### **GUJARAT ELECTRICITY REGULATORY COMMISSION**



# Mid-term Review of Business Plan

For

# Torrent Power Limited – Distribution Ahmedabad

Case No. 1366 of 2013 29<sup>th</sup> April 2014

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#### **GANDHINAGAR**

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#### **ABBREVIATIONS**

A&G	Administration and General
ARR	Aggregate Revenue Requirement
CAPEX	Capital Expenditure
CERC	Central Electricity Regulatory Commission
Control Period	FY 2011-12 to FY 2015-16
DGVCL	Dakshin Gujarat Vij Company Limited
DISCOM	Distribution Company
EA	Electricity Act, 2003
EHV	Extra High Voltage
FPPPA	Fuel and Power Purchase Price Adjustment
FY	Financial Year
GEB	Gujarat Electricity Board
GERC	Gujarat Electricity Regulatory Commission
GETCO	Gujarat Energy Transmission Corporation Limited
GFA	Gross Fixed Assets
GoG	Government of Gujarat
GSECL	Gujarat State Electricity Corporation Limited
GUVNL	Gujarat Urja Vikas Nigam Limited
HT	High Tension
JGY	Jyoti Gram Yojna
kV	Kilo Volt
kVA	Kilo Volt Ampere
kVAh	Kilo Volt Ampere Hour
kWh	Kilo Watt Hour
LT	Low Tension Power
MGVCL	Madhya Gujarat Vij Company Limited
MTR	Mid-term Review
MU	Million Units (Million kWh)
MW	Mega Watt
MYT	Multi-Year Tariff
O&M	Operations & Maintenance
PF	Power Factor
PGCIL	Power Grid Corporation of India Limited
PGVCL	Paschim Gujarat Vij Company Limited
PPA	Power Purchase Agreement
R&M	Repair and Maintenance
RLDC	Regional Load Despatch Centre
SBI	State Bank of India
SLDC	State Load Despatch Centre
UGVCL	Uttar Gujarat Vij Company Limited
WRLDC	Western Regional Load Despatch Centre





## Before the Gujarat Electricity Regulatory Commission at Gandhinagar

Case No. 1366 of 2013

Date of the Order: 29/04/2014

#### **CORAM**

Shri Pravinbhai Patel, Chairman Dr. M. K. Iyer, Member

#### **ORDER**

#### 1. Introduction

#### 1.1 Background

Section 16.2 of GERC (MYT) Regulations, 2011, of GERC provides for submission of the Business Plan for each Control Period by the Generating Company, Transmission Licensee, Distribution Wires Business and Retail Supply Business. Based on the Business Plan, the applicant shall submit the forecast of Aggregate Revenue Requirement (ARR) for the entire control period and the expected revenue from the existing Tariffs for the first year of the control period, and the Commission shall determine ARR for the entire control period and the tariff of the first year of the control period for the Generating Company, Transmission Licensee and distribution Wires Business Plan and Retail Supply Business.



Section 16.2 of the Regulations also lays down that the Generating Company, Transmission Licensee and Distribution Licensee may seek a Mid-term Review of the Business Plan through an application filed three (3) months prior to the filing of the Petition for truing up for the second year of the control period and tariff determination for the fourth year of the control period.

Regulation 17.2 of the Regulations, 2011, states that in case of Mid-term Review of Business Plan under Regulation 16.2, the Petition shall comprise of modification, if any, of the ARR for the remaining years of the control period, with adequate justification for the same.

Regulation 19.1 of GERC (MYT) Regulations, also stipulates that Mid-term Review of the Business Plan/ Petition may be sought by the Generating Company, Transmission Licensee and Distribution licensee through an application filed three (3) months prior to the specified date of filing of petition for truing up for the second year of the control period and Tariff determination for the fourth year of the control period.

#### 1.2 Background and Brief History of the Petitioner

The Torrent Power Limited (TPL) is a company incorporated under the Companies Act, 1956, and is carrying on the business of Generation and Distribution of Electricity in the cities of Ahmedabad, Gandhinagar and Surat. The present Petition has been filed by TPL for its distribution business in Ahmedabad and Gandhinagar. TPL had taken over the business, consequent to the amalgamation of Torrent Power Ahmedabad Limited (TPAL), Torrent Power Surat Limited (TPSL) and Torrent Power Generation Limited (TPGL) with Torrent Power Limited. Besides, TPL is also engaged in other businesses, which do not come under the regulatory purview of the Commission.

The TPAL was a licensee under the Indian Electricity Act, 1910. Torrent Power Limited is a deemed licensee for distribution of electricity under Section 19 (i) (d), read in conjunction with Section 19 (1) (i) of the Gujarat Electricity Industry (Reorganisation and Regularisation) Act, 2003, and Section 14 of the Electricity Act, 2003. The Commission had accorded approval for transfer / assignment of license to Torrent Power AEC Limited to incorporate the name of TPL as a licensee, in place of TPAL, without change of any terms and conditions of license.

The approval of the Commission was subject to the order and direction of the Hon'ble High Court of Gujarat on the scheme of amalgamation / merger of TPAL, TPSL and



TPGL and TPL. The scheme of amalgamation was approved by the Hon'ble High Court of Gujarat, vide its Order dated 11<sup>th</sup> September 2006.

### 1.3 Petition of TPL-D Ahmedabad Supply Area for Mid-term Review of the Business Plan

As per GERC (MYT) Regulations, 2011, the Petition is to be filed three months prior to the specified date for filing the petition. However, the Petitioner has requested the Commission to grant extension till 30<sup>th</sup> November, 2013 for filing Mid-term Review Petition vide its letter dated 27<sup>th</sup> August, 2013. In turn, the Commission has granted extension vide its letter no. GERC/Tariff/3513/1722 dated 31<sup>st</sup> August, 2013.

In accordance with Regulation 16.2 of GERC (MYT) Regulation, 2011, the TPL-D has filed the Petition for Mid-term Review of the Business Plan and Revision of ARR for the remaining years of the control period, i.e., FYs 2014-15 and 2015-16.

#### 1.4 Admission of the Petition and the Public Hearing Process

The TPL-D has submitted the current Petition for Mid-term Review of the Business Plan and Revision of ARR for the balance years (FY 2014-15 and FY 2015-16) of the control period. The Commission admitted the above petition (Case No. 1366/2013) on 4<sup>th</sup> December, 2013.

In accordance with Section 64 of the Electricity Act, 2003, the Commission directed TPL-D to publish its application in the abridged form to ensure public participation. The public notice, inviting objections / suggestions from its stakeholders on the Midterm Review Petition filed by it, was issued in the following newspapers on 11<sup>th</sup> December, 2013.

SI. No.	Name of the Newspaper	Language	Date of publication
1	Indian Express	English	11.12.2013
2	Sandesh	Gujarati	11.12.2013

The petitioner also placed the public notice and the Petition on its website (<a href="www.torrentpower.com">www.torrentpower.com</a>) for inviting objections and suggestions on its Petition. The interested parties/stakeholders were asked to file their objections / suggestions on the petition on or before 10<sup>th</sup> January, 2014.

The Commission received objections / suggestions from 6 stakeholder. The Commission examined the objections / suggestions received and fixed the date for public hearing for the petition on 21<sup>st</sup> February, 2014 at the Commission's Office, Gandhinagar, and subsequently a communication was sent to the objectors to take



part in the public hearing process for presenting their views in person before the Commission. The public hearing was conducted in the Commission's Office at Gandhinagar as scheduled on the above date.

The names of the stakeholders who filed their objections and the objectors who participated in the public hearing for presenting their objections are given below:

SI. No.	Name of Stakeholders	Participated in the Public Hearing
1	ATMA - Ahmedabad Textile Mills' Association	Yes
2	Gujarat Chamber of Commerce & Industry	Yes
3	Surat Citizen's Council Trust and The Southern Gujarat Chamber of Commerce & Industry	Yes
4	Laghu Udyog Bharati - Gujarat	Yes
5	Shri Amarsinh Chavda	No
6	Utility Users' Welfare Association (UUWA)	Yes

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

#### 1.5 Contents of this order

The order is divided into four chapters, as under:

- 1. The **First Chapter** provides the background of the Petition and details of the public hearing process.
- 2. The **Second Chapter** contains the summary of TPL's Mid-term Review Petition.
- 3. The **Third Chapter** provides a brief account of the public hearing process, including the objections raised by various stakeholders, TPL's response and the Commission's views on the response.
- 4. The **Fourth Chapter** deals with the Mid-term Review of the Business Plan and Revision of ARR for FYs 2014-15 and 2015-16.



### 2. Summary of TPL's Petition

The TPL-D has projected its Revised Aggregate Revenue Requirement for FYs 2014-15 and 2015-16 as part of Mid-term Review process for the remaining years of the control period.

#### 2.1 Mid-term Review for FY 2014-15 and FY 2015-16

The comparison of the revised projections for FY 2014-15 and FY 2015-16 in the Mid-term Review, vis-à-vis the costs approved by the Commission in the MYT Order dated 6<sup>th</sup> September 2011, are as given below:

Table 2.1: Mid-term Review for FY 2014-15 and FY 2015-16

(Rs. Crore)

		FY 20	14-15	FY 20	15-16
SI. No.	Particulars	Approved in MYT Order	Projected in Mid-term Review	Approved in MYT Order	Projected in Mid-term Review
1	Power Purchase	3,216.68	4,003.17	3,410.33	4,643.66
2	O&M Expenses	220.38	254.58	232.99	264.40
3	Interest on Loans	132.19	68.74	130.71	96.74
4	Interest on SD	17.63	41.02	19.47	45.25
5	Interest on Working Capital	7.62	8.22	7.42	11.53
6	Depreciation	190.78	119.76	207.57	142.54
7	Bad Debts Written Off	1.09	1.50	1.09	1.50
8	Contingency Reserve	0.60	0.60	0.60	0.60
9	RoE	209.93	160.43	221.03	179.75
10	Tax	8.52	•	8.52	-
11	Less: Non-Tariff income	56.49	64.50	58.18	65.99
12	ARR	3,948.94	4,593.52	4,181.56	5,319.96

#### 2.2 Request of TPL-D (Ahd.)

The TPL-D has requested the Commission to:

- a) Admit the petition for Mid-term Review of Business Plan and approval of resultant ARR.
- b) Approve the revised Business plan and approve the resultant ARR for FY 2014-15 & FY 2015-16.
- c) Allow additions/ alterations/ changes/ modifications to the application at a future date.
- d) 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.

- e) Condone the delay in filing the present petition.
- f) Allow any other relief, order or direction which the Commission deems fit to be issued.
- g) Condone any inadvertent omissions / errors / rounding off difference / shortcomings.



# 3. Brief outline of objections raised, response from TPL and the Commission's View

#### 3.0 Public Response to Petition

In response to the public notice inviting objections / suggestions from stakeholders on the Petition filed by TPL for Mid-term Review of Business Plan for FY 2014-15 and FY 2015-16, a number of consumers / consumer organizations filed their objections/suggestions in writing. Some of these objectors participated in the public hearing also. It is observed that the objections / suggestions filed, by and large, are repetitive in nature. The Commission has therefore, addressed the objections / suggestions issue-wise rather than objector-wise. The objections / suggestions by the consumer / consumer organizations, the response from the Petitioner and the view of the Commission are as given below:

### 3.1 Delay in filing of Mid-term Review Petition Objection

The Mid-term Review of Business plan needs to be filed three months before true-up exercise of second year of control period of year 2012-13 whereas the petition for true-up for 2012-13 is filed when present petition is filed. By this act of TPL, present petition stands quashed for not following norms of GERC (MYT) Regulations 2011, the Commission is requested to quash the petition.

#### **Response of TPL**

Regulation 16.2 of the GERC (MYT) Regulations, 2011 provides for the Mid-term review of the business plan by the Generating Company, Transmission Licensee and Distribution Licensee three months prior to the filing of Petition for truing up. However, the Petitioner had requested the Commission to grant extension till 30<sup>th</sup> November, 2013 for filing Mid-term Review Petition. In turn, the Commission has granted extension. Accordingly, the Petitioner has filed the present petition for Mid-term review of the remaining years of the control period i.e. FY 2014-15 to 2015-16 for the approval of the Commission.

#### Commission's View

The Commission agrees with the response of the Petitioner.



#### 3.2 Security Deposits

#### Objection

The security deposit recovered from consumers is Rs. 352.89 Cr. (Ahd.) & Rs 171.76 Cr. (Surat). Rate of interest on security deposit paid to consumers in the year 2012-13 is shown as Rs. 12.84 Cr. (Ahd.) & Rs. 15.43 Cr. (Surat) @ rate of 3.7% (Ahd.) & 9.5% (Surat). So the difference in rate of interest computed is to be given effect in ARR.

#### **Response of TPL**

The amount of Rs. 12.84 Crore is the amount of interest on working capital and not the interest on security deposit. Further, the Petitioner has claimed Rs. 26.60 Crore as the interest on the security deposit in line with the provisions of the Act and Regulation.

#### Commission's View

The interest on security deposit is approved as per GERC (MYT) Regulations, 2011.

### 3.3 Procurement of the Power through Competitive bidding Objection

The Petitioner's proposal to purchase power from its own generation is objectionable and it is suggested to carry out competitive bidding for procurement of power. Further, the per unit generation cost of SUGEN is higher, when compared to other generating stations.

#### **Response of TPL**

The Petitioner is entrusted with the obligation of supplying electricity in its area of supply i.e. Ahmedabad / Gandhinagar and Surat. Accordingly, the Petitioner makes the necessary power purchase arrangements in line with the provisions of the EA, 2003.

