GUJARAT ELECTRICITY REGULATORY COMMISSION (GERC)

Annual Performance Review for FY 2008-09
&
Aggregate Revenue Requirement for FY 2009-10

For

Torrent Power Limited

Case No. 966/2009

9 December 2009

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TABLES

LIST OF ABBREVIATIONS

AEC	Ahmedabad Electric Company
AMR	Automated Meter Reading
APR	Annual Performance Review
ARR	Aggregate Revenue Requirement
Avg.	Average
CAGR	Compounded Annualized Growth Rate
CEA	Central Electricity Authority
CERC	Central Electricity Regulatory Commission
CGP	Commercial General Purpose
DoE	Diversion of Energy
FPPPA	Fuel Price and Power Purchase Adjustment
FY	Financial Year
GCV	Gross Calorific Value
GDP	Gross Domestic Product
GERC	Gujarat Electricity Regulatory Commission
GIS	Geographical Information Systems
GLP	General Lighting Purpose
GUVNL	Gujarat Urja Vidyut Nigam Limited
HT	High Tension
HTMD	High Tension Maximum Demand
HVDS	High Voltage Distribution System
IGP	Industrial General Purpose
kCal	Kilocalorie
kWh	Kilowatt Hour
LTMD	Low Tension Maximum Demand
LTP	Low Tension Power
MTL	Meter Testing Laboratory
MYT	Multi Year Tariff
NABL	National Accreditation Board for Testing & Calibration Laboratories
NCV	Net Calorific Value
PAF	Plant Availability Factor
PLF	Plant Load Factor
RGP	Residential General Purpose
SEC	Surat Electric Company
SHR	Station Heat Rate
SLC	Service Line Charges
TPAL	Torrent Power AEC Limited

TPL	Torrent Power Limited
TPL-D	Torrent Power Limited - Distribution
TPL-G (APP)	Torrent Power Limited -Generation (Ahmedabad Power Plant)
TPGL	Torrent Power Generation Limited
TPSL	Torrent Power SEC Limited
TS	Temporary Supply
YoY	Year on Year

BEFORE THE GUJARAT ELECTRICITY REGULATORY COMMISSION AT AHMEDABAD

Case No. 966/2009

Date of Order: 9 December 2009

CORAM

Dr. P. K. Mishra – Chairman

Shri Pravinbhai Patel – Member

ORDER

1 Background and brief history

1.1 Background

Torrent Power Limited (herein after referred to as TPL or petitioner) has filed its petition under Section 62 of the Electricity Act, 2003 read with Gujarat Electricity Regulatory Commission (Terms & Conditions of Tariff) Regulations, 2005 (hereinafter referred to as 'Terms & Conditions of Tariff') and Gujarat Electricity Regulatory Commission (Multi Year Tariff Framework) Regulations, 2007 (hereinafter referred to as 'MYT Regulations') on 12th May 2009 for annual performance review (APR) of FY 2008-09 and determination of tariff for FY 2009-10 for generation and distribution businesses, under the MYT Control Period FY 2008-09 to FY 2010-11. Subsequent to the filing, the Commission undertook a technical validation of the petition and assessed that the following additional information were required from TPL:

- Form D4 and Form D5 as per the Regulations;
- Status on compliance of directives issued vide Commission's Order dated 17th January 2009;

- Copy of audited accounts statement for the FY 2008-09;
- Details of energy audit carried out and compliances with the Energy Conservation Act, 2001;
- Status of SUGEN project, details of infirm generation, if any, along with the treatment of infirm generation, status of associated transmission system, Commercial Operation Date (CoD) of units etc.;
- Details of activities related to Demand Side Management / Energy Efficiency

The Commission accordingly issued a letter on 28th May 2009 directing the petitioner to submit the above information. TPL submitted the required information on 6th June, 2009. Along with the additional information, the petitioner also submitted five copies of the List of Tables and Page No. 153 of its earlier submission, indicating that there were typographical errors in the earlier submission and this should now be replaced with copies of the corrected pages.

