014-15, the Commission had deducted Rs. 2.48 Crore towards the value of discarded assets and trued up the O&M expenses at Rs. 9.64 Crore.

Accordingly, the Commission has now computed the O&M expenses using the trued up values for FY 2012-13, FY 2013-14 and FY 2014-15 and as per the methodology specified in the GERC (MYT) Regulations, 2016:

Table 5-16: O&M expenses approved by the Commission for FY 2016-17 to FY 2020-21

(Rs. Crore)

Particulars	2016-17	2017-18	2018-19	2019-20	2020-21
Total O&M Expenses	5.63	5.95	6.29	6.65	7.03

5.7.2 Capex, capitalization and funding of capex

Petitioner's submission

The Petitioner has submitted that it has planned to undertake prudent capital investments for the development of the distribution network in the SEZ area so as to cater to the demand of its consumers and provide reliable power.

TPL-D (D) has projected the capital expenditure to the extent of Rs. 55.56 Crore for the control period FY 2016-17 to FY 2020-21 as shown in the table below.

Table 5-17: Capital expenditure projected by TPL-D (D) for FY 2016-17 to FY 2020-21

(Rs. Crore)

Particulars	2016-17	2017-18	2018-19	2019-20	2020-21
EHV Network	10.93	16.17	2.00	1.83	0.35
HT Network	1.83	1.93	1.97	0.79	1.13
LT Network	0.28	0.33	0.20	0.18	0.11
Metering	0.33	0.13	0.05	0.02	0.02
Special Projects	0.33	0.05	3.05	1.05	1.09
Customer Care & IT	0.40	0.04	0.10	0.04	0.07
Others	3.13	2.10	2.39	0.73	0.42
Total	**17.23**	**20.75**	**9.76**	**4.62**	**3.19**

The Petitioner has further detailed the projects proposed to be taken up:

EHV Network:

33kV DGEN-West connectivity: Currently, the West part of Dahej SEZ is being fed through D/C cable laid through GIDC corridor. Both circuits are laid parallel and in case of any damage, repair work takes longer time. Therefore, it is proposed to create second 33kV connectivity to West part through an alternate route which is less prone to cable damage. This project is proposed to be initiated in FY 2016-17 with total project cost of Rs. 15.89 Crore. During FY 2016-17, project preparatory work (route survey, final drawings, approvals for ROW from all stakeholders, specifications, and ordering) will be initiated. The project is expected to be completed in FY 2017-18.

220 kV substation and network: Cost of CT replacement of 220 kV tariff meter has been considered in FY 2018-19 based on the increase in the system demand above 60 MW. Cost of approach road inside 220 kV switchyard has been considered in FY 2016-17.

220 kV substation and network:

- One 33/11 KV 10MVA transformer installation has been considered in West part of Dahej SEZ based on the increase in demand in FY 2016-17. Based on the development, four number of 33kV customers have been considered in the CAPEX proposals.
- As per CEA Regulation 2010, the higher size transformers shall be provided with necessary Fire Fighting System. All the 4 transformers at Dahej are falling under the criteria. Hence, the Petitioner has proposed to install Nitrogen Injection Fire Protection System for all the 4 nos. of 33/11 kV transformers.
- Cost of Switchyard fencing has been considered in FY 2016-17 for both 33kV Substations.
- Cost of SCADA Augmentation has been considered in FY 2016-17 & FY 2017-18.
- Provision for DC light considered in both 33kV substation control building considered in FY 2016-17 for illumination during power outages.

The summary of expenditure planned for the above described items is provided in the table below:

Table 5-18: EHV capital expenditure projected by TPL-D (D) for FY 2016-17 to FY 2020-21

(Rs. Crore)

Particulars	2016-17	2017-18	2018-19	2019-20	2020-21
33kV DGEN- West Connectivity	1.50	14.39	-	-	-
220 kV Substation and Network	0.70	1.28	0.33	0.10	0.10
33 KV Network	-	-	0.19	0.14	-
220kV & 33 KV Consumers	5.30	-	1.23	1.28	-
33 kV Sub Stations	3.44	0.40	0.20	0.20	0.20
Testing and Measuring Instrument	-	0.10	0.05	0.10	0.05
Total	**10.93**	**16.17**	**2.00**	**1.83**	**0.35**

HT Network

- Based on current trend of demand and consumption, two nos. of new distribution substation have been considered in FY 2017-18 & FY 2020-21.
- Cost of laying network for release of new 11kV HT consumers has been considered as per the estimates. Further, new 11kV feeder has been considered to cater to the incremental load growth of 3 MW at 11kV level in both the East and West part of SEZ.
- Roof on distribution substation & modification of distribution substation with RCC slab considered in FY 2016-17.
- Cost of Safety equipment, tools & tackles have also been considered in each year of the MYT period.

The summary of expenditure planned for the above described items is provided in the table below:

Table 5-19: HT capital expenditure projected by TPL-D (D) for FY 2016-17 to FY 2020-21

(Rs. Crore)

Particulars	2016-17	2017-18	2018-19	2019-20	2020-21
Distribution substation	-	0.02	-	-	0.23
New HT Consumers	0.74	0.66	0.77	0.08	0.17

Particulars	2016-17	2017-18	2018-19	2019-20	2020-21
Cable Scheme	0.71	0.95	1.07	0.58	0.60
Existing electrical equipment	0.03	0.02	0.02	0.02	0.02
Miscellaneous	0.36	0.10	0.10	0.11	0.11
Total	**1.83**	**1.93**	**1.97**	**0.79**	**1.13**

LT Network

- Cost of creating LT network to cater to new LT consumer has been considered as per projection for the control period.
- Similarly, cost towards augmentation of LT network has been considered during the control period.

The summary of expenditure planned for the above described items is provided in the table below:

Table 5-20: LT capital expenditure projected by TPL-D (D) for FY 2016-17 to FY 2020-21

(Rs. Crore)

Particulars	2016-17	2017-18	2018-19	2019-20	2020-21
Services on Existing Mains / DE	0.06	0.09	0.04	0.01	-
Extension / Reduction of Load	0.22	0.25	0.16	0.16	0.11
Total	**0.28**	**0.33**	**0.20**	**0.18**	**0.11**

Special Projects

- Automation: 11kV feeder automation has been considered in three years from FY 2018-19 onwards for ease of load transfer.
- GIS: Development of GIS has been considered in FY 2018-19 to map the network element and enhance customer services based on the same.
- Miscellaneous Projects: Expenses to be incurred towards energy conservation and process improvement related projects.

The summary of expenditure planned for the above described items is provided in the table below:

Table 5-21: Special projects capital expenditure projected by TPL-D (D) for FY 2016-17 to FY 2020-21

(Rs. Crore)

Particulars	2016-17	2017-18	2018-19	2019-20	2020-21
Automation	-	-	1.00	1.05	1.09
GIS	-	-	2.00	-	-
Miscellaneous Projects	0.33	0.05	0.05	-	-
Total	**0.33**	**0.05**	**3.05**	**1.05**	**1.09**

Metering

- Cost of Meter for new consumers & supporting infrastructure considered including cost of replacement of existing Meter-Modem.
- Cost towards Automatic Meter Reading (AMR) & Meter Testing Bench have been considered in FY 2016-17 whereas GPRS Software for Meter Reading has been considered in FY 2017-18.

The summary of expenditure planned for the above described items is provided in the table below:

Table 5-22: Metering capital expenditure projected by TPL-D (D) for FY 2016-17 to FY 2020-21

(Rs. Crore)

Particulars	2016-17	2017-18	2018-19	2019-20	2020-21
Normal Load Growth	0.04	0.04	0.05	0.01	0.01
Reliability, Renovation, and Replacement	0.30	0.08	0.004	0.004	0.01
Total	**0.33**	**0.13**	**0.05**	**0.02**	**0.02**

Others

- Customer Care/ IT: This includes CAPEX requirements related to hardware replacements & software upgradation, network enhancement and related expenditure.

- Administration: Cost of surveillance system has been considered based on security requirements Cost of Canteen building has also been considered in FY 2016-17 & FY 2017-18, which will be constructed in 33kV East plot. It is proposed to incur CAPEX for Office area infrastructure & upgradation during the MYT control period.
- Office Furniture/ Fixtures: Nominal cost has been considered towards furniture & fixtures during the MYT control period for storage and seating arrangements at 33 kV West Substation.
- Civil: 220kV tower line foundation work for proposed 220kV interconnectivity is considered in FY 2016-17. Soil filling has been considered in FY 2017-18 for ground leveling and plantation. Cost of erecting maintenance building in 33kV East plot has been considered in FY 2018-19.
- Store: Internal store building, 220 kV store fencing and scrap yard development have been considered in FY 2016-17. Storage Area near 220 kV switchyard considered in FY 2018-19.
- Miscellaneous: Lump sum amount has been considered for both the substations (East & West) front corridor horticulture and development work.