The State and Central Commission's Regulations framed under the EA, 2003 stipulate for long term commitment of 25 years between the generator and distribution licensee for supply of electricity at regulated tariff irrespective of market fluctuations. Accordingly, the Petitioner has entered into the long term agreements for sourcing the power including setting up of its own generation capacity in order to fulfil its universal supply obligation. SUGEN supplies power to TPL-D for the contracted quantum at regulated tariff since 2009.



In 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 the 25 years in accordance with the provisions of the Regulations irrespective of the level of utilization.

At present, SUGEN plant is not being fully utilized because domestic gas is not being allocated by the Government due to lower availability of gas in the scenario of unexpected reduction in production of gas from KG basin. These are the factors which are beyond the control. Further, the Gol is making all possible efforts to address this Short-Term situation. It may be noted that the Petitioner's power purchase arrangements are with long term approved source of power for 25 years and accordingly, the Short-Term issue of non-availability of gas needs to be seen in long term perspective. Further, the determination of capacity charges and its payment is in accordance with the Regulations of the Appropriate Commission. In these circumstances, the comparison of generation cost on per unit basis is not relevant.

#### Commission's View

The response of the petitioner is noted.

#### 3.4 The Petition format is not suitable

#### Objection

The petition format is not suitable as it does not reflect the real facts and figures for the distribution licensee area as the Petitioner is involved in other multiple businesses at multiple locations.

#### Response of TPL

All the requisite information for the present proceedings are already provided in the Petition as required under the GERC (MYT) Regulations, 2011. The Petitioner submits that it maintains the separate accounts for the regulated business and the same gets certified by the Statutory Auditors of the Company. The segregated Accounting Statements for the FY 2012-13, duly certified by the Statutory Auditors of the Company, have also been made available along with the truing up petition. The baseless allegations are therefore emphatically denied.

#### **Commission's View**

The response of the Petitioner is noted.



### 3.5 The Petition and the business of the Petitioner are not as per the Electricity Act, 2003

#### Objection

The Petition is not maintainable and it is not as per the Electricity Act, 2003 and the business conducted by the Petitioner contrary to the provisions of the Electricity Act, 2003 and the Regulations.

#### **Response of TPL**

The Petitioner has prepared and filed the Mid-term review Petition in accordance with the provisions of the GERC (MYT) Regulations, 2011 read with the Electricity Act, 2003. Therefore, the objection does not have any merit. The Petitioner has been conducting the business in compliance with the provisions of the Electricity Act, 2003. All the activities carried out by the Petitioner are in conformity with and in consonance with the law of the land.

#### Commission's View

The response of the Petitioner is noted.

#### 3.6 To Supply Power at fixed price for 5 Years

#### Objection

The Commission is requested to evaluate the option of making power available to the consumers at the fixed price at least for five years to facilitate the industries and the common man.

#### **Response of TPL**

The various items of expenses including power purchase depend upon various uncontrollable factors i.e. inflation, exchange rate, interest rate, change in law etc. Similarly there would be variation in sales. Therefore, the GERC (MYT) Regulations, 2011 mandate the filing of petition for truing up of expenditure and determination of tariff for each year of the control period. Further, the Tariff Policy and the Electricity Act, 2003 mandate the speedy recovery of expenditure so as not to burden the future consumers with the past cost. The Objector's suggestion is not in line with the spirit of the Act and hence cannot be considered.

#### Commission's View

The Commission agrees with the response of the Petitioner.



### 3.7 Objectionable Power Purchase from various sources Objection

The power procurement from TPL-G (APP), SUGEN, UNOSUGEN and D-Gen is objectionable as there is no FSA. It is suggested to procure power through competitive bidding.

#### **Response of TPL**

The Petitioner is entrusted with the obligation of supplying electricity in its area of supply i.e. Ahmedabad/Gandhinagar and Surat. The State and Central Commission's Regulations specified under the EA, 2003 provides for long term arrangement of 25 years between the generator and distribution licensee for supply of electricity at regulated tariff irrespective of market fluctuations. Accordingly, the Petitioner has entered into the long term agreements 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 the 25 years in accordance with the provisions of the Regulations irrespective of the level of utilization. At present, the Petitioner's gas based plants are not being fully utilized because fuel is not being allocated 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 Gol is making all possible efforts to address this Short-Term situation. It may kindly be noted that the petitioner's purchase arrangements are with long term approved source of power for 25 years and accordingly, the Short-Term issue of non-availability of gas needs to be seen in long term perspective. Further, the determination of capacity charges and its payment is in accordance with the Regulations of the Commissions.

Regarding Fuel Supply Agreements, it may kindly be noted that AMGEN has necessary coal linkage of indigenous coal. Regarding gas based stations, it may kindly be noted that the same is being governed as per Gol policy for allocation of gas and determination of price. For new gas generating station, the gas is to be allocated when the station is nearing to commence commercial operation. However, due to reduction in gas availability, the gas is not getting allocated as per prevailing government policy despite the Power Sector being accorded highest priority for allocation of gas. The Electricity Act, 2003 seeks a balanced view of the various components, factors and elements of the electricity industry. It also contemplates for increasing the investment in the electricity industry.



#### Commission's View

The response of the Petitioner is noted.

#### 3.8 Sales projections not realistic

#### Objection

The sales figures shown are not realistic as Gujarat is a developing State and reduction in sales is not a plausible scenario.

#### Response of TPL

In the MYT petition the Petitioner had furnished the projected sales for the control period based on historical trend duly taking into account end user surveys and ground situation. As against this, in the MYT order, the approved sales for the control period considered based on 5 year CAGR of FY 2010-11 over FY 2005-06. The sales were abnormally high in the FY 2010-11 due to extreme summer. This has resulted in higher than normal 5 year CAGR. This higher 5 year CAGR was applied on sales of FY 2010-11 for projecting the sales of MYT control period. Thus, the sales figures approved in MYT were higher than projection submitted by the Petitioner. Even after that, material changes have taken place resulting into the reduction in sales it may be noted that the sales forecast FY 2014-15 and FY 2015-16 is based on change in economic scenario.

#### Commission's View

The Commission approved the sales, after prudence check and considering past trend and various factors like 5 year, 3 year and YoY CAGR, the Open Access activity etc.

#### 3.9 Capital Investment Plan

#### Objection

The Commission is requested not to approve Capital Investment Plan in absence of evidence regarding the utilization of funds.

#### Response of TPL

All the requisite information for the present proceedings are already provided in the Petition as required under the GERC (MYT) Regulations, 2011. Further, the Petitioner would like to clarify that the public hearing is to be conducted to get suggestions from stakeholders as per the statutory provisions of the Electricity Act, 2003 and GERC (MYT) Regulations, 2011.



#### Commission's View

The capital investment is required to augment the network to cater to the demand, supply quality power and reduce distribution losses.

#### 3.10 High Investments

#### Objection

The consumers are not at all benefited by high investments as there is no considerable reduction in T&D losses.

#### Response of TPL

The Petitioner has made investments to cater to consumers' load demand and to provide reliable and quality supply to its consumers. It may kindly be noted that the augmentation, up gradation and modernization made in the network have helped the Petitioner in reducing and containing the T&D losses in addition to meeting the load growth and maintaining / enhancing the system reliability.

#### Commission's View

The response of the petitioner is noted.

#### 3.11 Investments in non-regulated areas

#### Objection

The Petitioner has invested in non-regulated areas like Bhiwandi, Agra and Kanpur and that expenditure is booked in its regulated businesses.

#### Response of TPL

Allegations of the Objector are extraneous to the present petition. Further, the Petitioner maintains separate accounts for its regulated business and the same gets certified by the Statutory Auditors of the Company. All the activities carried out by the Petitioner are in conformity with and in consonance with the law of the land.

#### Commission's View

The response of the Petitioner is noted.

#### 3.12 Demand Charges of HTMD Consumers

#### Objection

If the demand charges in a two part tariff are set at a higher level, the energy conservation measures as envisaged under the tariff policy will not be materialized, as there will be lesser incentive for the consumers in reducing their energy consumption. A high component of fixed monthly demand charges in comparison to



the variable monthly energy charges in the tariff will make investments in energy conservation and energy efficiency measures of the consumers commercially unviable.

Further, the demand charges were already increased in FY 2013-14. Therefore, it is submitted that no further increase in demand charges be allowed for the HTMD category. Any further need for increase in revenue requirement, including any need for enhancing the recovery of fixed costs of the licensee may be met through an increase in energy charges instead of demand charges, so as to encourage efficient use of electricity and to promote DSM measures. Similarly, if any reduction of tariff is possible, the same may be put into effect through a reduction in demand charges.

The proposed tariff is-skewed unfavourably on the consumers who are having a lower consumption as they will be paying a higher demand charges disproportionate to their energy consumption in comparison to consumers who are having a higher consumption. It is requested that such a tariff structure wherein in the same tariff category consumers who have lower consumption are charged at a higher rate shall not be approved by the Commission.

Further, considering that true-up of ARR is being made on a regular basis, all the legitimate costs of the licensee are passed over to the consumers through tariff determination and true-up exercises. Therefore, there is no rationale for an increase in demand charges and decrease in energy charges as proposed by the Distribution Licensee.

#### Response of TPL

The Objector's objection is not in consonance with the essence of the statutory provisions of the tariff contained in the EA 2003. The determination of fixed charges should be in accordance with the provisions of Section 45 of the Act and the Tariff Policy. Ideally, the fixed charge component of tariff should recover the entire fixed cost incurred by the licensee for providing services to its consumers and is in line with the standard tariff philosophy of Two Part tariff. The consumer is required to pay for the services made available irrespective of lower utilization else it amounts to cross subsidization i.e. though capacity is created to serve the particular consumer but the same is to be borne by other retail consumers. The same is against the provisions of the Act. The submissions of the Objector therefore needs to be considered also in light of Open Access issues.



The consumer with demand of above 1 MW is allowed to buy power from other than the Distribution licensee including the power exchange by relying on GERC (Open Access Regulations), 2011. Due to lower fixed charges, the consumer above 1 MW maintains the status of retail consumer of the licensee and utilizes the retail connection as standby facilities without paying the total fixed cost to the licensee. The Petitioner submits that if a consumer after availing Open Access does not utilize the booked capacity and if the recovery of fixed charges is to be recovered from energy charges as per existing tariff structure, then there would be under-recovery of fixed cost from such OA consumers. This in turn would be borne by the other retail consumers of the licensee at the time of truing up which is against the intentions of the Section 42 (2) (3) of the Electricity Act, 2003. The Section 42(3) of the Act itself contemplates "non-discriminatory" Open Access.

The Objector's observation, based on para 8.4 of the Tariff Policy, that increase in fixed charges would make the investments in energy efficiency and energy conservation unviable is erroneous. The Tariff Policy provides for the tariff structure which encourages the flattening of the peak. When demand charges reflect the fixed cost, the consumers would be encouraged to make efforts to reduce the peak demand by shifting the load from peak hours to off-peak hours and by utilizing the energy efficient equipment to reduce overall demand. Thus, the increase in demand charges would aid the purpose of demand side management as consumer will be motivated to maintain the uniform load which would help to flatten the load curve. Thus, the proposal to rationalize the demand charges is in accordance with the provisions of Tariff Policy.

#### Commission's View

The Tariff including fixed charges are determined after taking all aspects into consideration.

### 3.13 Disallowing Open Access for part load or part day of operations Objection

The suggestion of the licensee for disallowing Open Access for part load or part of the day operations is totally against the competitive framework as envisaged for the power sector under Electricity Act 2003.

Under the provisions of the Act, the Distribution Licensee is duty-bound to provide non-discriminatory Open Access on payment of wheeling charges and surcharge. The suggestion of disallowing Open Access for part load or part of the day operations



indicates the intent of the Licensee to avoid performing its duties under the Act. Therefore the Commission is requested not to approve the suggestion of the Licensee for disallowing Open Access for part load or part of the day operations.

#### Response of TPL

The issue was decided by the Commission vide its order in Suo Motu Petition in Case No. 1226 of 2012. Notwithstanding the same, the Petitioner would like to submit that the OA is the option given to the consumer to source power from person other the incumbent distribution licensee. However, such OA consumers by their action should not be allowed to load the cost on other retail consumers. The Objector cannot expect preferential treatment for Open Access consumers.

It is a well-established fact that generally the cost of power during peak hours is higher than that during the off-peak hours. It is likely that Open Access consumers may procure the power from market/ other sources only during the off-peak periods and may depend on the licensee during the peak period. This may lead to a situation where the licensee may have to back down the generation during off-peak period and procure costlier power during the peak period. This would lead to overall rise in the power purchase costs along with maintaining the daily load curve and pose additional burden on other consumers thereby leading to an increase in the cross subsidization. Therefore, the Petitioner has reiterated the principle decided by the Commission which is in consonance with the provisions of the Act.

#### Commission's View

The response of the petitioner is noted.

### 3.14 Open Access consumers continuing to maintain their CMD and paying demand charges

#### Objection

The fact that most of the Open Access consumers continue to maintain their contract demand and continue to pay demand charges may also be taken into account by the Commission while determining wheeling charges. Such consumers are already paying a portion of the network charges through their monthly demand charges.