The Commission examined the additional information submitted on 6th June 2009 along with the earlier submission made on 12th May 2009 and thereafter admitted the petition of TPL on 6th June 2009.

1.2 Torrent Power Limited (TPL)

Torrent Power Limited (TPL), a company incorporated under the Companies Act, 1956 is carrying on the business of generation and distribution of electricity in the cities of Ahmedabad, Gandhinagar and Surat. TPL had assumed the business consequent to the amalgamation of Torrent Power AEC Limited (TPAL), Torrent Power Surat Limited (TPSL) and Torrent Power Generation Limited (TPGL) with Torrent Power Limited. Besides, TPL also engages in other businesses which are not regulated by the Commission.

TPAL was a licensee under the provisions of the Indian Electricity Act 1910 and TPSL was a sanction-holder (in terms of the sanction granted by the Government of Gujarat). Under the provisions of the Indian Electricity Act 1910, Torrent Power Limited is a deemed licensee for distribution of electricity under Section 19 (1) (d) read with Section (19) (1) (i) of Gujarat Electricity Industry (Reorganization and Regularization) Act 2003 and under Section 14 of the Electricity Act 2003. The Commission had granted approval to the transfer / assignment of licenses granted to Torrent Power AEC Limited and Torrent Power SEC Limited so as to incorporate the name of TPL as licensee in place of TPAL and TPSL in the respective licenses.

The approval of the Commission was subject to the order and directions of the Hon'ble High Court of Gujarat on the scheme of amalgamation / merger of TPAL, TPSL, TPGL and TPL. The scheme of amalgamation has been approved by the Hon'ble High Court of Gujarat vide its order dated 11th September 2006.

1.3 Commission's Order for the first control period

Torrent Power Limited had filed its petition under the Multi Year Tariff framework for FY 2008-09, FY 2009-10 and FY 2010-11 on 8th May 2008 in accordance with the Gujarat Electricity Regulatory Commission (Multi Year Tariff Framework) Regulations, 2007 notified by the Commission. The Commission, in exercise of the powers vested in it under Sections 61 and 62 of the Electricity Act 2003 and all other powers enabling it in this regard, issued the Multi-Year Tariff order on 17th January 2009 for the control period comprising FY 2008-09, FY 2009-10 and FY 2010-11. The Commission also took into consideration the submissions made by TPL, the objections by various stakeholders, response of TPL, issues raised during the public hearing and all other relevant material while issuing the tariff order.

1.4 Admission of current petition and public hearing process

The Commission undertook a technical validation of the petition submitted by TPL and admitted the current petition of TPL for annual performance review (APR) of FY2008-09 and determination of tariff for FY2009-10 for generation and distribution businesses (Case No 966 of 2009) on 6th June 2009.

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

The Public Notice was published in the following newspapers on 11th June 2009 inviting objections/suggestions from stakeholders on the petition filed by it.

1. Indian Express – Ahmedabad and Vadodara Edition
2. Sandesh – Ahmedabad Edition
3. Gujarat Samachar – Ahmedabad Edition
4. Divya Bhaskar – Ahmedabad Edition
5. Gujarat Mitra – Surat Edition
6. Sambhav Metro – Ahmedabad Edition

The petitioner also placed the public notice and the petition on its website (www.torrentpower.com) for inviting objections and suggestions on its petition.

The interested parties/stakeholders were asked to file their objections and suggestions on the petition on or before 10th July 2009. However, the Commission received several representations from stakeholders for extending the time for filing their objections/suggestions. The Commission, therefore, directed the petitioner vide its letter no. GERC/TPL/APR&TP/SEC/2009/01122 dated 15th July 2009 to notify the stakeholders through public notice about extension the date for filing of objections/suggestions to 30th July 2009. The petitioner accordingly published a public notice on 18th July 2009 in the following newspapers intimating extension of date for submission of objections/suggestions on the petition:

1. Indian Express – Ahmedabad and Vadodara Edition
2. Sandesh – Ahmedabad Edition
3. Gujarat Samachar – Ahmedabad Edition
4. Divya Bhaskar – Ahmedabad Edition
5. Gujarat Mitra – Surat Edition
6. Sambhav Metro – Ahmedabad Edition

TPL/Commission received objections/suggestions from 30 respondents. Some of the objections/suggestions received after the last date, but prior to the date of public hearing, have also been considered by the Commission.