The summary of expenditure planned for the above described items is provided in the table below:

Table 5-23: Other capital expenditure projected by TPL-D (D) for FY 2016-17 to 2020-21

(Rs. Crore)

Particulars	2016-17	2017-18	2018-19	2019-20	2020-21
Customer Care/ IT	0.40	0.04	0.10	0.04	0.07
Administration	0.87	0.41	0.05	-	0.05
Office Furniture & Fixture	0.21	0.05	-	0.10	-
Store	0.68	-	0.41	0.18	-
Civil	0.77	1.50	1.78	0.29	0.24
Miscellaneous	0.60	0.15	0.16	0.15	0.13
Total	**3.53**	**2.14**	**2.49**	**0.77**	**0.49**

Commission’s analysis

While capital investment is required to be made by TPL-D (D) for various purposes like the creation of new infrastructure to meet the load growth, to meet statutory requirements, to strengthen the existing system and increase its operational efficiency, replace old and obsolete assets etc. but any such capital investment increases the fixed asset base, resulting in the higher debt servicing, higher return on equity and higher depreciation which ultimately affects the tariffs to consumers. The Commission also expresses its apprehension over the fact that TPL-D (D) did not approach the Commission with details about such projects which involves significant investment. The Commission finds it necessary to ensure that the proposed capital investment schemes do not impose avoidable burden on the consumers by way of increase in tariff and that the CAPEX should be utilized at optimum level.

The Commission is of the opinion that the proposed CAPEX is quite ambitious considering the pace of development in SEZ and requires a detailed review. In reply to a Commission's query regarding details of capital deployment for every project with mention of timelines, TPL-D (D) has furnished details about cumulative expenditure incurred, expenditure capitalised, and opening capital work in progress along with investment on each technology during each year of the control period till FY 2020-21. In reference to a query of Commission regarding schedules of capitalisation over the years for each technology, TPL has furnished details to the Commission.

TPL has envisaged significant capex for various schemes *inter alia* special initiatives on almost all aspects of infrastructure upgradation that involves EHV, HT, LT, Meter as well as other provisions like customer care, safety etc. Although, as stated earlier, the Commission facilitates upgradation of infrastructure to ensure reliable and economic supply to the consumers, but at the same time, the Commission needs to analyse in detail the technical relevance of such projects to be undertaken.

The Commission would not like to prune down the proposed capital investment at this stage pending a detailed technical review. However, the capitalisation of CAPEX on various projects has not been considered as claimed by the petitioner as it would load the ARR purely on notional basis. TPL-D (D) may seek midterm review of the capital investment plan along with others, if any, in accordance with GERC (MYT) Regulations, 2016 by providing all the relevant details, including the details of actual investment made by that time against the projected investment schedule.

The Commission has noted the CAPEX projections during the 2nd control period and has analysed the actual capitalisation from its respective true up years. Except for FY

2014-15 and FY 2015-16, for which Commission has considered CAPEX as approved in the MTR order. Hence, Commission has analysed a trend of CAPEX proposed during MYT period and actual capitalization done in respective true up years. The Commission observed that approximately 48% of CAPEX approved in last MYT Order (for last two years MTR order has been referred) has been capitalized over the last five years starting from FY 2011-12 to FY 2015-16. This trend has been used as a base to approve the capitalization for the third control period. The service line contribution quantum has been reduced to the extent of reduction in capitalization for each year.

The Commission has analysed historical trend in actual capitalization achieved by TPL-D (D) as against what it had proposed during the 2nd MYT control period.

Table 5-24: Actual capitalization against proposed capex for 2nd control period

(Rs. Crore)

Particulars	2011-12	2012-13	2013-14	2014-15	2015-16
Proposed capex*	158.10	40.94	59.03	14.96	10.08
Actual capitalization	47.50	6.69	57.16	6.74	5.18

** For FY 2011-12 to FY 2013-14, the figures are as per petition in case no. 1070 of 2011 (MYT 11-12 to 15-16). For FY 2014-15 and FY 2015-16, the figures are as per petition in case no. 1342 of 2013 (Mid Term Review for MYT 11-12 to 15-16).*

Based on the above, it is observed that TPL-D (D) has been able to **capitalize only 48% of the capital expenditure proposed** during the 2nd control period. In order to reduce burden caused due to front loading of capex on consumers, the Commission decides to approve 48% of the capex proposed by TPL-D (D) as capitalization. The actual capitalization will be considered during the truing up exercise of respective years. The Commission would also like to state that even though it has approved lower capitalization, it approves the entire capex as proposed by TPL-D (D).

Accordingly, the Commission approves the capex, capitalization and funding of capex as shown below. The SLC from consumers has been reduced in the same proportion as the extent of reduction in capitalization, with respect to the value submitted by TPL-D (D).

Table 5-25: Capex, capitalization and funding of capex approved by Commission for FY 2016-17 to FY 2020-21

(Rs. Crore)

Particulars	2016-17	2017-18	2018-19	2019-20	2020-21
Opening GFA	135.38	143.64	153.59	158.27	160.49
Addition during the year	8.26	9.95	4.68	2.22	1.53
Deletion during the year	0.00	0.00	0.00	0.00	0.00
Closing GFA	143.64	153.59	158.27	160.49	162.02
CAPEX of the year	17.23	20.75	9.76	4.62	3.19
Capitalization	8.26	9.95	4.68	2.22	1.53
Less: SLC Additions and grants	3.48	0.33	0.98	0.66	0.08
Balance capitalization	4.78	9.61	3.70	1.56	1.45
Normative Debt @ 70%	3.35	6.73	2.59	1.09	1.01
Normative Equity @ 30%	1.43	2.88	1.11	0.47	0.43

5.7.3 Depreciation

Petitioner's submission

TPL-D (D) has submitted that the depreciation for the control period has been computed at the rates specified in the GERC Regulations. It has claimed the following amount under depreciation:

Table 5-26: Depreciation projected by TPL-D (D) for FY 2016-17 to FY 2020-21

(Rs. Crore)

Particulars	2016-17	2017-18	2018-19	2019-20	2020-21
Depreciation	5.88	6.57	7.41	7.69	7.78

Commission's analysis

The Commission has reviewed the asset category-wise depreciation rates as submitted by TPL-D (D) and accordingly computed the depreciation for the control period using effective depreciation rate on overall asset base. The details of opening balance of assets as on 1st April, 2016, addition and deduction to the Gross Block during each year of the control period and the depreciation on the assets, asset classification-wise are as given in Form F5 (TPL-D Dahej License Area) of the petition. The Commission has approved capitalization and SLC as detailed in this order. Accordingly, the depreciation determined by the Commission is:

Table 5-27: Depreciation approved by Commission for FY 2016-17 to FY 2020-21

(Rs. Crore)

Particulars	2016-17	2017-18	2018-19	2019-20	2020-21
Depreciation	5.78	6.08	6.51	6.65	6.67

5.7.4 Interest and finance charges

Petitioner's submission

The Petitioner has considered the interest expenses as per the GERC (MYT) Regulations, 2016 on normative loans. The Petitioner has calculated the interest expenses by applying the estimated opening weighted average rate of interest of the 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. The interest expense thus proposed is shown in the table below.

Table 5-28: Interest and finance charges projected by TPL-D (D) for FY 2016-17 to FY 2020-21

(Rs. Crore)

Particulars	2016-17	2017-18	2018-19	2019-20	2020-21
Opening Balance of Loan	62.32	62.82	71.31	69.31	63.89
Addition of Loan due to capitalisation during the year	6.38	15.05	5.41	2.27	2.11
Repayment of loan during the year	5.88	6.57	7.41	7.69	7.78
Closing Balance of Loan	62.82	71.31	69.31	63.89	58.23
Average Balance of Loan	**62.57**	**67.07**	**70.31**	**66.60**	**61.06**
Weighted average Rate of Interest on actual Loans (%)	**11.30%**	**11.30%**	**11.30%**	**11.30%**	**11.30%**
Interest expenses	7.07	7.58	7.94	7.53	6.90
Finance charges	-	-	-	-	-
Total interest and finance charges	**7.07**	**7.58**	**7.94**	**7.53**	**6.90**

Commission's analysis

The Commission has reworked the interest on LT loans and finance charges based on revised approvals made in preceding sections. The Commission has considered the opening balance of loans for FY 2016-17 based on truing up of FY 2015-16 done in this order. The loan addition is derived as discussed in the preceding section on capitalization and funding of capex. The repayment of loan has been equated to depreciation which has been approved in the preceding section of this order. Based on the foregoing analysis, the Commission has computed the opening, closing and average balance of normative loan during the control period.