#### Response of TPL

The existing tariff structure does not allow recovery of full fixed cost through the fixed charges. Accordingly, the balance fixed cost is being recovered through the energy charges. Thus, Open Access consumer maintains the contract demand with the



licensee to utilize the contract demand with the licensee as Standby facility and sources power from the exchanges. The Petitioner has proposed the rationalization of demand charges to avoid any burden on other retail consumers in case of under-utilization of the capacity booking retained with the licensee.

#### Commission's View

The response of the Petitioner is noted.

### 3.15 Considering transmission charge in the determination of Cross Subsidy Surcharge

#### **Objection**

When a consumer opts for Open Access, the Distribution Licensee avoids payment of transmission charges for the energy consumed by him, especially in the surplus power scenario as claimed by the Licensee. Therefore the transmission charges shall be considered as part of avoided cost while determining Cross Subsidy Surcharge.

The cost of the distribution licensee to supply electricity to the consumers consist of power purchase charges paid to Generators, Transmission Charges paid to CTU and STU, Transmission Losses applicable to use of CTU and STU lines, and Distribution Licensee's own charges and losses. Therefore Transmission charges being an integral part of the licensee's cost to supply electricity, the same will also have to be considered while calculating Cross Subsidy Surcharge. Transmission charges paid by the Distribution Licensee is a component of its ARR, and due to Open Access the Distribution Licensee's own payables towards transmission charges will decrease which has to be considered in the avoided cost methodology of Cross Subsidy Surcharge computation as given in NTP 2006.

If transmission charges are not made part of power purchase cost, the same has to be considered as part of wheeling charges. This methodology is adopted by the Kerala SERC.

The end effect of both these approaches is to ensure that effect of avoidance of payment of transmission charges by the Distribution Licensee due to a consumer moving to Open Access is also reflected in the Cross Subsidy Surcharge. Failure to do so will cause recovery of transmission charges from OA consumers through Cross Subsidy Surcharge even though the Distribution Licensee does not incur transmission charges of these OA consumers, thereby leading to excess payment by the OA consumers to the Distribution Licensee.



Further, OA consumers will be paying transmission charges for their actual procurement of power, which means that they will be paying transmission charges twice.

#### Response of TPL

The transmission charges are the long term charges based on the capacity booked with the transmission licensee for sourcing of power. The transmission charges have to be paid at the rate determined by the Commission or the Central Commission irrespective of the level of utilization or drawal by the distribution licensee. Accordingly, the contention of the Objector is erroneous that such charges are avoidable. Further, the suggestion, to revisit the formula on the basis of avoided cost method for calculation of Cross Subsidy Surcharge, cannot be part of the present proceedings. It is also pertinent to note that the Objector approbates and reprobates on this issue.

Further, the reliance is made on KERC Tariff Order, wherein transmission charges has been considered in place of wheeling charges for EHV consumers and Transmission plus wheeling Charges considered in place of wheeling charges for HV consumers. In this regard, the Petitioner would like to submit that "Transmission" and "Wheeling" charges are defined separately in the Act and cannot be used interchangeably. The Tariff Policy specifies the consideration of wheeling charges for computation of cross subsidy surcharge. Notwithstanding the above, the KERC order cannot have any bearing in the present proceedings as it is under different Regulation.

The Objector has further contended that Open Access consumers will be required to pay the transmission charges for their actual procurement of power under Open Access. In this regard, the Petitioner would like to submit that any Open Access user including the distribution licensee, who wishes to have any Short-Term Open Access, is required to pay Short-Term Open Access charges for collective/ bilateral transaction in addition to any long/ medium term access availed in accordance with the applicable Regulations. Further, the Open Access is always given with reference to specific injection & drawal point except the collective transactions being carried out by the Power Exchange. Accordingly, all Open Access users are required to pay the transmission charges in accordance with the applicable Regulations.

#### **Commission's View**

The response of the Petitioner is noted.



#### 3.16 CAGR for projections of HT and LT Sales

#### Objection

For HT and other category sale projections for FY 2014-15, petitioner has not submitted CAGR for 3 or 5 years. Therefore it is not possible to comment on derivation of various data. Petitioner is requested to submit HT category sale till Decdetails of 13 compared with Dec-12 and Dec-11. Also requested to give us power purchased by consumers under OA till Dec-13 compared with FY 12-13 and 11-12.

About growth rate of HT category, it is to submit that now southern grid is connected with national grid and will be stabilized soon. Thereafter, exchange price is expected to increase. Commission has approved levy of additional surcharge on Open Access consumers and its amount may be decided in near future. After these, purchase from Open Access would be obviously reduced. Further consumption by HT consumers having CD less than 1000 KW will be added. As such growth rate of sale MUs in HT category should be derived considering all such aspects.

#### Response of TPL

TPL has furnished all relevant information of sales projection at Para 3.3 & 3.4 of its Mid-term Review Petition (Case No. 1366 of 2013) and power purchase details at para 3.10, 3.12 and 3.13 of its Mid-term Review Petition (Case No. 1366 of 2013) in line with the requirements of the GERC (MYT) Regulations, 2011. Regarding the consumption under Open Access, the Petitioner would like to submit that OA facility is being utilized by the consumers from March 2013. The consumption under Open Access for FY 2013-14 till Dec 13 is about 225 MUs.

#### **Commission's View**

The response of Petitioner is noted.



# 4. Mid-term Review of Business Plan for FY 2014-15 and FY 2015-16

#### 4.1 Introduction

In terms of Regulation 16.2 (i) of GERC (MYT) Regulations, 2011, a Mid-term Review of the Business Plan may be sought by the Generating company, Transmission and Distribution Licensees through an application filed three months prior to the filing of the Petition for truing up for the second year of the control period and tariff determination for the fourth year of the control period.

The Generating, Transmission and Distribution Companies shall file applications for Mid-term Review of the Business Plan three months prior to the filing of Truing up for the FY 2012-13 and determination of tariff for FY 2014-15.

#### 4.2 Submission of TPL - D (Ahmedabad)

In accordance with the above provisions, the TPL-D (Ahmedabad) has submitted the Petition for Mid-term Review of the Business Plan for the remaining years of the control period, i.e., FYs 2014-15 and 2015-16.

### 4.3 Summary of the Petition for Mid-term Review for the Remaining Years of the Control Period, i.e., FY 2014-15 and FY 2015-16.

4.3.1 TPL-D (Ahmedabad) has projected the Revised Aggregate Revenue Requirement for FYs 2014-15 and 2015-16 as a part of Mid-term Review process, vis-à-vis the figures approved by the Commission in the MYT Order dated 6<sup>th</sup> September, 2011, as given in the Table below:

Table 4.1: Revised ARR of Ahmedabad Supply Area for FY 2014-15 and FY 2015-16 (Rs. Crore)

		FY 20	014-15	FY 2015-16	
SI. No.	Particulars	Approved in MYT Order	Projected in Mid-term Review	Approved in MYT Order	Projected in Mid-term Review
1	Power Purchase	3,216.68	4,003.17	3,410.33	4,643.66
2	O&M Expenses	220.38	254.58	232.99	264.40
3	Interest on Loans	132.19	68.74	130.71	96.74
4	Interest on SD	17.63	41.02	19.47	45.25
5	Interest on Working Capital	7.62	8.22	7.42	11.53
6	Depreciation	190.78	119.76	207.57	142.54
7	Bad Debts Written Off	1.09	1.50	1.09	1.50
8	Contingency Reserve	0.60	0.60	0.60	0.60
9	RoE	209.93	160.43	221.03	179.75
10	Tax	8.52	-	8.52	-
11	Less: Non-Tariff Income	56.49	64.50	58.18	65.99
12	ARR	3,948.94	4,593.52	4,181.56	5,319.96



### 4.4 Estimation of ARR for the remaining years of control period, FY 2014-15 and FY 2015-16.

The Mid-term Review highlights the following items of ARR for the remaining years of the control period, i.e., FYs 2014-15 and 2015-16.

- Energy Projection
- Distribution Losses
- Energy Requirement and Energy Balance
- Power Purchase
- Capital Expenditure and Funding of CAPEX.
- · Operations and Maintenance Expenses
- Depreciation
- Interest on Loan and Finance Charges
- Interest on Working Capital
- Return on Equity
- Provision for Tax

The Commission has analysed and discussed the energy sales and components of expenditure under the Mid-term Review of the Business Plan in this Section.

#### 4.5 Energy Sales

#### 4.5.1 Projection of Energy Sales for FY 2014-15 and FY 2015-16

#### Petitioner's submission

TPL-D (Ahmedabad) has projected the Energy Sales for FYs 2014-15 and 2015-16, as given in the Table below:

Table 4.2: Projected Energy Sales for Ahmedabad Supply Area for FY 2014-15 and FY 2015-16, along with the Approved Sales in the MYT Order

(MU)

		FY 201	4-15	FY 2015-16	
SI. No.	Category	Approved in the MYT Order	Projected in Mid-term Review	Approved in the MYT Order	Projected in Mid-term Review
1	RGP	2438	2,268	2657	2,411
2	Non RGP	1461	921	1638	975
3	LTP	344		359	
4	LTMD	1087	1,632	1144	1,719
5	HT	1755	1,403	1871	1,434
6	HT Pumping	113	104	115	106
7	Others	71	80	71	84
8	Total	7269	6,408	7855	6,729



In response to a query from the Commission, TPL-D(Ahmedabad), vide its letter dated 05.02.2014, has furnished the category –wise sales for FY 2012-13 and the expected sales for FY 2013-14, as given below:

Table 4.3: Actual Category-wise for the FY 2012-13 and Expected Sales for FY 2013-14

(MU)

SI. No.	Category	FY 2012-13 (Actuals)	FY 2013-14 (Expected)
1	RGP	1965.19	2112.41
2	Non RGP	814.41	863.48
4	LTMD	1487.02	1569.47
5	HTMD	1701.24	1478.89
6	HT Pumping	103.84	101.01
7	Others	84.93	85.54
8	Total	6156.64	6210.81

TPL-D (Ahmedabad) has made the following submissions to justify the projections in general and for different categories, in particular.

- The sales for the MYT control period were approved, by considering a 5 year CAGR of FY 2010-11 over FY 2005-06 for major categories of RGP, Non RGP, LTMD and HTMD. The sales were abnormally high during FY 2010-11 due to extreme summer. This has resulted in higher than normal 5 year CAGR. This higher 5 year CAGR was applied on sales of FY 2010-11 for projecting the sales of the MYT control period. This has had a compounding effect for subsequent years -further widening the gap between MYT approved sales and forecasted sales. The actual sales in FY 2011-12 and FY 2012-13 have been lower than the sales approved in the MYT Order.
- The Commission had approved the sales for FY 2011-12 to FY 2015-16 as per the old tariff categories in the MYT Order. In accordance with the revised tariff schedule specified by the Commission, the RGP, CGP /IGP, LTP and LTMD categories were restructured. The LTP category has since been abolished. Thus, the revised estimates of sales of LT categories are not comparable with the MYT Order for individual categories.
- RGP: In the MYT Order, the Commission had considered a growth of 8.94% over the sales for FY 2010-11 for this category. The actual sales for RGP in the FY 2011-12 and FY 2012-13 are lower than those approved in the MYT Order. The revised sales forecast of RGP category



for FY 2014-15 to FY 2015-16 has been carried out by considering the per capita CAGR of the last 10 years, i.e., 3.44%, considering FY 2012-13 as the base year. For projecting sales, the number of customers as per trends of the previous years, and inputs received from the field survey have been considered.

- Non RGP: The Commission, in the MYT Order, has considered a growth rate of 12.16% over the sales of FY 2010-11 for projecting the sales to CGP category (old category). The Actual Sales for Non RGP in FYs 2011-12 and 2012-13 were lower than those approved in the MYT Order. The revised sales forecast for Non-RGP category for FYs 2014-15 and 2015-16 has been carried out by considering the per capita CAGR (i.e. 2.98%) of the last five years, considering FY 2012-13 as the base year. For projecting the sales, the number of customers according to the trends of the past years and inputs received from the field survey have been considered.
- LTMD: For the MYT Order, the Commission has considered the five years' CAGR at 5.25% over the sales of FY 2010-11. For the forecast for FYs 2014-15 and 2015-16, the five years' CAGR of sales, i.e., 5.29%, with FY 2012-13 as the base year, has been considered.
- HT: The forecast for FYs 2014-15 and 2015-16 is based on the sales to existing customers and addition of new customers and load extensions as per the trend of the previous years. During the control period, the customers having load above 1 MW have been allowed to avail Open Access. As a result, a significant numbers of customers having demand above 1 MW have started sourcing power through Short-Term Open Access from the second half of FY 2012-13. The month-wise loss of sale due to Open Access during FY 2013-14 is as per the Table below:

Month	Apr-13	May-13	Jun-13	Jul-13	Aug-13	Sep-13
Open Access (MUs)	9.00	13.62	15.95	29.30	31.87	34.39

It can be seen from the above data that the actual sales to this category has been impacted and this is increasing month on month. The Petitioner is already processing further applications for Open Access,



which would increase the monthly loss of sales. Therefore, this item needs to be factored in, when carrying out the revised forecast.

The projected loss of sales due to Open Access is based on customers who are already availing Open Access and the number of applications in the pipeline. Based on this, the loss on sale due to Open Access is expected to be 450 MU for FY 2014-15 and 500 MU for FY 2015-16.

- HT Pumping: The Commission has considered the growth rate of 2.04% over the sales of FY 2010-11 during the control period for projecting sales to the HT Pumping category. However, the actual sale was lower than those projected in the MYT control period due to the following reasons:
  - Commissioning of water treatment plant at Raska by the local authority (Ahmedabad Municipal Corporation, i.e., AMC) resulted in lower consumption by the water pumping stations from FY 2011-12 onwards.
  - ii) Old pumps have been replaced by high efficiency new pumps at different water pumping stations - resulting in saving in energy consumption.