The Commission thereafter fixed the date of public hearing for TPL conducted on 3rd October 2009 and 5th October 2009 and sent communication to the objectors inviting them to take part in the public hearing process for presenting their views on the petition before the Commission. During the course of public hearing on 5th October 2009, representations were received from some objectors to grant time on a subsequent date as they were unable to attend the scheduled public hearing. The Commission considered the representation and after giving due consideration to the views of TPL, granted time to those objectors who were unable to attend the public hearing on 3rd and 5th October 2009 to be present on 12th October 2009.

The issues and concerns voiced by various stakeholders during the course of the public hearing as well as the written submissions have been carefully examined by the Commission.

The details of the organizations and individuals who have filed their objections / suggestions on the petition are given in Annexure 7.5. The details of objectors who had participated in the public hearing are given in Annexure 7.6.

1.5 Contents of the Order

The order comprises of six chapters as under:

1. The first chapter provides a background regarding the petitioner, petition and details of the public hearing process.
2. The second chapter provides detailed account of the public hearing process, including the objections raised by various stakeholders, TPL responses and the Commission's views on the responses.
3. The third chapter details the process of annual performance review of FY 2008-09 for the generation and distribution business.
4. The fourth chapter analyses the Aggregate Revenue Requirement for generation and distribution business for the FY 2009-10.
5. The fifth chapter deals with compliance of existing directives and issue of fresh directives
6. The sixth chapter discusses the tariff philosophy and design approved by the Commission

1.6 Approach of this Order

In this order the Commission has considered the petition for Annual Performance Review (APR) for FY 2008-09 and estimation of Aggregate Revenue Requirement (ARR) for FY 2009-10. Under the MYT Framework, the Commission has projected the ARR for the petitioner for each year of the control period in the MYT Order issued on 17th January, 2009. The Regulations provide for Annual Performance Review based on the actual expenses incurred by the petitioner compared with the trajectories approved under the MYT Order.

1.6.1 Approach for APR for the FY 2008-09

Regulation 9.1 of the MYT Regulations provides that where the aggregate revenue requirement of a generating company or a licensee is covered under a multi year tariff framework, such licensee shall be subject to an Annual Performance Review (APR) during the control period. With regard to the scope of the APR, Regulation 9.3 of the MYT Regulations provide that the scope of APR shall include a comparison of the audited performance of the generating company or the licensee with the approved forecast of aggregate revenue requirement and expected revenue from tariff and other charges.

Regulation 9.6 further provides that subsequent to APR, the Commission shall attribute and classify any variation in performance to either on account of controllable parameters or uncontrollable parameters. Components of controllable factors and uncontrollable factors have accordingly been provided in the MYT Regulations. Subsequent to classification of the variations into those on account of uncontrollable and controllable parameters, Regulation 10 provides the mechanism for pass through of gains and losses on account of uncontrollable parameters and Regulation 11 provides the mechanism for sharing of gains and losses on account of controllable parameters.

For the purpose of APR for the FY 2008-09, the Commission has considered the above approach and has undertaken a comparison of the audited actual performance with the MYT Order projections. The Commission has thereafter classified the deviations into uncontrollable and controllable and has considered the treatment as provided in Regulation 10 and Regulation 11 of the MYT Regulations.

1.6.2 Approach for ARR for the FY 2009-10

Regulation 9.7 of the MYT Regulations provides that the Commission shall, subsequent to the annual performance review of a year, revise the forecast for the remaining period of the control period. The Commission has maintained the controllable items at the level approved under the MYT Framework, unless there are justifiable reasons to revise the same. Reasons for revision of the controllable parameters have been analyzed within the framework of Regulation 9.6 of the MYT Regulations. In regard to the uncontrollable parameters the Commission has revised them based on the analysis and verification of the submissions made by the petitioner and the results of APR of FY 2008-09.