TPL-D (D) has used an interest rate of 11.30% throughout the control period which is equal to the weighted average rate of interest of the actual loan portfolio of TPL-D (D) as on 1st April, 2016. The Commission, in its earlier orders, had given clear directives to the Petitioner to engage with its lenders so that the rate of interest gets reduced. In response to this, the Petitioner has submitted a letter from State Bank of India (SBI) agreeing for an 'in principle' reduction in the rate of interest to 9.50% p.a. Accordingly, the Commission has considered a rate of 9.50% for working out the interest expense for FY 2017-18 to FY 2020-21.

The interest and finance charges thus approved for the control period are shown in the table below:

Table 5-29: Interest and finance charges approved by Commission for FY 2016-17 to FY 2020-21

(Rs. Crore)

Particulars	2016-17	2017-18	2018-19	2019-20	2020-21
Opening Balance of Loan	62.40	59.97	60.62	56.70	51.14
Addition of Loan due to capitalisation during the year	3.35	6.73	2.59	1.09	1.01
Repayment of loan during the year	5.78	6.08	6.51	6.65	6.67
Closing Balance of Loan	59.97	60.62	56.70	51.14	45.48
Average Balance of Loan	61.18	60.29	58.66	53.92	48.31

Particulars	2016-17	2017-18	2018-19	2019-20	2020-21
Rate of interest (%)	11.30%	9.50%	9.50%	9.50%	9.50%
Interest expenses	6.91	5.73	5.57	5.12	4.59
Finance charges	-	-	-	-	-
Total interest and finance charges	**6.91**	**5.73**	**5.57**	**5.12**	**4.59**

5.7.5 Interest on Security Deposit

Petitioner's submission

TPL-D (D) has submitted that it has estimated the interest on security deposit for each year considering the interest rate of 7.75% on the average of opening balance and closing balance of security deposit for Dahej supply area. The addition of deposit has been projected on the basis of past trends and expected consumer growth.

Table 5-30: Interest on security deposit projected by TPL-D (D) for FY 2016-17 to FY 2020-21

(Rs. Crore)

Particulars	2016-17	2017-18	2018-19	2019-20	2020-21
Amount held as security deposit	30.03	33.62	37.05	39.90	41.35
Interest rate (%)	7.75%	7.75%	7.75%	7.75%	7.75%
Interest on security deposit	**2.33**	**2.61**	**2.87**	**3.09**	**3.20**

Commission's analysis

The Commission has reviewed and accepted TPL-D (D)'s submission regarding the amount held as consumer deposits during each year of the control period. Further, the bank rate of 7.75% existing as on 1st April, 2016 has been considered by the Commission for calculation of interest on security deposit.

Table 5-31: Interest on security deposit approved by Commission for FY 2016-17 to FY 2020-21

(Rs. Crore)

Particulars	2016-17	2017-18	2018-19	2019-20	2020-21
Amount held as security deposit	30.03	33.62	37.05	39.90	41.35
Interest rate (%)	7.75%	7.75%	7.75%	7.75%	7.75%
Interest on security deposit	**2.33**	**2.61**	**2.87**	**3.09**	**3.20**

5.7.6 Interest on working capital

Petitioner's submission

The interest on working capital is computed as per the GERC (MYT) Regulations, 2016. The interest rate used is the SBBR (State Bank Base Rate) prevailing on 1st April, 2016 plus 250 basis points i.e. 11.80%. However, the working capital requirement is negative on account of the security deposit. Therefore, interest on working capital has not been claimed in ARR.

The interest on working capital as projected by TPL-D (D) is shown in the table below:

Table 5-32: Interest on working capital projected by TPL-D (D) for FY 2016-17 to FY 2020-21

(Rs. Crore)

Particulars	Norm	2016-17	2017-18	2018-19	2019-20	2020-21
Computation of Working Capital						
O&M expenses	1 month	0.55	0.58	0.62	0.65	0.69
Maintenance Spares	1% GFA	1.35	1.51	1.73	1.83	1.88
Receivables	1 month	9.79	12.34	14.96	16.57	17.55
Working Capital requirement		**11.70**	**14.44**	**17.31**	**19.05**	**20.11**
Less:						
Amount held as security deposit from Distribution System Users		30.03	33.62	37.05	39.90	41.35
Total Working Capital		-	-	-	-	-
Computation of working capital interest						
Interest rate (%)		11.80%	11.80%	11.80%	11.80%	11.80%
Interest on Working Capital		**-**	**-**	**-**	**-**	**-**

Commission's analysis

The Commission has recomputed the components of working capital, in line with the methodology as specified in the GERC (MYT) Regulations, 2016 using the component as approved in preceding sections of this order. Further, the interest rate on working capital has been considered as 11.70% per annum which is the 1 year SBI MCLR on 1st April, 2016 plus 250 basis points as per GERC (MYT) (First Amendment) Regulations, 2016.

Table 5-33: Interest on Working capital approved by Commission for FY 2016-17 to FY 2020-21

(Rs. Crore)

Particulars	Norm	2016-17	2017-18	2018-19	2019-20	2020-21
Computation of Working Capital						
O&M expenses	1 month	0.47	0.50	0.52	0.55	0.59
Maintenance Spares	1% GFA	1.35	1.44	1.54	1.58	1.60
Receivables	1 month	9.79	12.34	14.96	16.57	17.55
Working Capital requirement		**11.62**	**14.28**	**17.02**	**18.71**	**19.74**
Less:						
Amount held as security deposit from Distribution System Users		30.03	33.62	37.05	39.90	41.35
Total Working Capital		**(18.41)**	**(19.34)**	**(20.03)**	**(21.19)**	**(21.61)**
Computation of working capital interest						
Interest rate (%)		11.70%	11.70%	11.70%	11.70%	11.70%
Interest on Working Capital		**-**	**-**	**-**	**-**	**-**

5.7.7 Return on equity

Petitioner's submission

TPL-D (D) has submitted that the return on equity has been based on the opening and closing balance of equity considering the estimated capitalization in each year of the control period. The return on equity is claimed at 14% on the average of opening and closing balance of equity.

Table 5-34: Return on equity projected by TPL-D (D) for FY 2016-17 to FY 2020-21

(Rs. Crore)

Particulars	2016-17	2017-18	2018-19	2019-20	2020-21
Opening equity	34.79	37.52	43.97	46.29	47.26
Equity addition during the year	2.73	6.45	2.32	0.97	0.91
Closing equity	37.52	43.97	46.29	47.26	48.17
Average equity	36.15	40.75	45.13	46.77	47.72
Return on Equity	**5.06**	**5.70**	**6.32**	**6.55**	**6.68**

Commission's analysis

The Commission has reworked the components of equity base considering approvals made in preceding sections and computed the return on equity as described below:

Table 5-35: Return on equity approved by Commission for FY 2016-17 to FY 2020-21

(Rs. Crore)

Particulars	2016-17	2017-18	2018-19	2019-20	2020-21
Opening equity	34.79	36.22	39.10	40.21	40.68
Equity addition during the year	1.43	2.88	1.11	0.47	0.43
Closing equity	36.22	39.10	40.21	40.68	41.12
Average equity	35.50	37.66	39.66	40.45	40.90
Return on Equity	**4.97**	**5.27**	**5.55**	**5.66**	**5.73**

5.7.8 Income Tax

Petitioner's submission

Based on the latest annual accounts for the FY 2015-16, the Petitioner has not considered any income tax for the MYT control period as per the GERC (MYT) Regulations, 2016.

Commission's analysis

The Regulation 41.1 of GERC (MYT) Regulations, 2016 specifies the following

"The Commission in its MYT Order shall provisionally approve Income Tax payable for each year of the Control Period, if any, based on the actual income tax paid, including cess and surcharge on the same, if any, as per latest Audited Accounts available for the Applicant, subject to prudence check."

The Commission, accordingly, considers the provision for income tax for the control period for FY 2016-17 to FY 2020-21 as approved in the Truing Up for FY 2015-16. Any variation in income tax actually paid and approved shall be considered based on the documentary evidence at the time of Truing Up for each year of the control period in accordance with Regulation 41.2 of GERC (MYT) Regulations, 2016.

The Commission, accordingly, approves the income tax at "NIL" for the control period for FY 2016-17 to FY 2020-21.

5.7.9 Contingency Reserve

Petitioner's submission

The GERC (MYT) Regulations, 2016 provides for consideration of 0.5% of the cost of fixed assets towards the contingency reserve. Accordingly, the Petitioner has considered the Contingency Reserve as shown below:

Table 5-36: Contingency reserve projected by TPL-D (D) for FY 2016-17 to FY 2020-21

(Rs. Crore)

Particulars	2016-17	2017-18	2018-19	2019-20	2020-21
Contingency reserve	0.68	0.76	0.87	0.92	0.94

Commission's analysis

The Commission has reworked the contribution to contingency reserve based on revised gross asset values as 0.5% of the opening GFA.