For projecting the revised estimates of sales, 10 Years' CAGR (i.e. 2.61%) of sales has been considered over the FY 2012-13.

As regards the actual sales of FYs 2011-12 and 2012-13 and historic trend and the reasons as mentioned hereinabove, the revised estimates of sales for FYs 2014-15 and 2015-16 are 6,408 MUs and 6,729 MUs, respectively.

#### **Commission's Analysis**

The actuals of category–wise sales from FY 2007-08 to FY 2012-13, and five years' and three years' CAGR of FY 2012-13 over the previous years are given in the Table below:

Table 4.4: Category-wise Sales from FY 2007-08 to FY 2012-13

Category	FY 2007-	FY 2008-	FY 2009-	FY 2010-	FY 2011-	FY 2012-	5 Year	3 Year	YOY
Category	08 (MU)	09 (MU)	10 (MU)	11 (MU)	12 (MU)	13 (MU)	CAGR (%)	CAGR (%)	CAGR (%)
RGP	1293	1425	1544	1708	1830.15	1965.19	8.73	8.37	7.38
CGP and	671	781	827	914.56	880.56	814.41	3.95	(0.51)	(7.51)



Catagory	FY 2007-	FY 2008-	FY 2009-	FY 2010-	FY 2011-	FY 2012-	5 Year	3 Year	YOY
Category	08 (MU)	09 (MU)	10 (MU)	11 (MU)	12 (MU)	13 (MU)	1 ( - \( \cdot \cdo	CAGR (%)	CAGR (%)
IGP									
LTP & LTMD	991	1030	1141	1202.74	1303.89	1487.02	8.45	9.23	14.04
HT Pumping stations	91	88	99	98.42	88.31	103.84	2.67	1.60	17.59
HT	1334	1366	1332	1441	1538.67	1701.24	4.98	8.50	10.57
Others	112	67	76	78.1	79.73	84.93	(5.38)	3.77	6.52
Total	4492	4757	5019	5442.82	5721.31	6156.63	6.51	7.05	7.61

Since the Petitioner has submitted that all the LT categories have been restructured, in accordance with the revised Tariff Schedule specified by the Commission, the estimated sales of LT categories are not comparable with the MYT Order for individual categories.

Hence, it has been decided to compare the sales of all LT categories together with those of the earlier years for arriving at the CAGR and projections for FYs 2014-15 and 2015-16.

Table 4.5: 5 Years' and 3 Years' CAGR of sales, with 2012-13 as the Base Year

Category	FY 2007- 08 (MU)	FY 2008- 09	FY 2009- 10 (MU)	FY 2010- 11 (MU)	FY 2011- 12	FY 2012- 13	5 Year	3 Year	YOY CAG R
	(IVIO)	(MU)	(IVIO)	(IVIO)	(MU)	(MU)	R (%)	R (%)	(%)
All LT Categories	2955.00	3236.00	3512.00	3825.30	4014.60	4266.62	7.62	6.70	6.28
HT Pumping Stations	91.00	88.00	99.00	98.42	88.31	103.84	2.67	1.60	17.59
HT	1334.00	1366.00	1332.00	1441.00	1538.67	1701.24	4.98	8.50	10.57
Others	112.00	67.00	76.00	78.10	79.73	84.93	-5.38	3.77	6.52
Total	4492.00	4757.00	5019.00	5442.82	5721.31	6156.63	6.51	7.05	7.61

#### LT Sales

It could be seen that the five Years' CAGR has been 7.62% and the three years' CAGR, 6.70%, whereas YoY sales growth was 6.28% for the entire LT sales.

The Commission considers, it is reasonable to adopt 5 year CAGR, for all the LT categories put together and approves sales accordingly and apportion these approved sales for individual categories for FY 2014-15 and FY 2015-16, in the ratio of actual sales for FY 2012-13.



Based on the above, the approved sales for individual LT Categories are as given in the Table below:

#### **Approved Sales for LT categories**

(MU)

Category	FY 2012-13 (Actuals)	FY 2014-15 (Approved)	FY 2015-16 (Approved)
All LT Categories together	4266.62	4942	5318
RGP	1965.19	2276	2449
Non-RGP	814.41	943	1015
LTMD	1487.02	1723	1854
Total		4942	5318

#### **HT Pumping**

The five years' and three years' CAGRs of HT Pumping sales are 2.67% and 1.60% respectively and YoY growth has been 17.59%. TPL-D (Ahmedabad) has considered 0% growth over FY 2012-13 for FY 2014-15 and projected the sales of 104 MU and 2% growth for FY 2015-16 over FY 2014-15 and projected the sales of 106 MU for FY 2015-16.

The Commission considers it reasonable to adopt the 5 years CAGR of 2.67% for this category, as the pumping activity is bound to increase with increase in population. Thus the sales of this category are approved at 109 MU for FY 2014-15 and 112 MU for FY 2015-16.

#### HT

It is observed that the growth in sales of this category has been 4.98% for a five year period (FY 2008 -09 to FY 2012-13), 8.50% for a three year period (FY 2010-11 to FY 2012-13) and 10.57% during FY 2012-13 over FY 2011-12.

The Petitioner projected sales of 1403 MU for FY 2014-15 and 1434 MU for FY 2015-16, against the actual of 1701 MU during FY 2012-13, and the approved sales of 1755 MU and 1871 MU during FY 2014-15 and FY 2015-16 respectively in the MYT Order. It is submitted by the Petitioner that a significant number of consumers having demand above 1 MW have started sourcing power through Short-Term Open Access from the second half of FY 2012-13 and this trend is increasing month on month. It is submitted that loss on sale due to Open Access is anticipated to be 450 MU for FY 2014-15 and 500 MU during FY 2015-16.

It is observed, for the sales of this category, the 5 year CAGR, 3 year CAGR and YoY growth up to FY 2012-13 has been 4.98%, 8.50% and 10.57% respectively. The



consumers having demand above 1 MW only, source power through Short-Term Open Access.

It is considered that the drop in consumption during FY 2014-15 and FY 2015-16, due to Short-Term switching over to Open Access will be made good by the growth in consumption by the additional connections in this category including those connections of less than 1 MW.

Hence it is considered reasonable to consider the sales in this category at a growth rate of 5 year CAGR (4.98%) from FY 2012-13. Thus, the sales for HT category for FY 2014-15 and FY 2015-16, are approved at 1875 MU for FY 2014-15 and 1968 MU for FY 2015-16.

#### **Others**

The five years' CAGR under this head is (-)5.38% and the three years' CAGR is 3.77% and YoY growth is 6.52%. Since there is no consistency in the growth of sales of these consumers, the sales are considered at the level of FY 2012-13 and approved accordingly, at 85 MU for FY 2014-15 and FY 2015-16.

## Approved Category-wise Energy Sales for the FY 2014-15 and FY 2015-16

Based on the above discussions and decisions, the category-wise sales approved are as given in the Table below:

Table 4.6: Category-wise Sales approved for the FY 2014-15 and FY 2015-16 for the purpose of Mid-term Review of Business Plan

(MU)

SI. No.	Category	FY 2014-15	FY 2015-16
1	RGP	2276	2449
2	Non RGP	943	1015
4	LTMD	1723	1854
6	HT	1875	1968
7	HT Pumping	109	112
8	Others	85	85
9	Total	7011	7483

Thus, the Commission approves the energy sales for TPL-D (Ahmedabad) at 7011 MU and 7483 MU for FY 2014-15 and FY 2015-16 respectively.

## 4.6 Distribution Losses

The TPL-D (Ahmedabad) has projected the following distribution losses for FYs 2014-15 and FY 2015-16, for Mid-term Review:



Table 4.7: Projected Distribution Losses for FY 2014-15 and FY 2015-16

SI. No.	Particulars	FY 2014-15	FY 2015-16
1	Distribution Losses	8.50%	8.50%

#### Petitioner's submission

TPL-D (Ahmedabad) has submitted that it has witnessed a higher growth in LT Load, as compared to the HT load growth. This would lead to higher load through LT network leading to higher distribution losses since technical losses are higher in the LT Network.

TPL-D has been compelled to restrict the spending on Capex due to severe financial constraints. In the light of this situation, TPL-D has been forced to restrict the capital expenditure for meeting load growth and critical safety requirements, as well as for containing the increase in technical losses.

However, for the purpose of projections, TPL-D has considered the normative distribution losses approved by the Commission in the MYT Order for FYs 2014-15 and 2015-16.

## **Commission's Analysis**

The Commission, in the MYT Order dated 6<sup>th</sup> September, 2011, considered the distribution loss at 8.50% for the entire MYT Period. The actual losses are 8.18%, 7.53% and 7.25% for FY 2010-11, FY 2011-12 and FY 2012-13 respectively, which shows a reducing trend. The very purpose of Mid-term Review is to consider the performance and review the parameters where ever necessary. Hence, it is considered reasonable to approve the losses at the average of losses of FY 2010-11, FY 2011-12 and FY 2012-13 which works out to 7.65% for the FY 2014-15 and FY 2015-16. Thus, the distribution losses are approved for the purpose of Mid-term Review as given in the Table below:

Table 4.8: Approved Distribution Losses for FY 2014-15 and FY 2015-16 for Mid-term Review of the Business Plan

SI. No.	Particulars	FY 2014-15	FY 2015-16
1	Distribution Losses	7.65%	7.65%



# 4.7 Energy Requirement and Energy Balance

## 4.7.1 Energy Requirement

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

#### Petitioner's submission

The TPL has submitted that since power purchase is being arranged for Ahmedabad and Surat Supply Area on collective basis, the revised energy requirements for FYs 2014-15 and 2015-16 for Ahmedabad and Surat Supply Areas have been estimated, considering the revised estimates of sales, approved distribution losses and the prevailing transmission losses.

## **Commission's Analysis**

The Commission approved the energy requirement for Ahmedabad and Surat Supply areas, as per the approved sales, distribution losses and Transmission losses. The Transmission losses have been approved, as projected by the TPL-D.

The approved Energy Requirement is given in the Table below:

Table 4.9: Approved Energy Requirement of TPL-D for FY 2014-15 and FY 2015-16

		FY 20 <sup>-</sup>	14-15	FY 20	15-16
SI. No.	Particulars	Projected in Mid-term Review	Approved in Mid-term Review	Projected in Mid-term Review	Approved in Mid-term Review
Ahm	edabad Supply Area				
1	Energy Sales (MU)	6407.65	7011	6729.07	7483
2	Distribution Loss (%)	8.50%	7.65%	8.50%	7.65%
3	Distribution Loss (MU)	595.25	581	625.10	620
4	Energy input at Distribution level (MU)	7002.89	7592	7354.17	8103
5	Transmission Loss	117.52	118.00	155.41	155.00
6	Energy Requirement (A)	7120.41	7710	7509.58	8258
Sura	t Supply Area				
7	Energy Sales (MU)	3235.61	3212	3310.24	3247
8	Distribution Loss (%)	5.15%	4.50%	5.15%	4.50%
9	Distribution Loss (MU)	175.81	151	179.86	153
10	Energy input at Distribution level (MU)	3411.42	3363	3490.10	3400
11	Transmission Loss	47.34	47.00	32.19	32.00
12	Energy Requirement (B)	3458.75	3410	3522.29	3432
13	Total Energy Requirement (A+B) (MU)	10579.17	11120	11031.87	11690



# 4.7.2 Energy Availability

## **Petitioner's Submission**

The Petitioner has submitted the source-wise likely Power Purchase as per revised estimates, which are furnished in the Table below:

Table 4.10: Projected Energy Availability of TPL-D for FY 2014-15 and FY 2015-16

FY 2014-15 FY 2015-16 Projected in Projected in Approved in the Approved in **Energy Sources** Mid-term Mid-term MYT Order the MYT Order Review Review 2835.10 TPL - G (APP) 2901.14 2.936.66 2.533.41 **SUGEN** 5797.68 4,458.84 6235.87 6,262.99 **DGEN** 2623.86 2786.54 2,160.86 1855.68 Bilateral 66.58 Wind 216.74 398.18 807 82.82 83.05 Solar 852.62 **Biomass** Power Exchange 205.84 1,172.05 322.83 334.79 12335.52 10,722.78 **Sub-Total** 13032.91 11,839.87 143.62 Less: Sale of Surplus Power/UI 808.00 12335.52 10,579.17 13032.91 11,031.87 Total

The Petitioner has also submitted that the Commission had approved source-wise energy availability for the MYT Period, including FYs 2014-15 and 2015-16. However, the same is likely to change for the reasons enumerated hereunder;

**SUGEN (Including expansion):** SUGEN includes its expansion by capacity addition of UNIT 40, i.e., UNOSUGEN. The Petitioner has estimated the off take, based on the current supply of gas, as per existing agreements and its estimates of domestic gas availability. It has not considered any further availability of LNG, though available, for the purpose of present working.

**DGEN:** This inter-state generating station is in the final stage of commissioning. The availability of the generating station has been considered from 1<sup>st</sup> April, 2015. In the present working, the off take from the station has been estimated, based on the likely availability of domestic gas for FY 2015-16. It has not estimated the generation from LNG, though spot LNG is available.