2 Response from Stakeholders

2.1 Background

In response to the public notice inviting objections / suggestions from stakeholders on the MYT petition filed by TPL for annual performance review (APR) of FY 2008-09 and determination of tariff for FY 2009-10 for generation and distribution businesses, under MYT Control Period FY 2008-09 to FY 2010-11, thirty consumers / consumer organizations filed their objections / suggestions in writing. Out of the thirty objectors who filed objections / suggestions, fifteen stakeholders participated in the public hearings. The objections / suggestions received, responses of TPL and views of the Commission are presented in the following sections of this chapter.

2.2 Delay in filing of the petition

Objections:

Some stakeholders have raised objections with regard to the delay in filing of the petition and have submitted that delay in filing has become a norm for TPL. They have further submitted that this delayed submission should not be entertained by the Commission and there should be no consideration for tariff hike as requested in the petition. With regard to the proposed tariff hike the stakeholders have also submitted that consideration for tariff hike, if any, should be undertaken prospectively and there should be no retrospective increase in tariff.

TPL's response:

TPL has submitted that the delay in filing is merely a procedural matter and it does not relate to the substance of the petition. TPL has added that prior approval of the Commission for extension in timelines for submission of the petition had already been sought. With regard to retrospective increase in tariff, the petitioner has submitted that the current petition is for determination of tariff for the period 1st April 2009 to 31st March 2010. Therefore, as and when the Commission decides the petition, the implication of the increase in tariff to be allowed from 1st April 2009 may be adjusted appropriately so as to allow recovery of the revenue gap for the period from which the increased tariff is given effect to.

Commission's View:

The Commission has taken a very serious view of the delay in submission of the petition. The Commission is of the view that for future submissions the petitioner should file the petition within the stipulated time frame. In this regard the Commission is of the opinion that for the FY 2010-11, the petitioner should submit its petition within the permissible time frame as provided under the regulations.

In regard to the delay in submission of the current petition the Commission is of the view that since prior permission had been obtained for extension in timelines, the petition shall be considered within the applicable regulatory framework.

2.3 Maintenance of common books of accounts

Objections:

Some stakeholders have submitted that the expenses and incomes of all businesses of the petitioner, comprising regulated and non-regulated business, are consolidated under one book of accounts. They have submitted that this leads to double counting of certain expense items like O&M expenses since the expenses allocated to the regulated business are not audited separately in regular course of business. Concerns have also been raised by the stakeholders regarding the principles for allocation of expense items pertaining to SUGEN on to the retail distribution tariff.

TPL's Response:

TPL has submitted that the petition has been submitted in compliance with the Electricity Act 2003, GERC (Terms and Conditions of Tariff) Regulations 2005 and GERC (Multi Year Tariff) Regulations, 2007. With regard to the double counting of expenses and allocation of expenses of SUGEN to retail distribution business, TPL has submitted that it follows accounting principles laid down in conformity with the Companies Act, 1956 and it is following Accounting Standards issued by the Institute of Chartered Accountants of India and the books of accounts are duly audited by its Statutory Auditors.

Commission's view:

The Commission has observed that TPL has submitted consolidated information in support of its petition i.e. common audited accounts for its entire business which contains consolidated information for the generation utility, the two distribution licensees and the non-regulated business. The Commission, therefore, analyzed the framework for submission of information by the petitioner. In this context Section 64 (1) of the Electricity Act 2003 is relevant which mentions – 'An application for determination of tariff under Section 62 of the Electricity Act 2003 shall be made by a Generating Company or

Licensee in such manner and accompanied by such fee, as may be determined by Regulations'. Accordingly, Clause 5.2 of the MYT Regulations becomes relevant in regard to the information to be submitted along with the petition for ARR or annual review of performance. Clause 5.2 of MYT Regulation provides that the Generating Company or Licensee shall file '***separate'*** accounting statements[1] with the petition for ARR or the annual review of performance. In the case of TPL there are two distribution licensees (Ahmedabad and Surat) and one generating company. However, TPL has failed to submit duly audited separate accounting statements for each of the businesses and has reiterated during the public hearing that TPL being a single legal entity maintains only one set of accounting statements. The Commission observed that the issue of consolidated information has emerged after the amalgamation of generation business and distribution licensees under one common legal entity which happened in the year 2006.