The Commission, accordingly, approves the contingency reserve for the control period for FY 2016-17 to FY 2020-21 as detailed in the table below:

Table 5-37: Contingency reserve approved by Commission for FY 2016-17 to FY 2020-21

(Rs. Crore)

Particulars	2016-17	2017-18	2018-19	2019-20	2020-21
Contingency reserve	0.68	0.72	0.77	0.79	0.80

5.7.10 Provision for Bad Debts

Petitioner's submission

The Petitioner has not estimated any provision for the control period as of now. The Petitioner will seek approval during truing up exercise as may be required.

Commission's analysis

The Commission agrees with the submission of Petitioner regarding the provision of bad debts, and accordingly approves 'NIL' bad debt for the control period.

5.7.11 Non-Tariff income

Petitioner's submission

The non-tariff income consists of income mainly from meter rent, sale of scrap, DPC recovery, interest income and miscellaneous income, etc.

Table 5-38: Non-tariff income projected by TPL-D (D) for FY 2016-17 to FY 2020-21

(Rs. Crore)

Particulars	2016-17	2017-18	2018-19	2019-20	2020-21
Non-tariff income	2.00	2.70	3.35	3.76	4.04

Commission's analysis

The Commission has observed that the actual non-tariff income in FY 2015-16 was Rs. 3.10 Crore. The Commission has considered the trued up value of FY 2015-16 in order to project non-tariff income for the control period, but has however deducted the component of 'Provisions of earlier years' written back' amount (Rs. 0.01 Crore) since it is a one-time item.

The Commission, accordingly, approves the non-tariff income for the control period for FY 2016-17 to FY 2020-21 as detailed in the table below:

Table 5-39: Non-tariff income approved by Commission for FY 2016-17 to FY 2020-21

(Rs. Crore)

Particulars	2016-17	2017-18	2018-19	2019-20	2020-21
Non-tariff income	3.09	3.09	3.09	3.09	3.09

5.8 Aggregate Revenue Requirement

Based on the foregoing analysis, the aggregate revenue requirement for the control period as projected by TPL-D (D) and as approved by the Commission is given in the following two tables.

Table 5-40: ARR projected by TPL-D (D) for FY 2016-17 to FY 2020-21

(Rs. Crore)

Particulars	2016-17	2017-18	2018-19	2019-20	2020-21
Power Purchase Expenses	91.91	120.63	150.05	169.02	180.86
O&M Expenses	6.61	6.99	7.39	7.81	8.25
Depreciation	5.88	6.57	7.41	7.69	7.78
Interest & Finance Charges	7.07	7.58	7.94	7.53	6.90
Interest on security deposit	2.33	2.61	2.87	3.09	3.20
Interest on Working Capital	-	-	-	-	-
Bad Debts written off	-	-	-	-	-
Contribution to contingency reserves	0.68	0.76	0.87	0.92	0.94
Return on equity	5.06	5.70	6.32	6.55	6.68
Income Tax	-	-	-	-	-
Less: Non-Tariff Income	2.00	2.70	3.35	3.76	4.04
ARR	**117.54**	**148.13**	**179.49**	**198.84**	**210.57**

The ARR as approved by the Commission is given below.

Table 5-41: ARR approved by Commission for FY 2016-17 to FY 2020-21

(Rs. Crore)

Particulars	2016-17	2017-18	2018-19	2019-20	2020-21
Power Purchase Expenses	82.37	108.11	137.06	156.80	169.52
O&M Expenses	5.63	5.95	6.29	6.65	7.03
Depreciation	5.78	6.08	6.51	6.65	6.67
Interest & Finance Charges	6.91	5.73	5.57	5.12	4.59
Interest on Security Deposit	2.33	2.61	2.87	3.09	3.20
Interest on Working Capital	-	-	-	-	-
Bad Debts written off	-	-	-	-	-
Contribution to contingency reserves	0.68	0.72	0.77	0.79	0.80
Return on equity	4.97	5.27	5.55	5.66	5.73
Income Tax	-	-	-	-	-
Less: Non-Tariff Income	3.09	3.09	3.09	3.09	3.09
ARR	**105.57**	**131.37**	**161.53**	**181.68**	**194.45**

6 Determination of Tariff for FY 2017-18

6.1 Introduction

This chapter deals with the determination of tariff for the FY 2017-18 for TPL-D (D).

6.2 Revenue at existing tariff and gap/ (surplus) analysis

Petitioner's submission:

The revenue for FY 2017-18 is arrived at considering sales forecasted for FY 2017-18 and by applying the existing tariff including base FPPPA of Rs. 0.62 per unit. Accordingly, the estimated revenue for FY 2017-18 works out to Rs. 155.37 Crore. The ARR for FY 2017-18 is Rs. 148.13 Crore. Accordingly, the Petitioner has arrived at the surplus of Rs. 7.24 Crore for FY 2017-18. Further, the Petitioner has arrived at the surplus of Rs. 22.05 Crore for FY 2015-16 during the truing up exercise. The Petitioner has further calculated carrying cost on the surplus of FY 2015-16 which is a further surplus amount of Rs. 5.95 Crore. Accordingly, the consolidated gap / (surplus) for FY 2017-18 including surpluses of FY 2017-18 and FY 2015-16 along with carrying cost on surplus of FY 2015-16, at existing tariffs, is submitted as follows:

Table 6-1: Consolidated gap / (surplus) for FY 2017-18 as submitted by TPL-D (D)

(Rs. Crore)

Particulars	Value
1. ARR for 2017-18	148.13
2. Revenue from sale of power at existing tariff rates including FPPPA revenue @ Rs. 0.62 per unit	155.37
3. Gap / (surplus) for 2017-18 (1 - 2)	(7.24)
4. Add: Gap / (Surplus) for 2015-16	(22.05)
5. Add: Carrying cost on surplus of 2015-16	(5.95)
6. Total gap / (surplus) to be charged to tariffs (3 + 4 +5)	**(35.25)**

Commission's analysis

The Commission has reviewed submissions of the Petitioner in regard to the truing up for FY 2015-16 and ARR for FY 2016-17 to FY 2020-21. Accordingly, the

Commission has approved the truing up for FY 2015-16 and ARR for FY 2016-17 to FY 2020-21. With respect to carrying cost, the position of the Commission is as stated below:

Regulation 21.6 of the GERC (MYT) Regulations, 2016 states the following with regards to allowance of carrying cost:

"c) Carrying cost to be allowed on the amount of Revenue Gap or Revenue Surplus for the period from the date on which such gap/surplus has become due, i.e., from the end of the year for which true-up has been done, till the end of the year in which it is addressed, calculated on simple interest basis at the weighted average State Bank Base Rate for the relevant year, i.e., the year for which Revenue Gap or Revenue Surplus is determined:

Provided that carrying cost on the amount of Revenue Gap shall be allowed up to the above limit, 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 revenue gap is addressed;"

The Commission hereby defers the claim of carrying cost until such time documentary evidence is provided to substantiate incurrence of the cost.

Considering the foregoing analysis, the Commission now computes the consolidated gap/ (surplus) for FY 2017-18 which includes surpluses of FY 2017-18 and FY 2015-16, as follows:

Table 6-2: Approved revenue gap/ (surplus) for FY 2017-18 at existing tariffs

(Rs. Crore)

Particulars	Value
1. ARR for 2017-18	131.37
2. Revenue from sale of power at existing tariff rates including FPPPA revenue @ Rs. 0.62 per unit	155.37
3. Gap/ (surplus) for 2017-18 (1 - 2)	(23.99)
4. Add: Gap/ (surplus) for 2015-16	(25.56)
5. Total gap/ (surplus) to be charged to tariffs (3 + 4)	**(49.56)**

Accordingly, the Commission approves a total revenue surplus of Rs. 49.56 Crore for TPL-D (D).

In view of the surplus, the Commission decides to abolish the base FPPPA price of Rs. 0.62/ kWh and reduce the tariff for all categories by 50 paise per unit for the energy charges. This will still leave a surplus of Rs. 15.02 Crore which shall be addressed in future true-up.

7 Compliance of Directives

7.1 Existing directives

The Commission has issued directive to the Petitioner in its order dated 31st March, 2016 in Case No. 1554/2015. In this regard, TPL-D (D) has submitted the compliance vide its letter dated 19th November, 2016. The comments of the Commission on the submission / compliance of TPL-D (D) are given below.

Directive No. 1: Interest Cost Reduction

TPL-D (D) is directed to negotiate with the lenders for reduction in the rate of interest on the borrowings failing which they should replace high cost debt with low cost debt so that the net benefit of interest cost reduction is available to the consumers. TPL-D (D) shall furnish Quarterly Progress Report about the action taken and results thereof.

Compliance submitted by TPL-D (D)

In this regard, TPL-D (D) submits that it has always received support from its consortium of lenders to have term loans at most competitive terms. However, in compliance to the directive of the Commission, TPL-D (D) has discussed the same with Lead Banker. TPL-D (D) has requested Lead Banker to consider suitable reduction in interest rate for long term loans. Upon confirmation of the Lead Banker, TPL-D (D) will have to approach other lenders in the consortium for similar reduction. As it is consortium lending for long term loans, the decision for reduction in interest rate will be by consensus amongst all lenders. TPL-D (D) shall make all efforts to reduce the interest rate.