**TPL-G (APP):** During the MYT period, the retirement of C Station was proposed from FY 2014-15 onwards, subject to a review of the operating conditions. Based on the current site conditions and preliminary study, C Station can still remain in operation by strengthening certain parts of the plants and its building. Accordingly, it is proposed to keep C Station in operation in the interest of all stakeholders.



Further, Vatva Station has completed 23 years in operation, as against its life of 25 years. Due to non-availability of domestic gas and higher cost of RLNG/ Spot Gas, the Vatva CCPP had to be kept in wet preservation mode. Hence, due consideration needs to be given to the following factors:

- The station is nearing completion of its life in the next two years. Therefore, the continuation of the existing generating station necessitates major capital expenditure for life extension of the station.
- The SHR of this old generating station is higher than the new gas generation added with advanced technology. Further, the price of domestic gas is likely to increase and therefore, the implication of difference in SHR is likely to increase further.
- The tenures of the existing gas agreements expire on 31.03.2014. The renewal of gas agreement requires the commitment for Take/ Pay at new gas price, along with Ship/ Pay for gas transportation for the next five years.

Hence, considering the financial implications of the above factors, it is proposed to retire the Vatva Generation facilities.

Accordingly, the revised utilisation of Ahmedabad Generation Facilities is estimated, considering the availability of C – Station and retirement of Vatva CCPP for FYs 2014-15 and 2015-16.

## **Commission's Analysis**

The Commission considers that it is reasonable to consider the availability from different sources, as mentioned below:

- TPL-G APP: The availability from TPL-G APP is considered as approved in the Mid-term Review of the generation business plan.
- DGEN: No availability is considered from this source as tariff for the energy from this source is not determined/adopted by the Commission.
- SUGEN: The SUGEN expansion is not considered by the Commission, as tariff for the energy from this source is also not determined by the Commission. Accordingly, the energy availability from SUGEN existing plant is considered by the Commission at 3345 MU and 4698 MU for FYs 2014-15



and 2015-16, respectively based on the assumptions made by TPL regarding current supply of gas as per existing agreements and its estimate of domestic gas availability. The Commission has also not considered any further availability of LNG.

- From bilateral sources the energy availability is considered as projected by TPL-D.
- In case of renewable energy sources the availability is considered as per prevailing renewable energy purchase obligation (Wind energy @ 6.25%, Solar energy @ 1.25% and Bio-mass/Biogas/others @ 0.50% of the energy requirement.
- The balance energy availability is considered from power exchange.

Thus, the availability, as approved by the Commission is as given in the Table below:

Table 4.11: Power Availability considered by the Commission

		(1110)
Energy Sources	FY 2014-15	FY 2015-16
TPL-G(APP)	2953	2548
SUGEN	3345	4698
DGEN	0	0
GUVNL/Bilateral	1855.68	66.58
Wind	695	730.63
Solar	139	146.13
Bio-mass	55.56	58.45
Power Exchange	2076.72	3442.21
Total	11120	11690.00

#### 4.8 Power Purchase

#### Petitioner's submission

The source-wise power purchase cost projected by the Petitioner is given in the Table below:

Table 4.12: Projected Source-wise Capacity Charges for TPL-D Supply Area for FY 2014-15 and FY 2015-16

(Rs. Crore)

			(113. 01010)
SI. No.	Particulars	FY 2014-15	FY 2015-16
1	TPL - G (APP)	345.14	356.46
2	SUGEN (including expansion)	1,157.23	1,164.75
3	DGEN	-	580.97
4	Total Capacity Charges	1,502.37	2,102.18
5	Transmission Cost	48.98	195.92
6	Total	1,551.35	2,298.11



Table 4.13: Projected Source-wise Variable Purchase Rate for TPL-D Supply Area for FY 2014-15 and FY 2015-16

(Rs./kWh)

SI. No.	Particulars	FY 2014-15	FY 2015-16
1	TPL - G (APP)	3.17	3.11
2	SUGEN (including expansion)	4.66	4.61
3	DGEN	-	4.07
4	Bilateral	3.95	3.95
5	Wind Energy	3.43	3.22
6	Solar	9.98	9.98
7	Biomass	-	-
8	Power Exchange	4.00	4.00

Table 4.14: Projected Source-wise Power Purchase Cost for TPL-D Supply Area for FY 2014-15 and FY 2015-16

(Rs. Crore)

SI. No.	Particulars	FY 2014-15	FY 2015-16
1	TPL - G (APP)	1,277.26	1,145.26
2	(SUGEN incl. Expansion)	3,284.03	4,149.95
3	TPL-G (DGEN)	-	1,558.41
4	Bilateral	732.99	26.30
5	Wind Energy	74.44	128.16
6	Solar	82.66	82.87
7	Biomass	-	
8	Power Exchange	468.82	133.92
	REC	99.31	80.20
	Total	6,019.51	7,305.07

Table 4.15: Projected Total Power Purchase Cost for TPL-D Supply Area for FY 2014-15 and FY 2015-16

(Rs. Crore)

SI. No.	Particulars	FY 2014-15	FY 2015-16
1	Total Power Purchase Cost	6,019.51	7,305.07
2	Revenue from Sale of Surplus Power	56.01	315.12
3	Net Power Purchase Cost	5,963.50	6,989.95

The Petitioner has made the following submissions regarding the power purchase projections:

The Source-wise power purchase cost rate is projected as follows:

- □ TPL-G (APP): The power purchase cost of TPL − G (APP) is based on the Transfer Price arrived at from ARR computation of TPL-G (APP).
- SUGEN (Including expansion): The power purchase cost has been arrived at in accordance with the norms specified by the Hon'ble CERC in its Tariff Orders.
- D-GEN: The power purchase cost from this source is based on the provisional costing. Since this plant would be inter-state generating station, the tariff of



this project would be as per the tariff determined by the Hon'ble CERC.

- Bilateral/ Power Exchange: The rates for purchase of power from these sources are based on ongoing contracts and the estimate of likely prices.
- Renewable Power: TPL has estimated the purchase of power from the renewable energy sources to fulfil the Renewable Power Purchase Obligation, in accordance with the GERC (Procurement of Energy from Renewable Sources) Regulations, 2010. Accordingly, TPL has arrived at the renewable power purchase cost at the tariff rates approved by the Commission vide the respective Tariff Orders. It has also considered the cost of power purchase from the estimated capacity addition. The Petitioner has proposed to fulfil the shortfall in RPO through purchase of REC.

The Petitioner has also made the following submissions regarding Renewable Power Purchase Obligation:

- Clause 4.1 of the GERC (Procurement of Energy from Renewable Energy Sources) Regulation, 2010, specifies the Renewable Power Purchase Obligation (RPPO) for FYs 2010-11, 2011-12 and 2012-13. TPL-D has been making all efforts to fulfil its RPPO.
- In order to estimate the requirement of renewable power for FY 2014-15 and FY 2015-16, TPL-D has considered the RPPO at the same percentage as for FY 2012-13, as provided for in the Regulation. The efforts made to fulfil the RPPO are enumerated hereunder:

#### **Wind Power**

Currently, TPL sources 50 MW wind power from M/s GPEC under a PPA signed with M/s GPEC. It also procures the surplus power from the captive Renewable consumers.

In order to fulfil the obligation, as specified in the Regulations, TPL has repeatedly published (eight times) public notices inviting Expression of Interest (EOI) for supply of power from the renewable energy sources. In the current year, TPL has issued notices on 2<sup>nd</sup> August, 2013 and 18<sup>th</sup> November 2013 in the leading newspapers in Gujarat and in India covering major cities both at state and national levels.



However, the Petitioner has received a very limited response from the developers. In response to an advertisement in August 2013, one wind developer submitted an EOI for supply of wind power @ Rs. 6 per unit, which is higher than the tariff determined by the Commission. TPL has requested the developer to adhere to the Commission approved tariff.

The Commission, in the tariff order dated 16.04.2013, has directed the Petitioner to explore the possibility of procuring renewable energy to meet RPO obligations by entering into agreements with developers, instead of depending entirely on the purchase of REC, which will burden the consumers, without obtaining corresponding power for the cost paid in respect of REC. However, as can be seen from the above, despite all efforts, the Petitioner is unable to fulfil its obligation due to supply constraints since developers are not willing to sell power at the tariff determined by GERC. Since TPL is not able to get wind power at a preferential tariff, TPL has to purchase RECs to fulfil its obligation.

Hence, TPL has decided to develop 100 MW wind generation on its own fulfilment of its RPPO. Out of 100 MW, TPL-D proposes to allocate 65 MW to Ahmedabad license area and 35 MW to Surat license area. TPL-D expects to commission the generation from October 2015, considering the time for development and other approvals. TPL also estimates that it would be able to tie up another 50 MW wind power with an external party from 1<sup>st</sup> April 2015. The balance shortfall is proposed to be met by purchasing RECs.

Accordingly, TPL has considered compliance of wind RPO for FY 2014-15 & FY 2015-16. It has also estimated the procurement of surplus power from the captive renewable consumers.

#### **Solar Power**

TPL-D has tied up 50 MW solar power with M/s Kindle Engg. & Construction Pvt Ltd. The developer has intimated that the project would be commissioned by the revised Scheduled COD (March 2014), as approved by the Commission. The Petitioner has also signed 5 MW Gandhinagar Solar Roof Top PPA. The Roof Tops are being commissioned in phases.

#### **Others**

TPL has not received any offers to supply power at Commission approved rates in the **others** category.



# Renewable Energy Certificates (RECs)

The Petitioner submits that the compliance of RPPO, by purchasing RECs, adds to the burden on the customer. The Petitioner has considered the purchase of RECs to the extent of shortfall in RPO compliance though it adds to the woes of the Petitioner in terms of the burden on the existing acute cash flow situation, since purchase of RECs is not allowed as a pass through, even in the modified approved FPPPA formula. Accordingly, TPL-D earnestly requests the Commission either to allow recovery of REC through FPPPA, or to waive the shortfall in RPPO compliance in case of non-availability of renewable power, despite repeated efforts due to supply constraints at the time of truing up. Based on the above, it has estimated the renewable power purchase obligation in the following Table.

Table 4.16: RPPO for Ahmedabad Supply Area in FY 2014-15 and FY 2015-16

(MU)

SI. No.	Particulars	FY 2014-15	FY 2015-16
1	Energy Requirement	7,120.41	7,509.58
2	RE Procurement		
3	Wind energy to be procured (@6.25%)	445.02	469.35
4	Solar energy to be procured (@1.25%)	89.05	93.86
5	Biomass/Bagasse/Others (@0.50%)	35.60	37.55
6	Total (8.00%)	498.43	525.67
7	Compliance (Non-Solar)		
8	Wind	67.79	176.52
9	Biomass/others	-	-
10	Non-Solar REC	359.43	274.05
11	Compliance	427.22	450.57
12	Compliance (as % of Energy Requirement)	6.00%	6.00%
13	Compliance (Solar energy)		
14	Solar	49.69	49.83
15	Solar-REC	21.51	25.27
16	Compliance	71.20	75.10
17	Compliance (as % of Energy Requirement)	1.00%	1.00%
18	Shortfall		
19	Non-Solar	-	-
20	Solar	-	-
21	Total	-	-

## **Commission's Analysis**

After analysing the submissions of the Petitioner, the Commission has decided to consider the source-wise power purchase cost, based on the following:

 For TPL-G (APP) station, it has been decided to consider the fixed and variable costs, as approved in the Mid-term Review of Generation Business Plan for FYs 2014-15 and 2015-16 for TPL-G (APP).



- ii. With regard to GUVNL/Bilateral, M/s TPL has entered a power purchase agreement with GUVNL for purchase of power on Short-Term basis. The PPA provides for a rate of Rs. 3.40/ kWh for RTC power (0.00 to 24.00 Hrs.) and Rs. 3.80/ kWh for day power (9.00 to 21.00 Hrs.) with take or pay provision. TPL may not be requiring power on RTC basis, hence the purchase of power at Rs. 3.80/kWh is considered for drawal of entire power as per PPA.
- iii. For purchase from SUGEN, the power purchase cost per kWh has been considered, as per actual fixed cost, actual transmission cost and actual variable charge (Rs./kWh) as approved in the True-up for FY 2012-13.
- iv. Purchase from renewable sources, the power price (Rs./kWh) is considered as prevailing tariff orders issued by GERC for respective renewable energy sources.
- v. For purchase from Power Exchange the price is also considered as Rs. 3.91/kWh which is the rate approved in the truing up for FY 2012-13 which also compares well with present market rate.
- vi. As the Commission has anticipated energy availability from renewable sources to the extent of prevailing RPPO, REC cost is not considered.

Based on the above, the source-wise power purchase cost is approved, as given in the Table below:

Table 4.17: Source-wise Power Purchase Cost approved by the Commission for TPL-G (APP)

SI a			FY 2014-15		FY 2015-16		
No.	Energy Source	Quantity	Rate	Cost	Quantity	Rate	Cost
NO.		(MU)	(Rs./kWh)	(Rs. Cr.)	(MU)	(Rs./kWh)	(Rs. Cr.)
1	TPL-G(APP)	2953	3.99	1178.25	2548	4.13	1052.32
2	SUGEN	3345	5.86	1960.17	4698	5.86	2753.03
3	DGEN	0	0	0.00	0	0	0.00
4	GUVNL/Bilateral	1855.68	3.80	705.16	66.58	3.80	25.30
5	Wind	695	4.21	292.60	730.63	4.21	307.60
6	Solar	139	9.63	133.86	146.13	9.63	140.72
7	Bio-mass	55.56	5.04	28.00	58.45	5.04	29.46
8	Power Exchange	2076.76	3.91	812.01	3442.21	3.91	1345.90
9	Total	11120		5110.04	11690.00		5654.33

Any variations in the above cost can be passed on to the consumers through FPPPA/True-up.