Commission's view

The Commission has noted the Petitioner's response. Since TPL-D (D) has submitted a letter from SBI, the lead bank, agreeing in principle for reduction in the rate of interest, the Commission has considered interest at the reduced rate FY 2017-18 and onwards. However, TPL-D (D) should ensure the sanction from other consortium members at the earliest. Also, TPL-D (D) should continue to submit Quarterly Progress Report about the latest status on getting sanction from other consortium members.

8 Fuel and Power Purchase Price Adjustment

8.1 Fuel Price and Power Purchase Price Adjustment

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

Formula

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

Where,

PPCA	is the average power purchase cost per unit of delivered energy (including transmission cost), computed based on the operational parameters approved by the Commission or principles laid down in the power purchase agreements in Rs/kWh for all the generation sources as approved by the Commission while determining ARR and who have supplied power in the given quarter and transmission charges as approved by the Commission for transmission network calculated as total power purchase cost billed in Rs. Million divided by the total quantum of power purchase in Million Units made during the quarter.
PPCB	is the approved average base power purchase cost per unit of delivered energy (including transmission cost) for all the generating stations considered by the Commission for supplying power to the company in Rs/kWh and transmission charges as approved by the Commission calculated as the total power purchase cost approved by the Commission in Rs. Million divided by the total quantum of power purchase in Million Units considered by the Commission.
Loss in %	is the weighted average of the approved level of Transmission and Distribution losses(%) for the four DISCOMs / GUVNL and TPL-D applicable for a particular quarter or actual weighted average in Transmission and Distribution losses (%) for four DISCOMs / GUVNL and TPL-D of the previous year for which true-up have been done by the Commission, whichever is lower.

Note: Although no purchase from Power Exchange has been considered in the power purchase portfolio as indicated in Mid-term Review Order, in case there is a need to purchase power from the power exchange, the same shall be considered for calculation of PPCA in the FPPPA formula.

8.2 Base Price of Power Purchase (PPCB)

The Commission has approved the total energy requirement and the total Power Purchase Cost for TPL-D (D) including fixed cost, variable cost etc. from the various sources for FY 2017-18 as given in the Table below:

Table 8-1: Energy requirement and power purchase cost approved by the Commission for FY 2017-18

Year	Total Energy Requirement (MUs)	Approved Power Purchase cost (Rs Crore)	Power Purchase Cost per unit (Rs/ kWh)
2017-18	323.19	106.77	3.30

As mentioned above the base Power Purchase cost for TPL-D (D) is **Rs. 3.30 per kWh**.

TPL-D (D) 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 the preceding section.

Information regarding FPPPA recovery and the FPPPA calculations shall be kept on website of TPL-D (D).

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.

9 Wheeling Charges and Cross-Subsidy Surcharge

9.1 Wheeling charges

Regulation 91 of GERC (MYT) Regulations, 2016, stipulates that the Commission shall specify the wheeling charges of distribution wires business of the distribution licensee in its ARR and Tariff order. Accordingly, the Commission has reviewed submission of TPL-D (D) in this regard and accordingly determined the wheeling charges at HT and LT levels, for long term (LT), medium term (MT) and short term (ST) open access consumers.

Petitioner's submission

TPL-D (D) has allocated the total ARR expenditure of TPL-D (D) to wire and retail supply business considering the following allocation matrix:

Table 9-1: Allocation matrix for segregation of expenses between wire and supply business as specified by the Commission

(%)

ARR Components	Wire Business (%)	Retail Business (%)
Power Purchase Expense	0%	100%
Employee Expense	60%	40%
Administration & General Expenses	50%	50%
Repair & maintenance Expenses	90%	10%
Depreciation	90%	10%
Interest on long term loan	90%	10%
Interest on Working capital and Consumer security deposit	10%	90%
Bad Debt	0%	100%
Income Tax	90%	10%
Contingency reserve	100%	0%
Return on Equity	90%	10%
Non-Tariff Income	10%	90%

Based on the above allocation matrix, TPL-D (D) has segregated the ARR into wheeling and retail supply business as shown in tables below:

Table 9-2: Segregation of FY 2017-18 ARR as submitted by TPL-D (D)

(Rs. Crore)

ARR Components	Wire Business	Retail Business
Power Purchase Expense	-	120.63
Employee Expense	0.27	0.18
Administration & General Expenses	2.81	2.81
Repair & maintenance Expenses	0.82	0.09
Depreciation	5.91	0.66
Interest and Finance charges	6.82	0.76
Interest on security deposit	0.26	2.34
Interest on Working capital	-	-
Bad Debt	-	-
Income Tax	-	-
Contingency reserve	0.76	-
Return on Equity	5.13	0.57
Less: Non-Tariff Income	0.27	2.43
Aggregate Revenue Requirement	**22.51**	**125.61**

The above segregated ARR has been considered to determine the wheeling charges.

Determination of Wheeling Charges

It is submitted by TPL-D (D) that the sales to the L.T. category are negligible. Hence, it has not segregated the wheeling ARR in the LT and HT category. The wheeling charges for FY 2017-18 are submitted as below:

ARR of wheeling Business – Rs. 22.51 Crore
Sales (MUs) – 308.35
Wheeling Charges – Rs. 0.73 per kWh.

It is further submitted by TPL-D (D) that the Open Access consumers will also have to bear the **wheeling losses in addition to wheeling charges at 2.00%.**

Commission's analysis

The Commission, in order to compute the wheeling charges and cross subsidy surcharge, has considered the allocation matrix between the wires and retail supply business as per GERC (MYT) Regulations, 2016. The allocation matrix and the basis of allocation of various cost components of the ARR as per GERC (MYT) Regulations, 2016 are shown below:

Table 9-3: Allocation matrix for segregation to wire and retail supply business as per GERC (MYT) Regulations, 2016

(%)

ARR Components	Wire Business (%)	Retail Business (%)
Power Purchase Expense	0%	100%
Employee Expense	60%	40%
Administrative & General Expenses	50%	50%
Repair & maintenance Expenses	90%	10%
Depreciation	90%	10%
Interest and finance charges	90%	10%
Interest on Working capital	10%	90%
Bad Debt	0%	100%
Income Tax	90%	10%
Contingency reserve	100%	0%
Return on Equity	90%	10%
Non-Tariff Income	10%	90%

Based on the above allocation, the approved ARR for wires business and retail supply business are computed as shown below.

Table 9-4: Segregation between wires and retail supply business ARR as approved by the Commission for FY 2017-18

(Rs. Crore)

ARR Components	Total ARR	Wire Business	Retail Business
Power Purchase Expense	108.11	0.00	108.11
Employee Expense	0.39	0.23	0.16
Administrative & General Expenses	4.79	2.39	2.39
Repair & maintenance Expenses	0.77	0.70	0.08

ARR Components	Total ARR	Wire Business	Retail Business
Depreciation	6.08	5.47	0.61
Interest on loan	5.73	5.16	0.57
Interest on security deposit	2.61	0.26	2.34
Interest on Working capital	0.00	0.00	0.00
Bad Debt	0.00	0.00	0.00
Income Tax	0.00	0.00	0.00
Contingency reserve	0.72	0.72	0.00
Return on Equity	5.27	4.75	0.53
Less: Non-Tariff Income	3.09	0.31	2.78
Aggregate Revenue Requirement	**131.37**	**19.36**	**112.01**

The above allocations of ARR are used for determination of wheeling charges for FY 2017-18.

Determination of wheeling charges

The Commission considered the proposal of TPL-D (D) for not segregating wheeling ARR between HT and LT voltage levels. Accordingly, the Commission has derived the wheeling charges as shown below:

ARR of wheeling business (Rs. Crore)	– 19.36
Sales (MUs)	– 308.35
Wheeling Charges	**– Rs. 0.63 / kWh.**

The Open Access consumer will also have to bear the **distribution losses at 2.00%** in addition to the wheeling charges.

9.2 Determination of Cross Subsidy Surcharge

Petitioner's submission

TPL-D (D) submitted cross-subsidy calculation based on the formula enumerated in the Tariff Policy as shown in the Table below:

Table 9-5: Cross subsidy surcharge for FY 2017-18 submitted by TPL-D (D)

Particulars	HTP-1
T – Tariff for HT category in Rs/ kWh	3.72
PPC – Average cost of power Purchase in Rs/ kWh	3.70
L – Loss for HT category in %	2.00
D –Wheeling charges for HT category in Rs/ kWh	0.73
Cross subsidy surcharge in Rs/ kWh	**-**

Commission's analysis

The 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 recently issued Tariff Policy, 2016. According to this policy the formula for Cross Subsidy Surcharge is 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.

The cross subsidy surcharge based on the above formula is determined as shown in the table below:

Table 9-6: Cross subsidy surcharge for FY 2017-18

Sr. No.	Particulars	HTP-I
1	T - Tariff for HTP-I Category (Rs./ kWh)	3.74
2	C – Wtd. Avg. Power Purchase Cost (Rs./kWh)	3.30

Sr. No.	Particulars	HTP-I
3	D - Wheeling Charge (Rs./kWh)	0.63
4	L - Aggregate T&D Loss (%)	2.00%
5	R - per unit cost of carrying regulatory assets (Rs./kWh)	0.00
6	**S - Cross subsidy surcharge (Rs./kWh)**	**0.00**

S = T – [C / (1 - L/100) + D + R]

= 3.74 – [3.30 / (1 – 2.00/100) + 0.63 + 0.00]

= 0.00

COMMISSION'S ORDER

The Commission approves the revised Aggregate Revenue Requirement (ARR) for Torrent Power Limited - Distribution (Dahej) for the control period FY 2016-17 to FY 2020-21, as shown in the table below:

(Rs. Crore)

Particulars	2016-17	2017-18	2018-19	2019-20	2020-21
Power Purchase Expenses	82.37	108.11	137.06	156.80	169.52
O&M Expenses	5.63	5.95	6.29	6.65	7.03
Depreciation	5.78	6.08	6.51	6.65	6.67
Interest & Finance Charges	6.91	5.73	5.57	5.12	4.59
Interest on Security Deposit	2.33	2.61	2.87	3.09	3.20
Interest on Working Capital	-	-	-	-	-
Bad Debts written off	-	-	-	-	-
Contribution to contingency reserves	0.68	0.72	0.77	0.79	0.80
Return on equity	4.97	5.27	5.55	5.66	5.73
Income Tax	-	-	-	-	-
Less: Non-Tariff Income	3.09	3.09	3.09	3.09	3.09
ARR	**105.57**	**131.37**	**161.53**	**181.68**	**194.45**

The retail supply tariffs for TPL-D (D) for FY 2017-18 determined by the Commission are annexed to this order. This order shall come into force with effect from 10th June, 2017. The revised rate shall be applicable for the electricity consumption from the 10th June, 2017 onwards.

Sd/-	Sd/-	Sd/-
P. J. THAKKAR	**K. M. SHRINGARPURE**	**ANAND KUMAR**
Member	Member	Chairman

Place: Gandhinagar

Date: 09/06/2017

ANNEXURE: TARIFF SCHEDULE

TARIFF FOR SUPPLY OF ELECTRICITY AT LOW TENSION, HIGH TENSION, AND EXTRA HIGH TENSION

Effective from 10th June, 2017

GENERAL CONDITIONS

1. The tariff figures indicated in this tariff schedule are the tariff rates payable by all the consumers of Torrent Energy Limited – Distribution in the Dahej SEZ area.

2. These tariffs are exclusive of Electricity Duty, tax on sale of electricity, taxes and other charges levied by the Government or other competent authorities from time to time which are payable by the consumers, in addition to the charges levied as per the tariff.

3. All these tariffs for power supply are applicable to only one point of supply.

4. The charges specified are on monthly basis. Distribution Licensee may decide the period of billing and adjust the tariff rate accordingly.

5. Except in cases where the supply is used for purpose for which a lower tariff is provided in the tariff schedule, the power supplied to any consumer shall be utilized only for the purpose for which supply is taken and as provided for in the tariff.

6. Meter charges shall be applicable as prescribed under 'GERC (Licensee's Power to Recover Expenditure incurred in providing supply and other Miscellaneous Charges) Regulations, 2005 as in force from time to time.

7. The various provisions of the GERC (Licensee's power to recover expenditure incurred in providing supply and other miscellaneous charges) Regulations will continue to apply.

8. 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.

9. The billing of fixed charges based on contracted load or maximum demand shall be done in multiples of 0.5 (one half) Horse Power or kilo watt (HP or kW) as the

case may be.

The fraction of less than 0.5 shall be rounded to next 0.5. The billing of energy charges will be done on complete one kilo-watt-hour (kWh).

10. The Connected Load for the purpose of billing will be taken as the maximum load connected during the billing period.

11. The Fixed charges, minimum charges, demand charges, meter rent 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.

12. Contract Demand shall mean the maximum kW for the supply of which licensee undertakes to provide facilities to the consumer from time to time.

13. Fuel Cost and Power Purchase Adjustment Charges shall be applicable in accordance with the Formula approved by the Gujarat Electricity Regulatory Commission from time to time.

14. 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.

15. The payment of power factor penalty does not exempt the consumer from taking steps to improve the power factor to the levels specified in the Regulations notified under the Electricity Act, 2003 and licensee shall be entitled to take any other action deemed necessary and authorized under the Act.

16. Delayed payment charges for all consumers:

    No delayed payment charges shall be levied if the bill is paid within ten days from the date of billing (excluding date of billing).

    Delayed payment charges will be levied at the rate of 15% per annum for the period from the due date till the date of payment.

For Government dues, the delayed payment charges will be levied at the rate provided under the relevant Electricity Duty Act.

17. Prompt payment discount on the total bill excluding all types of levies, duties or taxes levied by the Government or any other competent authorities and meter rent but including fixed charges, energy charges and minimum charge may be allowed at the 1% rate for all tariff categories provided that the payment is made within 7 days of presentation of bill and that no previous amount is outstanding as on the date of the bill.

PART - I

SCHEDULE OF TARIFF FOR SUPPLY OF ELECTRICITY

AT LOW AND MEDIUM VOLTAGE

1.0 Rate: RGP

This tariff is applicable to all services in the residential premises.

Single-phase supply: Aggregate load up to 6 kW
Three-phase supply: Aggregate load above 6 kW

1.1 Fixed Charges/Month:

Range of Connected Load:

(a)	Up to and including 2 kW	Rs. 5/- per month
(b)	Above 2 and up to 4 kW	Rs. 15/- per month
(c)	Above 4 and up to 6 kW	Rs. 30/- per month
(d)	Above 6 kW	Rs. 45/- per month

PLUS

1.2 Energy Charges: For the total monthly consumption:

(a)	First 50 units	175 Paise per Unit
(b)	Next 50 units	205 Paise per Unit
(c)	Next 150 units	270 Paise per Unit
(d)	Above 250 units	360 Paise per Unit

1.3 Minimum bill (excluding meter charges)

Payment of fixed charges as specified in 1.1 above.

2.0 Rate: Non-RGP

This tariff is applicable to the services for the premises those are not covered in any other tariff categories and having aggregate load up to and including 40 kW.

2.1 Fixed charges per month:

(i) Up to and including 10 kW of connected load	Rs. 30/- per kW
(ii) Above 10 and up to 40 kW of connected load	Rs. 55/- per kW

PLUS

2.2 Energy charges:

(a)	For installation having contracted load up to and including 10 kW: for entire consumption during the month	270 Paise per Unit
(b)	For installation having contracted load exceeding 10 kW: for entire consumption during the month	300 Paise per Unit

2.3 Minimum Bill

Minimum bill per installation per month for consumers other than Seasonal Consumers:

Payment of Fixed Charge as specified in 2.1 above.

2.4 Minimum Bill per Installation for Seasonal Consumers

a) “Seasonal Consumer”, shall mean a consumer who takes and uses power supply for ice factory, ice candy machines, ginning and pressing factory, oil mill, rice mill, huller, salt industry, sugar factory, khandsari, cold storage plants (including such plants in fisheries industry), tapioca industries manufacturing starch, etc.

b) Any consumer, who desires to be billed for the minimum charges on annual basis shall intimate to that effect in writing in advance about the off-season period during which energy consumption, if any, shall be mainly for overhauling of the plant and machinery. The total period of the off-season so declared and observed shall be not less than three calendar months in a calendar year.

c) The total minimum amount under the head “Fixed and Energy Charges” payable by the seasonal consumer satisfying the eligibility criteria under sub-clause (a) above and complying with the provision stipulated under sub-clause (b) above shall be Rs. 1600/- per annum per kW of the contracted load.

d) The units consumed during the off-season period shall be charged for at a flat rate of 335 Paise per unit.

e) The electricity bills related to the off-season period shall not be taken into account towards the amount payable against the annual minimum bill. The amount paid by the consumer towards the electricity bills related to the seasonal period only under the heads “Fixed Charges” and “Energy Charges”, shall be taken into account while determining the amount of short- fall payable towards the annual minimum bill as specified under sub-clause (c) above.

3.0 <u>Rate: LTMD</u>

This tariff is applicable to the services for the premises those are not covered in any other tariff categories and having aggregate load above 40 kW and up to 100 kW.

This tariff shall also be applicable to consumer covered in category- 'Rate: Non-RGP' so opts to be charged in place of 'Rate: Non-RGP' tariff.