## **Surplus Power**

The total energy available from various sources is as per the energy requirement of TPL-D, hence there is no surplus energy which can be projected for sale.



#### **Net Power Purchase Cost**

The approved power purchase cost is allocated to Ahmedabad and Surat Distributions in proportion to the respective energy requirements, as given in the Table below:

Table 4.18: Approved power purchase cost for Ahmedabad and Surat Areas

Rs. Crore

SI. No	Distribution	FY 2014-15	FY 2015-16
1	Total Power Purchase Cost	5110.04	5654.33
2	For Ahmedabad	3543.02	3994.31
3	For Surat	1567.02	1660.02

# 4.9 Capital Expenditure Plan

TPL-D has projected the capital expenditure in the Mid-term Review at Rs. 279.34 Crore for FY 2014-15 and Rs. 762.70 Crore for FY 2015-16, as against Rs. 650.58 Crore and Rs. 302.51 Crore approved for FY 2014-15 and FY 2015-16 respectively in the MYT Order. The details are as given in the Table below:

Table 4.19: Capital Expenditure of TPL-D in FY 2014-15 & FY 2015-16

(Rs. Crore)

SI. No.	Particulars	Approved in	MYT Order	Projected in Mid-term Review	
NO.		FY 2014-15	FY 2015-16	FY 2014-15	FY 2015-16
1	EHV	177.35	137.90	132.92	169.46
2	HT Network	84.42	85.83	63.45	86.72
3	LT Network	45.32	47.12	53.25	57.64
4	Metering	21.89	22.30	18.3	19.7
5	Special Projects	2.14	2.14	6.18	7.45
6	IT & related expenditure	8.09	4.76	3.34	5.33
7	Distribution Administration	4.38	2.46	1.9	10.15
8	Sub Total	343.59	302.51	279.34	356.45
9	Special initiatives on Safety	307.00	-	-	1
10	Total	650.58	302.50	279.34	356.45
11	Capital Expenditure for Own Wind Power Generation Project				406.25
12	Grand Total	650.59	302.51	279.34	762.7

## Petitioner's submission

The Petitioner had planned to undertake prudent capital investments for the MYT Control Period for augmentation and up-gradation of distribution network with the following major objectives:

 To meet the anticipated load growth in the MYT period and also keeping in mind the long term forecast.



- Provide reliable power to customers.
- Maintain optimal level of Distribution Losses
- Maximize safety of the network.
- Provide better customer services.

However, TPL-D has been compelled to restrict the spending on Capex due to severe financial constraints as a result of inadequate tariff rise. In the light of this situation, TPL-D has been forced to restrict the capital expenditure for meeting load growth and critical safety requirements. The majority of the Capex planned for enhancing reliability and improving redundancy had to be deferred from FYs 2011-12 and 2012-13 to FYs 2014-15 and 2015-16. Further, it has deferred some major EHV projects and procurement of land for the planned substation, keeping in mind the load growth. Despite the curtailment of Capex, TPL-D has been able to maintain its high standard of reliability due to hard work of its employees and good maintenance practices. However, such a situation and resultant reliability cannot continue indefinitely. Further, it may kindly be noted that TPL-D has not been able to spend on the special initiatives on safety.

The major variances on the revised expenditure against the approved are detailed as under.

- a. EHV The Petitioner has reviewed the capital expenditure plan for the MYT 2<sup>nd</sup> Control Period to meet the long-term demand and to ensure the reliability of the network.
  - Bulk Supply Point: For importing power from the 1200 MW DGEN gas based generating station to Ahmedabad, a new 400 KV substation is planned near Gota. Due to the need to curtail Capex, at present TPL-D has decided to upgrade the existing 220 KV Nicol –2 substation to 400 KV, instead of establishing the new substation and the associated evacuation infrastructure. The bulk supply point planned at Gota has been deferred beyond the current MYT control period. The minor work for switchyard modification at Nicol-2 has already been carried out in FY 2011-12 and FY 2012-13. Major works are planned to be executed in FYs 2014-15 and 2015-16.
  - EHV Lines: The project of laying a 132 KV line/cable from Nicol –1 to Airport, via Naroda substation, and upgrading of Naroda substation to 132 KV, as well as up-gradation of 66 KV SBI- Gandhinagar Line to



132 KV, which were initiated during FY 2011-12 are proposed to be completed in FY 2014-15. The uprating of the 132 KV line to 400 KV from Pirana to Vinzol was completed in FY 2012-13. The section from Vinzol to Vastral will be uprated in FY 2014-15.

The 400 KV Nicol –2 import point will be connected with PGCIL (CTU) network by LILO of Dehgam-Pirana line of PGCIL. This new scheme has been necessitated because of upgradation of Nicol-2 substation from 220 KV to 400 KV. It is proposed to uprate the 132 KV Nicol-2 to Nicol-1 line conductor by ACCC Conductor (Aluminium Conductor Composite Core) to enhance the evacuation capacity of Nicol-2.

It may kindly be noted that due to fund constraints, TPL-D has deferred the major scheme of 132 KV inter-connection between Dudheshwar and Pirana beyond the control period. The scheme for 220 KV D/C line between Nicol-2 and Dehgam has been dropped, as Nicol-2 is being upgraded to 400 KV.

• EHV Substations: The work for upgradation of Gandhinagar switchyard from 66 KV to 132 KV has been completed. However, the replacement of Transformers from 66 KV to 132 KV has been deferred since the Sabarmati-Gandhinagar line upgradation work is pending. This project is now proposed to be completed during FY 2014-15. Further, the work on 132 KV substation at IT Park has been initiated and is going to be undertaken in a phased manner by FY 2015-16. Also, it is proposed to commission additional power transformers at various EHV substations during FY 2014-15, for meeting load growth and enhancing system reliability, based on revised network configuration.

The Capex for 132 KV substations proposed at various locations, such as Lambha, Motera, and River Front and Upgradation of Jamalpur substation to 132 KV have now been deferred beyond the control period, considering fund constraints. Even the land procurement of substations at various locations, such as Koba and City (400 KV each), Ranip (132 KV) and Nehrunagar (220 KV), have been deferred beyond FY 2015-16.



- 33 KV substation: The revised Capex proposed under this head is mainly the deferred Capex of the projects approved in the past years of the control period. In FY 2014-15, it is proposed to incur expenditure pertaining to 33 KV substations at New Ranip, Gujarat University, Sumel, SG Road (New High Court). Similarly, in FY 2015-16, expenditure for 33 KV substations at New Naroda, CTM and New Vadaj are proposed to be incurred. Simultaneously, the expenditure proposed for 33 KV substations at Gandhinagar, Ashram Road, Nehrunagar and Mother dairy have now been deferred beyond the control period.
- Others: A new activity of 11 KV re-arrangement at EHV substations for load balancing of transformers is planned in FY 2014-15 and FY 2015-16. The expenditure incurred on old switchgear/ breaker replacement, under the head of renovation and replacement, was considered in MYT under the head of Special Safety, but is now proposed to be incurred under the head of others. The expenditure planned under upgradation, support infrastructure and Automation has been curtailed due to fund constraints.
- b. HT The major portion of Capex under this head is meant for establishing new Distribution Substations and creating an 11 KV network for meeting the load demand of new and existing customers. TPL-D is required to install distribution substations to meet additional load requirement of existing, as well as new, customers and to maintain the existing level of losses. However, due to restriction of Capex, TPL-D has subsequently reduced the planned quantity of new substations and transformers replacements. This may increase the loading of the existing network.

Based on the trend of applications for New HT consumers, TPL-D has proposed higher Capex for FY 2014-15 and 2015-16. Further, higher expenditure is proposed under the head of reactive compensation since the activity was curtailed in FY 2011-12 and FY 2012-13. This is intended to ensure lower level of system loss. The expenditure for old HT switchgear replacement and HT overhead to underground conversion has been considered under the respective heads.



As explained above, the expenditure on activities for reducing fault and improving reliability of the network had to be curtailed or deferred. This will impact the customer service parameters, reliability indices like SAIFI, SAIDI and may also result in increase in technical losses.

- c. LT The spending under this head is estimated to be higher than that approved in the MYT Order due to substantially higher number of applications received and connections released during the current MYT period. However, the Petitioner has proposed to restrict the spending on load balancing and load management due to fund constraints.
- d. Metering The proportion of recycled and reused meters has increased considerably. This has led to incurring lower Capex in this area for the past period. Accordingly, the Capex proposed for FY 2014-15 and 2015-16 has been revised.

#### e. Others -

- . **Special Project:** Geographical Interface System (GIS) would facilitate a number of applications like distribution network mapping, consumer database indexing, network analysis and load flow studies, outage management, energy audit and customer services. The GIS project has been deferred from the earlier years and is now planned to be completed in FY 2014-15. The Capex planned in FY 2015-16 is for opening Customer Interaction Centres (CIC) for providing single window services to the customers near their location. The CIC is planned for the convenience of the customers and for enhancing the experience of the services provided by TPL-D. However, TPL-D has dropped the Capex planned for Automatic meter reading (AMR) and some testing equipments to restrict the expenditure.
- ii. Administration Distribution Power Supply Centres (PSC), which were planned in 2013-14 for reducing the attendance time for faults/ complaints, have been deferred to FY 2015-16. Some items under Office equipment, furniture fixture and vehicle have been curtailed/ deferred due to fund constraints.
- iii. **IT & related projects –** The Capex for IT infrastructure, like computers, software, planned under this head has been scaled down



due to fund constraints. The data archiving project is planned to be taken up in FY 2014-15, wherein data which is no longer required for online processes will be sent to an archive and deleted from the database.

f. Capex for setting up own wind power generation project – As mentioned in the earlier section of 'Renewable Power Purchase Obligation', TPL-D is setting up its own wind power generation project of 100 MW. Out of the total 100 MW, 65 MW has been allocated to TPL-D (A). The capital expenditure is to be incurred for the erection and commissioning of the project. In this regard, TPL-D (A) has proposed to incur an expenditure of Rs. 406.25 Crore in FY 2015-16.

Particulars Particulars	FY 2014-15	FY 2015-16
Own Wind Power Generation Project	-	406.25

## **Commission analysis**

TPL-D has considered the capital expenditure of Rs. 306.99 Crore for FY 2013-14 as approved in the MYT Order. It is observed that TPL-D has projected a much lower capital expenditure for FY 2014-15 and a higher Capital Expenditure for FY 2015-16 in the Mid-term Review as compared to what was approved for the respective years in the MYT Order. However, TPL-D has explained the reasons for the variation in capital expenditure revised for FYs 2014-15 and 2015-16 by stating that the higher capital expenditure is mainly on account of deferment of works that could not be taken up in FY 2011-12 and FY 2012-13. TPL has further explained that it has deferred some major EHV projects and procurement of land for the planned substations, keeping in mind the load growth.

However, in view of the past performance of the TPL-D (A) in achieving the actual capitalisation out of the CAPEX approved in the previous years of the control period, it is observed that TPL-D (A) has been achieving around 31% of approved CAPEX as capitalisation as shown in the Table below:

Table 4.20: Approved CAPEX vs. Actual Capitalisation for FY 2011-12 and FY 2012-13

SI.	Particulars	Ahmadabad	
No.		FY 2011-12	FY 2012-13
1	Approved Capex in MYT Order (in Rs. Crore)	826.57	928.96
2	Actual Capitalization (in Rs. Crore)	257.53	214.36
3	Achievement in percentage	31.16%	23.07%



In view of the above, the Commission finds it appropriate to allow capitalization of 31% of approved CAPEX. However, actual capitalization shall be considered by the Commission after prudence check.

Further, TPL has submitted that it is setting up its own wind power generation project of 100 MW. Out of total 100 MW, 65 MW is allocated to TPL-D Ahmedabad and proposed to incur a CAPEX to the extent of Rs. 406.25 Crore in FY 2015-16 for erecting and commissioning the project.

The Commission has examined the capital investment proposed for setting up the windmill generation project. This needs to be separately filed before the Commission with all the relevant details. This requires to be examined separately.

Accordingly, the Commission approves the Capital Expenditure and capitalization for FY 2015-16 in the Mid-term Review as shown in the Table below:

Table 4.21: Approved CAPEX and capitalisation for TPL-D (A) in the Mid-term Review (Rs. Crore)

SI. No.	Particulars	FY 2014-15	FY 2015-16
1	CAPEX	279.34	356.45
2	Capitalisation	86.60	110.50

## **Capitalisation and Funding the CAPEX**

The Service Line Contribution (SLC) for FY 2014-15 and FY 2015-16 is considered at the ratio of actual SLC contribution and capitalization for FY 2012-13. The capital expenditure, capitalisation and the sources of funding proposed by TPL-D and approved by the Commission are given below:

Table 4.22: Capitalisation and Funding the Capex

(Rs. Crore)

SI.	Particulars	Projected in the Mid-term Review		Approved in Rev	
No.		FY 2014-15	FY 2015-16	FY 2014-15	FY 2015-16
1	Capital expenditure	279.34	762.7	279.34	356.45
2	Capitalisation	272.91	775.00	86.60	110.50
3	Less: SLC	51.76	55.80	25.57	32.63
4	Balance Capitalisation	1	1	61.02	77.87
5	Debt (70%)	43.35	42.57	42.72	54.51
6	Equity (30%)	(4.00)	(18.24)	18.31	23.36

The capitalisation debt and equity will be taken into consideration in the computation of depreciation, interest on normative loan and return on equity.



## 4.10 O&M Expenses

TPL-D has projected the O&M expenses at Rs. 254.58 Crore for FY 2014-15 and Rs. 264.40 Crore for FY 2015-16 in the Mid-term Review petition. The O&M expenses approved for these years in the MYT Order dated 6<sup>th</sup> September, 2011 and the revised projections submitted by TPL-D are given in the following Table:

Table 4.23: Operations & Maintenance Expenses projected for TPL-D in FY 2014-15 & FY 2015-16

(Rs. Crore)

Particulars	Approved in MYT Order		Projected in Mid-term Review	
Faiticulais	FY 2014-15	FY 2015-16	FY 2014-15	FY 2015-16
Employee Expenses			110.12	108.79
R&M Expenses	220.39	232.99	78.58	82.51
A&G Expenses			65.88	69.19
Sub Total	220.39	232.99	254.58	260.50
O&M Expenses for				
own wind Power	-	-	-	3.90
Generation Project				
Grand Total	220.39	232.99	254.58	264.40

#### **Petitioner's Submission**

The Petitioner has submitted that the actual weighted average inflation rate, considering 60% and 40% weight to WPI & CPI respectively, is substantially higher than the approved escalation factor during the years FY 2009-10 to FY 2012-13, as detailed in the Table below:

Table 4.24: Actual inflation versus approved escalation factor

SI. No.	Particulars	FY 2009-10	FY 2010-11	FY 2011-12	FY 2012-13
1	Actual inflation (YOY)	7.54%	9.95%	8.66%	7.52%
2	Approved escalation factor	4%	4.00%	5.72%	5.72%

TPL-D has further submitted that compounded effect of escalation factor would further widen the gap between the actual and approved expenses. TPL-D has mentioned that wage revision of unionized staff is due, with effect from 1<sup>st</sup> April, 2013. The matter is under discussion with the employees union and requested to allow the impact of wage revision or change in the law at actual during the truing up exercise.

TPL-D has proposed to set up its own wind generation project of 100 MW, which is likely to be commissioned by October 2015. This was not part of MYT projections. TPL-D has estimated separate O&M Expenses for the wind project for a six month period.



## **Commission's Analysis**

The Commission has examined the O&M expenses projected by TPL in the Mid-term Review. The Commission has approved the O&M expenses, based on the audited accounts for FY 2012-13. GERC (MYT) Regulations, 2011 specify the escalation of O&M expenses at 5.72% per annum from FY 2012-13 onwards.

The Commission has not considered the additional O&M Expenses proposed for wind generation project since the cost of the wind generation project has not been considered in the Mid-term Review.

The Commission, accordingly, approves the O&M expenses with 5.72% escalation per annum in the Mid-term Review for FY 2014-15 and FY 2015-16, over the actual O&M expenses approved in the truing up for FY 2012-13.

Table 4.25: O&M expenses approved in the review for FY 2014-15 and FY 2015-16 (Rs. Crore)

SI. No.	Particulars	Projected in the Mid-term Review		Approved in the Mid-term Review	
NO.		FY 2014-15	FY 2015-16	FY 2014-15	FY 2015-16
1	O&M expenses	254.58	264.49	229.00	242.10

## 4.11 Depreciation

TPL-D has projected the depreciation at Rs. 119.76 Crore for FY 2014-15 and Rs. 142.54 Crore for FY 2015-16 in the Mid-term Review Petition. The depreciation approved for these years in the MYT Order dated 6<sup>th</sup> September, 2011 and now projected by TPL in the Mid-term Review are given in the Table below:

Table 4.26: Depreciation projected in Mid-term Review

(Rs. Crore)

Particulars	Approved in	MYT Order	Projected in Mid-term Review	
	FY 2014-15	FY 2015-16	FY 2014-15	FY 2015-16
Depreciation	190.78	207.57	119.76	142.54

#### Petitioner's submission

TPL has submitted that the depreciation rates, as per GERC (Terms and Conditions of Tariff) Regulations, 2004, have been applied on the opening GFA of FY 2009-10 and for addition of assets from 1<sup>st</sup> April 2009 onwards, the depreciation has been computed at depreciation rates specified in Appendix III to the CERC Tariff Regulations, 2009, as approved by the GERC. The reduction in depreciation amount, compared to the approved depreciation, is mainly on account of lower capitalisation due to deferment of some projects.



## **Commission's Analysis**

The Commission has approved the capitalisation in Table 4.22 above. The Commission has considered the average rate of depreciation at 4.02% based on the actual depreciation for FY 2012-13. The Commission has computed the depreciation based on the capitalisation approved as given in the Table below:

Table 4.27: Approved Depreciation in the Mid-term Review (Rs. Crore)

SI. No.	Particulars	FY 2014-15	FY 2015-16
1	Opening GFA	2786.31	2872.91
2	addition during the year	86.60	110.50
3	Withdrawal during the year	0	0
4	Closing GFA	2872.91	2983.40
5	Average GFA	2829.61	2928.16
6	Rate of Depreciation	4.02%	4.02%
7	Depreciation	113.75	117.71

# 4.12 Interest and Finance charges

TPL -D has projected interest and finance charges at Rs. 68.74 Crore for FY 2014-15 and Rs. 96.74 Crore for FY 2015-16 in the Mid-term Review. The interest and finance charges approved for these years in the MYT Order dated 6<sup>th</sup> September 2011 and now projected by TPL-D in the Mid-term Review are given in the Table below:

Table 4.28: Interest charges projected in the Mid-term Review

(Rs. Crore)

SI.	Particulars	Approved in	MYT Order	Projected in Mid	-term Review
No.	No. Particulars	FY 2014-15	FY 2015-16	FY 2014-15	FY 2015-16
1	Interest charges	132.19	130.71	68.74	96.74

The details of interest charges claimed are as given in the Table below:

Table 4.29: Projected Interest Expense for Loans

(Rs. Crore)

SI. No.	Particulars	FY 2014-15	FY 2015-16
I	Interest Expenses for loans till 31 <sup>st</sup> March, 2011		
1	APDRP		
	Opening Balance	25.74	23.48
	Repayments	2.26	2.26
	Closing Balance	23.48	21.22
	Interest on Loan	2.22	2.02
2	HDFC 2		
	Opening Balance	1.92	-
	Repayments	1.92	-
	Closing Balance		-
	Interest on Loan	0.03	
3	HDFC 3		
	Opening Balance	16.67	-
	Repayments	16.67	-
	Closing Balance	-	-



SI. No.	Particulars	FY 2014-15	FY 2015-16
	Interest on Loan	1.11	-
4	LIC		
	Opening Balance	24.77	19.56
	Repayments	5.21	5.21
	Closing Balance	19.56	14.34
	Interest on Loan	2.63	2.02
5	ВОВ		
	Opening Balance	96.15	79.43
	Repayments	16.72	16.72
	Closing Balance	79.43	62.71
	Interest on Loan	10.34	8.39
6	BOB-1		
	Opening Balance	34.50	28.50
	Repayments	6.00	6.00
	Closing Balance	28.50	22.50
	Interest on Loan	3.71	3.01
7	IDFC		
	Opening Balance	18.21	15.70
	Repayments	2.51	2.51
	Closing Balance	15.70	13.19
	Interest on Loan	1.68	1.43
	Total	21.71	16.87
II	Interest Expenses for loan after 31 <sup>st</sup> March, 2011		
	Capitalisation during the year	272.91	775.00
	Less: SLC Additions	51.76	55.80
	Normative Debt @ 70%	154.80	503.44
	Opening Balance	344.70	462.48
	New Borrowings	154.80	503.44
	Repayments	37.03	60.15
	Closing Balance	462.48	905.77
	Interest Expense	47.02	79.87
III	Total Interest Charges (I+II)	68.74	96.74

#### Petitioner's submission

TPL-D has submitted that it has considered the interest expenses for the existing loan availed for the earlier capitalisation as per actuals and for the capitalisation carried out from 1<sup>st</sup> April 2011 onwards, the Petitioner has calculated the interest expenses by applying the opening weighted average rate of interest on the eligible additional loan component, while repayment has been considered equal to the depreciation for the year.

TPL-D has further submitted that there is an operational difficulty, especially for Greenfield project in maintaining and calculating the repayment of loans on normative basis and it creates difficulty in calculating the interest expenses on normative basis and requested to approve the interest expenses, as projected in the Mid-term Review.



## **Commission Analysis**

The Commission has examined the interest charges projected in the Mid-term Review. The opening loans (actual) for FY 2013-14 have been taken into consideration as approved in the true-up for FY 2012-13. In accordance with Regulation 39 of GERC (MYT) Regulations, 2011, the repayment for the year during the tariff period from FY 2011-12 to FY 2015-16 shall be deemed to be equal to the depreciation allowed for that year (Regulation 39.3) and the rate of interest shall be the weighted average rate of interest calculated on the basis of the actual loan portfolio at the beginning of each year applicable to the generating company (Regulation 39.5). The weighted average rate of interest on the loans for FY 2012-13 is 11.28%.

The interest and finance charges for the remaining years of control period, i.e., FY 2014-15 and FY 2015-16 have been arrived at in accordance with Regulation 39 of GERC (MYT) Regulations, 2011 and are as detailed in the Table below:

Table 4.30: Interest approved in the Mid-term Review

(Rs. Crore)

				(1101 01010)
SI. No.	Particulars	FY 2013-14	FY 2014-15	FY 2015-16
1	Opening loan	556.84	570.95	499.92
2	Loan addition during the year	187.21	42.72	54.51
3	Repayment during the year	173.1	113.75	117.71
4	Closing loan	570.95	499.92	436.71
5	Average loan		535.43	468.31
6	Rate of interest		11.28%	11.28%
7	Interest charges		60.40	52.83
8	Other borrowing costs			
9	Total interest over financial charges		60.40	52.83

# 4.13 Interest on working capital

TPL-D has projected the interest on working capital at Rs. 8.22 Crore for FY 2014-15 and Rs. 11.53 Crore for FY 2015-16 in the Mid-term Review. The interest on working capital approved for these years in the MYT Order dated 6<sup>th</sup> September, 2011 and now projected by TPL in the Mid-term Review are as given below:

Table 4.31: Projected interest on working capital in the Mid-term Review

 (Rs. Crore)

 Particulars
 Approved in MYT Order Projected in Mid-term Review

 FY 2014-15
 FY 2015-16
 FY 2014-15
 FY 2015-16

 Interest on working capital
 7.62
 7.42
 8.22
 11.53



#### Petitioner's submission

TPL-D has submitted that the revised estimate of interest on working capital has been arrived at considering GERC (MYT) Regulations, 2011. TPL has computed that the working capital requirement, as per the estimated sales revenue, O&M Expenses and security deposit balance. The Petitioner has considered the interest of 14.45% on such working capital requirement to arrive at the interest on working capital.

# **Commission Analysis**

The Commission has examined the working capital requirement and interest thereon projected by TPL in the Mid-term Review. The interest rate of 14.45% considered by TPL is the SBAR as on 1<sup>st</sup> April, 2013. Taking into consideration the approved O&M expenses and revenue projected with approved sales at existing tariff to arrive at the figure of receivable for 1 month, the working capital requirement and interest rate thereon are estimated, as detailed in the Table below:

Table 4.32: Interest on working capital approved in the Mid-term Review

(Rs. Crore) Approved in Mid-term Projected in Mid-term SI. Review **Particulars** Review No. FY 2014-15 | FY 2015-16 | FY 2014-15 FY 2015-16 O&M expenses for 1 month 21.22 21.71 19.08 20.17 Maintenance spares (1% of 2 32.74 35.37 27.86 28.73 Opening GFA) 3 Receivables for 1 month 382.79 443.33 345.42 368.49 Less: Security deposit 379.83 420.63 407.59 448.35 5 Normative Working Capital 56.92 79.77 (15.22)(30.96)14.45% 14.45% 6 Interest Rate (%) 14.45% 14.45% Interest on Working 7 8.22 11.33 Nil Nil Capital

## 4.14 Interest on security deposit

TPL has estimated the interest on security deposit at Rs. 41.02 Crore for FY 2014-15 and Rs. 45.25 Crore for FY 2015-16 in the Mid-term Review Petition. The interest on security deposit approved for these years in the MYT Order dated 6<sup>th</sup> September 2011 and now projected by TPL in the Mid-term Review is given in the Table below:

Table 4.33: Interest on security deposits projected in the Mid-term Review (Rs. Crore)

Particulars	Approved in	MYT Order	Projected in Mid-term Review	
Particulars	FY 2014-15	FY 2015-16	FY 2014-15	FY 2015-16
Interest on security deposit	17.63	19.47	41.02	45.25



#### Petitioner's submission

TPL has submitted that it has computed the interest expenses on security deposit assuming the bank rate on the estimated addition in the security deposit. TPL has further submitted that the increase in security deposit is mainly on account of change in estimated interest rate and increase in security deposit amount.