3.1 Fixed charges:

(a)	**For billing demand up to the contract demand**	
	(i) For first 40 kW of billing demand	Rs. 65/- per kW per month
	(ii) Next 20 kW of billing demand	Rs. 100/- per kW per month
	(iii) Above 60 kW of billing demand	Rs. 165/- per kW per month
(b)	**For billing demand in excess of the contract demand**	Rs. 210/- per kW

PLUS

3.2 Energy charges:

For the entire consumption during the month	305 Paise per unit

PLUS

3.3 Reactive Energy Charges:

For all the reactive units (KVARH) drawn during the month	10 Paise per KVARH

3.4 Billing Demand

The billing demand shall be highest of the following:

(a) Eighty-five percent of the contract demand

(b) Actual maximum demand registered during the month

(c) 15 kW

3.5 Minimum Bill

Payment of demand charges every month based on the billing demand.

3.6 Seasonal Consumers taking LTMD Supply:

3.6.1 The expression, "Seasonal Consumer", shall mean a consumer who takes and uses power supply for ice factory, ice-candy machines, ginning and pressing factory, oil mill, rice mill, salt industry, sugar factory, khandsari, cold storage plants (including such plants in fishery industry), tapioca industries manufacturing starch, pumping load or irrigation, white coal manufacturers etc.

3.6.2 A consumer, who desires to be billed for minimum charges on annual basis, shall intimate in writing in advance about the off-season during which energy consumption, if any, shall be mainly for overhauling of the plant and machinery. The off-season period at any time shall be a full calendar month/months. The total period of off-season so declared and observed shall be not less than three calendar months in a calendar year.

3.6.3 The total minimum amount under the head "Demand and Energy Charges" payable by a seasonal consumer satisfying the eligibility criteria under sub clause 3.6.1 above and complying with provisions stipulated under sub clause 3.6.2 above shall be Rs. 2700/- per annum per kW of the billing demand.

3.6.4 <u>The billing demand shall be the highest of the following</u>:

(a) The highest of the actual maximum demand registered during the calendar year.

(b) Eighty-five percent of the arithmetic average of contract demand during the year.

(c) 15 kW.

3.6.5 Units consumed during the off-season period shall be charged for at the flat rate of 335 Paise per unit.

4.0 <u>Rate: Non-RGP Night</u>

This tariff is applicable for aggregate load up to 40 kW and using electricity **<u>exclusively</u>** **<u>during night hours</u>** from 10.00 PM to 06.00 AM next day. (The supply hours shall be regulated through time switch to be provided by the consumer at his cost.)

4.1 Fixed Charges per month:

Fixed charges specified in Rate Non-RGP above.

PLUS

4.2 Energy Charges:

For entire consumption during the month	100 Paise per unit

NOTE:

1. *15% of the contracted demand can be availed beyond the night hours prescribed as per para 4.0 above.*
2. *10% of total units consumed during the billing period can be availed beyond the night hours prescribed as per para 4.0 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 Non-RGP category demand charge rates given in para 2.1 of this schedule.*
4. *In case the consumer failed to observe condition no. 2 above during any of the billing month, then entire energy consumption during the relevant billing month shall be billed as per Non-RGP category energy charge rates given in para 2.2 of this schedule.*
5. *In case the consumer failed to observe above condition no. 1 and 2 both during any of the billing month, then demand charge and entire energy consumption during the relevant billing month shall be billed as per Non-RGP category demand charge and energy charge rates given in para 2.1 and 2.2 respectively, of this schedule.*
6. *This tariff shall be applicable if the consumer so opts to be charged in place of Non-RGP tariff by using electricity exclusively during night hours as above.*
7. *The option can be exercised to switch over from Non-RGP tariff to Non-RGP Night tariff and vice versa twice in a calendar year by giving not less than one month's notice in writing*

5.0 Rate: LTMD- Night

This tariff is applicable for aggregate load above 40 kW and using electricity **exclusively during night hours** from 10.00 PM to 06.00 AM next day. (The supply hours shall be regulated through time switch to be provided by the consumer at his cost.)

5.1 Fixed Charges per month:

Fixed charges specified in Rate **LTMD** above.

PLUS

5.2 Energy Charges:

For entire consumption during the month	100 Paise per unit

5.3 Reactive Energy Charges:

For all reactive units (KVARH) drawn during the month	10 Paise per KVARH

NOTE:

1. *15% of the contracted demand can be availed beyond the night hours prescribed as per para 5.0 above.*
2. *10% of total units consumed during the billing period can be availed beyond the night hours prescribed as per para 5.0 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 LTMD category demand charge rates given in para 3.1 of this schedule.*
4. *In case the consumer failed to observe condition no. 2 above during any of the billing month, then entire energy consumption during the relevant billing month shall be billed as per LTMD category energy charge rates given in para 3.2 of this schedule.*
5. *In case the consumer failed to observe above condition no. 1 and 2 both during any of the billing month, then demand charge and entire energy consumption during the relevant billing month shall be billed as per LTMD category demand charge and energy charge rates given in para 3.1 and 3.2 respectively, of this schedule.*
6. *This tariff shall be applicable if the consumer so opts to be charged in place of LTMD tariff by using electricity exclusively during night hours as above.*
7. *The option can be exercised to switch over from LTMD tariff to LTMD Night tariff and vice versa twice in a calendar year by giving not less than one month's notice in writing.*

6.0 <u>Rate: WWSP</u>

This tariff shall be applicable to services used for water works and sewerage pumping purposes.

(a)	Fixed charges per month	Rs. 15 per HP
	PLUS	
(b)	Energy charges per month: For entire consumption during the month	265 Paise per Unit

7.0 <u>Rate: SL</u>

7.1 Tariff for Street Light for Local Authorities and Industrial Estates:

This tariff includes the provision of maintenance, operation and control of the street lighting system.

7.1.1 Energy Charges:

For all the units consumed during the month	240 Paise per unit

7.1.2 Renewal and Replacements of Lamps:

The consumer shall arrange for renewal and replacement of lamp at his cost by person authorised by him in this behalf under Rule-3 of the Indian Electricity Rules, 1956 / Rules issued by CEA under the Electricity Act, 2003.

7.1.3 Maintenance other than Replacement of Lamps:

Maintenance of the street lighting system shall be carried out by Distribution Licensee.

8.0 <u>Rate: TMP</u>

This tariff is applicable to services of electricity supply for temporary period at the low voltage.

8.1 FIXED CHARGE

Fixed charger per installation	Rs. 14 per kW per Day

8.2 ENERGY CHARGE

A flat rate of	305 Paise per unit

Note: Payment of bills is to be made within seven days from the date of issue of the bill. Supply would be disconnected for non-payment of dues on 24 hours' notice.

PART-II

TARIFFS FOR SUPPLY OF ELECTRICITY AT HIGH TENSION (3.3 KV AND ABOVE, 3-PHASE 50 C/S), AND EXTRA HIGH TENSION

The following tariffs are available for supply at high tension for large power services for contract demand not less than 100 kVA

9.0 Rate: HTP-I

This tariff will be applicable for supply of electricity to HT consumers contracted for 100 kVA and above for regular power supply and requiring the power supply for the purposes not specified in any other HT Categories.

9.1 Demand Charges;

9.1.1 For billing demand up to contract demand

(a)	For first 500 kVA of billing demand	Rs. 100/- per kVA per month
(b)	For next 500 kVA of billing demand	Rs. 200/- per kVA per month
(c)	For billing demand in excess of 1000 kVA	Rs. 270/- per kVA per month

9.1.2 For Billing Demand in Excess of Contract Demand

For billing demand in excess over the contract demand	Rs. 370 per kVA per month

PLUS

9.2 Energy Charges

For entire consumption during the month		
(a)	up to 500 kVA of billing demand	270 Paise per Unit
(b)	For next 2000 kVA of billing demand	290 Paise per Unit
(c)	For billing demand in excess of 2500 kVA	300 Paise per Unit

PLUS

9.3 Time of Use Charges:

For energy consumption during the two peak periods, viz., 0700 Hrs. to 1100 Hrs. and 1800 Hrs. to 2200 Hrs.	
(a) For Billing Demand up to 500 kVA	35 Paise per Unit
(b) For Billing Demand above 500 kVA	75 Paise per Unit

9.4 Billing Demand:

The billing demand shall be the highest of the following:

(a) Actual maximum demand established during the month

(b) Eighty-five percent of the contract demand

(c) One hundred kVA

9.5 Minimum Bills:

Payment of “demand charges” based on kVA of billing demand.

9.6 Power Factor Adjustment Charges:

9.6.1 Penalty for poor Power Factor:

Penalty for poor Power Factor:

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.