### **Commission analysis**

The Commission has observed a 36% growth in security deposit in FY 2012-13 over FY 2011-12. The Commission, however, considers a growth rate of 10% in the security deposit per annum over the actual for FY 2012-13. The actual security is linked to bank rate, which was 9.5% as on 01.04.2013. The Commission, accordingly, computes the interest on security deposit, as detailed in the Table below:

Table 4.34: Approved Interest on security deposit in the Mid-term Review
(Rs. Crore)

				(113. 01010)
SI. No.	Particulars	FY 2013-14	FY 2014-15	FY 2015-16
1	Opening security deposits	352.89	388.18	427
2	Addition during the year	35.29	38.82	42.7
3	Closing security deposit	388.18	427	469.7
4	Average security deposit		407.59	448.3 5
5	Interest on security deposit @ 9.5%		38.72	42.59

The Commission, accordingly, approves the interest on security deposit at Rs. 38.72 Crore for FY 2014-15 and Rs. 42.59 Crore for FY 2015-16 in the Mid-term Review.

#### 4.15 Provision for Bad Debts

TPL has estimated the provision for bad debts at Rs. 1.50 Crore for FY 2014-15 and FY 2015-16 in the Mid-term Review Petition. The provision for bad debts approved for these years in the MYT Order 6<sup>th</sup> September, 2011 and now claimed by TPL in the Mid-term Review are given in the Table below:

Table 4.35: Provision for Bad Debts projected in the Mid-term Review

				(IVS. CIOIE)	
Particulars	Approved i	n MYT Order	Projected in Mid-term Review		
Particulars	FY 2014-15	FY 2015-16	FY 2014-15	FY 2015-16	
Provision for Bad Debts	1.09	1.09	1.5	1.5	

#### **Commission analysis**

TPL has projected the provision for bad and doubt full debts at Rs. 1.50 Crore each for FY 2014-15 and FY 2015-16, as against actual bad debt written off of Rs. 3.64 Crore approved in the truing up for FY 2012-13. The Commission approves the



provision for bad debts, as projected by TPL in the Mid-term Review, as detailed in the Table below:

Table 4.36: Provision for Bad and doubt full Debts approved in the Mid-term Review (Rs. Crore)

SI. No.	Particulars	FY 2014-15	FY 2015-16
1	Provision for bad and doubt full debts	1.50	1.50

# 4.16 Contingency reserve

TPL has projected the contingency reserve at Rs. 0.60 Crore for FY 2014-15 and Rs. 0.60 Crore for FY 2015-16 in the Mid-term Review. The contingency reserve approved for these two years in the MYT Order dated 6<sup>th</sup> April 2011 and now projected in the Mid-term Review are as given in the Table below:

Table 4.37: contingency reserve projected in the Mid-term Review

(Rs. Crore)

Particulars	Approved in	MYT Order	Projected in Mid-term Review		
Particulars	FY 2014-15	FY 2015-16	FY 2014-15	FY 2015-16	
Contingency reserve	0.6	0.6	0.6	0.6	

# **Commission Analysis**

The Commission approves the contingency reserved as projected by TPL in the Midterm Review, since the projection is in line with the earlier approval.

**Table 4.38: Approved Contingency Reserve** 

(Rs. Crore)

			(1.10. 0.0.0)
SI. No.	Particulars	FY 2014-15	FY 2015-16
1	Contingency reserve	0.6	0.6

# **4.17 Prompt Payment Rebate**

TPL has not projected any prompt payment rebate for FY 2014-15 and FY 2015-16 in the ARR for Mid-term Review. However, in the revenue computation, TPL has projected the prompt payment rebate at Rs. 28.91 Crore for FY 2014-15. Yet, in the MYT Order dated 6<sup>th</sup> September, 2011, the prompt payment rebate was approved, as detailed below:

Table 4.39: Prompt Payment Rebate projected in the Mid-term Review

(Rs. Crore)

Particulars	Approved in	MYT Order	Projected in Mid-term Review		
Particulars	FY 2014-15	FY 2015-16	FY 2014-15	FY 2015-16	
Prompt payment rebate	34.18	36.95	28.91	Nil	

# **Commission Analysis**

The Commission has observed that there has been a prompt payment rebate to the extent of Rs. 41.40 Crore in the FY 2012-13, as per the audited annual accounts. Cash discounts allowed to consumers as an incentive for timely payment by the due



date need to be treated as cost and shown separately as such in the revenue account. The Commission considers the Prompt Payment rebate at Rs. 28.91 Crore for FY 2014-15, as projected by TPL in the Revenue calculation. The Commission approves the Prompt Payment rebate at Rs. 30.36 Crore for FY 2015-16 in proportion to the sales approved for FY 2015-16, as detailed in the Table below:

Table 4.40 prompt payment rebate approved in the Mid-term Review

Particulars	Projected in Mid-term Review		Approved in Mid-term Review	
	FY 2014-15	FY 2015-16	FY 2014-15	FY 2015-16
Prompt payment rebate	28.91	-	28.91	30.36

# 4.18 Return on Equity

TPL-D has claimed a sum of Rs. 160.43 Crore for FY 2014-15 and Rs. 179.75 Crore for FY 2015-16 in the Mid-term Review Petition. The Return on Equity approved for these years in the MYT Order dated 6<sup>th</sup> September, 2011 and now projected by the TPL in the Mid-term Review are given in the Table below:

Table 4.41: Return on Equity projected in the Mid-term Review

(Rs. Crore)

Particulars	Approved in	MYT Order	Projected in Mid-term Review		
Particulars	FY 2014-15	FY 2015-16	FY 2014-15	FY 2015-16	
Opening Equity	1456.53	1542.42	1114.24	1177.58	
Equity Addition	85.89	72.71	63.34	212.76	
Equity with drawn	-	-	-	-	
Closing Equity	1542.42	1615.13	1177.58	1390.24	
Average Equity	1499.48	1578.78		-	
Return on equity @ 14%	209.93	221.03	160.43	179.75	

#### **Petitioner's Submission**

TPL-D has submitted that the eligible amount of equity has been arrived at, considering the estimated addition of equity after deduction of SLC. The Return on equity has been computed by applying a rate of 14% on the average of opening and closing balance of equity.

#### **Commission's Analysis**

The Commission takes into consideration the closing equity of FY 2012-13, as approved in True-up, as opening equity for FY 2013-14 and the addition of equity for FY 2013-14, as approved in the MYT Order, and equity addition during FY 2014-15 and FY 2015-16, as approved in Para 4.9 bove, based on approved capitalisation.

The estimated return on equity in the Mid-term Review is given in the Table below:



Table 4.42: Return on Equity approved in the Mid-term Review

(Rs. Crore)

Particulars	FY 2012 14	Projected in Mid-term Review					in Mid-term /iew
	2013-14	FY 2014-15	FY 2015-16	FY 2014-15	FY 2015-16		
Opening Equity	1060.70	1114.24	1177.58	1140.93	1159.24		
Equity Addition	80.23	63.34	212.76	18.31	23.36		
Closing Equity	1140.93	1177.58	1390.24	1159.24	1182.60		
Average Equity	-	-	-	1150.08	1170.92		
Return on equity @ 14%	-	160.43	179.75	161.01	163.93		

The Commission, accordingly, approves the return on equity at Rs. 161.01 Crore for FY 2014-15 and Rs. 163.93 Crore for FY 2015-16 in the Mid-term Review.

#### 4.19 Income Tax

TPL-D has not projected income tax for FY 2014-15 and FY 2015-16 in the Mid-term Review. The income tax approved for these years in the MYT Order dated 6<sup>th</sup> September, 2011 and now claimed by TPL in the Mid-term Review are given in the Table below:

Table 4.43: Income tax projected in the Mid-term Review

(Rs. Crore)

Dortiouloro	Approved in	MYT Order	Projected in	Mid-term Review
Particulars	FY 2014-15	FY 2015-16	FY 2014-15	FY 2015-16
Income Tax	8.52	8.52	-	-

#### Petitioner's submission

TPL-D has submitted that actual income tax amount of the last Financial Year to be considered provisionally as in GERC (MYT) Regulations, 2011 and the actual is to be allowed at the time of truing up. Accordingly, it has not claimed any income tax for FY 2014-15 and FY 2015-16 in the Mid-term Review since there was loss during FY 2012-13.

## **Commission's Analysis**

The income tax approved in the truing up for FY 2012-13 as per audited annual accounts is Nil. The Commission, therefore, approves the income tax provision at Nil for FY 2014-15, as well as FY 2015-16, in the Mid-term Review, as projected by TPL, as detailed below:

Table 4.44: Approved Income tax in the Mid-term Review

(Rs. Crore)

Ī	SI.	Particulars	Projected in Mi	d-term Review	Approved in Mid-term Review		
	No.	Particulars	FY 2014-15	FY 2015-16	FY 2014-15	FY 2015-16	
ſ	1	Income Tax	Nil	Nil	Nil	Nil	



#### 4.20 Non-Tariff Income

TPL-D has projected the Non-Tariff income at Rs. 65.40 Crore for FY 2014-15 and Rs. 64.99 Crore for FY 2015-16 in the Mid-term Review. The Non-Tariff income approved for these years in the MYT Order dated 6<sup>th</sup> September, 2011 and now projected by TPL in the Mid-term Review is given in the Table below:

Table 4.45: Non-Tariff income projected in the Mid-term Review

(Rs. Crore)

Particulars	Approved in	MYT Order	Projected in Mid-term Review		
Particulars	FY 2014-15	FY 2015-16	FY 2014-15	FY 2015-16	
Non-Tariff income	56.49	58.18	64.50	64.99	

#### Petitioner's submission

TPL-D has submitted that it has estimated the higher amount of Non-Tariff income for FY 2014-15 and FY 2015-16, considering the actuals for FY 2011-12 and FY 2012-13.

## **Commission's Analysis**

The Non-Tariff income for FY 2012-13, as per audited accounts, is Rs. 104.56 Crore. The Commission approves the Non-Tariff income for FY 2014-15 and FY 2015-16 at the level of actual for FY 2012-13, as detailed below:

Table 4.46: Non- tariff income approved in the Mid-term Review

(Rs. Crore)

Particulars	Projected in N	lid-term Review	Approved in Mid-term Review		
Particulars	FY 2014-15	FY 2015-16	FY 2014-15	FY 2015-16	
Non-Tariff income	64.50	64.99	88.1	88.1	

## 4.21 Revised ARR for FY 2014-15 and FY 2015-16

As discussed in the above paragraphs, the Commission approves the revised ARR in the Mid-term Review for FY 2014-15 and FY 2015-16, as given in the Table below:

Table 4.47: ARR for TPL-D in FY 2014-15 & FY 2015-16

(Rs. Crore)

		Annrove	d in MYT	Projecte	d in the		d for Mid-
SI.	Particulars Particulars		der	Mid-term		term Review	
No.	Particulars	FY	FY	FY	FY	FY	FY
		2014-15	2015-16	2014-15	2015-16	2014-15	2015-16
1	Power purchase Cost	3216.68	3410.33	4003.17	4643.66	3543.02	3994.31
2	Operations and	220.38	232.99	254.58	264.4	229.0	242.10
	Maintenance expenses	220.36	232.99	254.56	204.4	229.0	242.10
3	Depreciation	190.78	207.57	119.76	142.54	113.75	117.71
4	Interest on Loans	132.19	130.71	68.74	96.74	60.40	52.83
5	Interest on working capital	7.62	7.42	8.22	11.53	0	0
6	Interest on Security Deposit	17.63	19.47	41.02	45.25	38.72	42.59
7	Bad debts written off	1.09	1.09	1.5	1.5	1.5	1.5
8	Contingency Reserve	0.6	0.6	0.6	0.6	0.6	0.6
9	Prompt Payment rebate	34.18	36.95			28.91	30.36
10	Return on equity	209.93	221.03	160.43	179.75	161.01	163.93

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SI.	Particulars	Approved in MYT Order		Projected in the Mid-term Review		Approved for Mid- term Review	
No.	Particulars	FY	FY	FY	FY	FY	FY
		2014-15	2015-16	2014-15	2015-16	2014-15	2015-16
11	Income Tax	8.52	8.52			0	0
12	Total expenditure	4039.6	4276.68	4658.02	5385.97	4176.91	4645.93
13	Less: Non-Tariff Income	56.49	58.18	64.5	65.99	88.1	88.1
14	Aggregate Revenue Requirement	3983.11	4218.5	4593.52	5319.98	4088.81	4557.83

The Commission approves in the ARR at Rs. 4088.81 Crore for FY 2014-15 and Rs. 4557.83 Crore for FY 2015-16 in the Mid-term Review.



# **COMMISSION'S ORDER**

The Commission approves the revised Aggregate Revenue Requirement (ARR) for TPL-D (Ahmedabad) in the Mid-term Review for FY 2014-15 and FY 2015-16, as shown in the Table below:

## Approved ARR for TPL-D (A) in FY 2014-15 and FY 2015-16

(Rs. Crore)

			(1.01 0.010)
SI.	Particulars	FY	FY
No.	Farticulars	2014-15	2015-16
1	Power purchase Cost	3543.02	3994.31
2	Operations and Maintenance expenses	229.0	242.10
3	Depreciation	113.75	117.71
4	Interest on Loans	60.40	52.83
5	Interest on working capital	0	0
6	Interest on Security Deposit	38.72	42.59
7	Bad debts written off	1.5	1.5
8	Contingency Reserve	0.6	0.6
9	Prompt Payment rebate	28.91	30.36
10	Return on equity	161.01	163.93
11	Income Tax	0	0
12	Total expenditure	4176.91	4645.93
13	Less: Non-Tariff income	88.1	88.1
14	Aggregate Revenue Requirement	4088.81	4557.83

Sd/-	Sd/-
DR. M.K. IYER Member	SHRI PRAVINBHAI PATEL Chairman

Place: Gandhinagar Date: 29/04/2014