9.6.2 Power Factor Rebate:

If the power factor of the consumer’s installation in any month is above 95%, the consumer will be entitled to a rebate at the rate of 0.5% (half percent) in excess of 95% power factor on the total amount of electricity bill for that month under the head “Energy Charges”, arrived at using tariff as per para 9.2 of this schedule, for every 1% rise or part thereof in the average power factor during the month above 95%.

9.7 Maximum Demand and its Measurement:

The maximum demand in kW or kVA, as the case may be, shall mean an average KW/KVA supplied during consecutive 30/15 minutes or if consumer is having parallel operation with the grid and has opted for 3 minutes, period of maximum use where such meter with the features of reading the maximum demand in KW/KVA directly, have been provided.

9.8 Contract Demand:

The contract demand shall mean the maximum KW/KVA for the supply, of which the supplier undertakes to provide facilities from time to time.

9.9 Rebate for Supply at EHV:

On Energy charges:		**Rebate @**
(a)	If supply is availed at 33/66 kV	0.5%
(b)	If supply is availed at 132 kV and above	1.0%

9.10 Concession for Use of Electricity during Night Hours:

For the consumer eligible for using supply at any time during 24 hours, entire consumption shall be billed at the energy charges specified above. However, the energy consumed during night hours of 10.00 PM to 06.00 AM next morning (recorded by a polyphase meter operated through time-switch) shall be eligible for concession at the rate of 30 Paise per unit. The polyphase meter and time switch shall be procured and installed by the consumer at his cost and sealed by the Distribution Licensee.

9.11 Seasonal Consumers taking HT Supply:

9.11.1 The expression, "Seasonal Consumer", shall mean a consumer who takes and uses power supply for ice factory, ice-candy machines, ginning and pressing factory, oil mill, rice mill, salt industry, sugar factory, khandsari, cold storage plants (including such plants in fishery industry), tapioca industries manufacturing starch, pumping load or irrigation, white coal manufacturers etc.

9.11.2 A consumer, who desires to be billed for minimum charges on annual basis, shall intimate in writing in advance about the off-season during which energy consumption, if any, shall be mainly for overhauling of the plant and machinery. The off-season period at any time shall be a full calendar month/months. The total period of off-season so declared and observed shall be not less than three calendar months in a calendar year.

9.11.3 The total minimum amount under the head "Demand and Energy Charges" payable by a seasonal consumer satisfying the eligibility criteria under sub clause 9.11.1 above and complying with provisions stipulated under sub clauses 9.11.2 above shall be Rs. 4000/- per annum per kVA of the billing demand.

9.11.4 The billing demand shall be the highest of the following:

(a) The highest of the actual maximum demand registered during the calendar year.

(b) Eighty-five percent of the arithmetic average of contract demand during the year.

(c) One hundred kVA.

9.11.5 Units consumed during the off-season period shall be charged for at the flat rate of 320 Paise per unit.

9.11.6 Electricity bills paid during off-season period shall not be taken into account towards the amount payable against the annual minimum bill. The amount paid by the consumer towards the electricity bills for seasonal period only under the heads "Demand Charges" and "Energy Charges" shall be taken into account while determining the amount payable towards the annual minimum bill.

10.0 Rate HTP-II

Applicability: This tariff shall be applicable for supply of energy to HT consumers contracting for 100 KVA and above, requiring power supply for Water Works and Sewerage pumping stations.

10.1 Demand Charges:

10.1.1 For billing demand up to contract demand

(a)	For first 500 kVA of billing demand	Rs. 90/- per kVA per month
(b)	For next 500 kVA of billing demand	Rs. 190/- per kVA per month
(c)	For billing demand in excess of 1000 kVA	Rs. 250/- per kVA per month

10.1.2 For billing demand in excess of contract demand

For billing demand in excess of contract demand	Rs. 335 per kVA per month

PLUS

10.2 Energy Charges:

For entire consumption during the month		
(a)	up to 500 kVA of billing demand	270 Paise per Unit
(b)	For next 2000 kVA of billing demand	290 Paise per Unit
(c)	For billing demand in excess of 2500 kVA	300 Paise per Unit

PLUS

10.3 Time of Use Charges:

For energy consumption during the two peak periods, viz., 0700 Hrs. to 1100 Hrs. and 1800 Hrs. to 2200 Hrs.	
(a) For Billing Demand up to 500 kVA	35 Paise per Unit
(b) For Billing Demand above 500 kVA	75 Paise per Unit

10.4 Billing demand

10.5 Minimum bill

10.6 Maximum demand and its measurement

10.7 Contract Demand

10.8 Rebate for supply at EHV

10.9 Concession for use of electricity during night hours

Same as per HTP-I Tariff

POWER FACTOR ADJUSTMENT CHARGES:

10.10.1 Penalty for poor Power Factor:

(a) The power factor adjustment charges shall be levied at the rate of 1% on the total amount of electricity bills for the month under the head “Energy Charges”, arrived at using tariff as per para 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%.

(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 10.2 of this schedule, will be charged.

10.10.2 Power Factor Rebate:

If the power factor of the consumer’s installation in any month is above 95%, the consumer will be entitled to a rebate at the rate of 0.5% (half percent) in excess of 95% power factor on the total amount of electricity bill for that month under the head "Energy Charges", arrived at using tariff as per para 10.2 of this schedule, for every 1% rise or part thereof in the average power factor during the month above 95%.

11.0 <u>Rate: HTP-III</u>

This tariff shall be applicable to a consumer taking supply of electricity at high voltage, contracting for not less than 100 kVA for temporary period. A consumer not taking supply on regular basis under a proper agreement shall be deemed to be taking supply for temporary period.

11.1 Demand Charges:

For billing demand up to contract demand	Rs. 462/- per kVA per month
For billing demand in excess of contract demand	Rs. 550/- per kVA per month

PLUS

11.2 Energy charges

For all units consumed during the month	510 Paise / Unit

PLUS

11.3 Time of Use Charges:

Additional charge for energy consumption during two peak periods, viz. 0700 Hrs. to 1100 Hrs. an 1800 Hrs to 2200 Hrs.	75 Paise per unit

11.4 Billing demand
11.5 Minimum bill
11.6 Maximum demand and its measurement
11.7 Contract Demand
11.8 Rebate for supply at EHV

Same as per HTP-I Tariff

11.9 POWER FACTOR ADJUSTMENT CHARGES:

11.9.1 Penalty for poor Power Factor:

(a) The power factor adjustment charges shall be levied at the rate of 1% on the total amount of electricity bills for the month under the head "Energy Charges", arrived at using tariff as per para 11.2 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 11.2 of this schedule, will be charged.

11.9.2 Power Factor Rebate:

If the power factor of the consumer's installation in any month is above 95%, the consumer will be entitled to a rebate at the rate of 0.5% (half percent) in excess of 95% power factor on the total amount of electricity bill for that month under the head "Energy Charges", arrived at using tariff as per para 11.2 of this schedule, for every 1% rise or part thereof in the average power factor during the month above 95%.

12.0 <u>Rate: HTP-IV</u>

This tariff shall be applicable for supply of electricity to HT consumers opting to use electricity exclusively during night hours from 10.00 PM to 06.00 AM next day and contracted for regular power supply of 100 kVA and above.

12.1 Demand Charges:

Same rates as specified in rate HTP-I

PLUS

12.2 Energy Charges:

For all units consumed during the month	80 Paise per unit

12.3	Billing demand	Same as per HTP-I Tariff
12.4	Minimum bill	
12.5	Maximum demand and its measurement	
12.6	Contract Demand	
12.7	Rebate for supply at EHV	

12.8 POWER FACTOR ADJUSTMENT CHARGES:

12.8.1 Penalty for poor Power Factor:

(a) The power factor adjustment charges shall be levied at the rate of 1% on the total amount of electricity bills for the month under the head "Energy Charges", arrived at using tariff as per para 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%.

(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 12.2 of this schedule, will be charged.

12.8.2 Power Factor Rebate:

If the power factor of the consumer's installation in any month is above 95%, the consumer will be entitled to a rebate at the rate of 0.5% (half percent) in excess of 95% power factor on the total amount of electricity bill for that month under the head "Energy Charges", arrived at using tariff as per para 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 HTP-I category demand charge rates given in para*

9.1 of this schedule.

4. *In case the consumer failed to observe condition no. 2 above during any of the billing month, then entire energy consumption during the relevant billing month shall be billed as per HTP-I category energy charge rates given in para 9.2 of this schedule.*
5. *In case the consumer failed to observe above condition no. 1 and 2 both during any of the billing month, then demand charge and entire energy consumption during the relevant billing month shall be billed as per HTP-I category demand charge and energy charge rates given in para 9.1 and 9.2 respectively, of this schedule.*
6. *This tariff shall be applicable if the consumer so opts to be charged in place of HTP-I tariff by using electricity exclusively during night hours as above.*
7. *The option can be exercised to switch over from HTP-I tariff to HTP-IV tariff and vice versa twice in a calendar year by giving not less than one month's notice in writing.*