The Commission, therefore, drew reference to the High Court Order dated 11th September 2006 whereby the amalgamation of the various businesses of TPL was approved. More specifically, the Commission drew reference to paragraph 29 of the High Court Order where the Honourable Court expressed its opinion that the provisions of the Electricity Act, 2003 and the Electricity Regulatory Commission Act, 1998 would take care of different situations with regard to Transmission, Distribution, and Supply of the Electricity by the transferee company. The Commission also drew reference to its Order on petition No. 881/2006. The Commission noted the submission made under clause 9 of its Order on petition No. 881/2006 which is produced below:

"…..merging of licenses is different from merging of companies. The two licenses are required to be transferred to the new company but will remain independent. There would be no change in the conditions of license or the areas of license…"

As indicated above even after the approval of the Scheme of Amalgamation, the governing conditions of license shall continue to remain applicable. Therefore, the requirement for separate information for each category i.e. the generating company and the two distribution licensees cannot be diluted as this is one of the mandatory requirements under the provisions of MYT Regulations, 2007. In the absence of segregated information for each of the businesses, the Commission has shown concern in regard to the principles considered for allocation of cost to respective businesses under a common legal entity.

The Commission, therefore, after due deliberation considers it pertinent to issue the following directive to the petitioner:

[1] Accounting Statement has been defined under Clause 2.1(a) of the MYT Regulations so as to consist of Balance Sheet, Profit & Loss account and the Cash Flow Statement

Directive

The petitioner should maintain separate books of accounts from FY 2010-11 onwards in regard to the following:

1. Generating Business
2. Ahmedabad Distribution license
3. Surat Distribution license

Further, the books of accounts of each of these businesses should be audited annually and the audited accounts should form part of the annual submissions i.e. Aggregate Revenue Requirement and Annual Performance Review.

2.4 Blending of Coal

Objections:

Some stakeholders have submitted that the petitioner has been using imported coal which is costlier and has lower calorific value compared to cheaper indigenous coal. This practice increases the cost of generation which is finally passed on to the consumers through higher distribution tariffs. The stakeholders have therefore submitted that the petitioner should strive to use indigenous coal for its generation business.

TPL's Response:

TPL has submitted that it does strive to utilize maximum amount of indigenous coal. The petitioner has submitted that it has sought full linkages for the indigenous coal, but this has not been granted by the Authorities. Therefore, the petitioner is forced to source imported coal for the balance requirement i.e. over and above the available indigenous coal. In this regard the petitioner has submitted that it gets about 70% of its total requirement by way of indigenous coal and the balance as imported coal.

Commission's view:

The Commission is of the view that the petitioner should strive to minimize its cost of generation and accordingly strategize its sourcing and procurement of fuel.

2.5 Faulty Meters

Objections:

Some stakeholders have expressed concerns with regard to the accuracy of the installed meters. It has been submitted that the installed meters are generally fast due to which consumers have to pay excess bill. The objectors have further submitted that the petitioner should undertake replacement of the old meters at the earliest. The stakeholders have also suggested that third party verification of faulty meters should be undertaken.

TPL's Response:

The petitioner has submitted that it ascertains the accuracy of each and every meter before it is installed at the consumer's premises by testing the same in the laboratory. Further, it also undertakes periodical testing and calibration of its Reference Standard Energy Measurement Equipment through independent agency having accreditation certificate. With regard to the replacement of the old meters, the petitioner has submitted that it does not propose to carry out a Mass Meter Replacement program as it will not yield the desired results against the investment for the same. However, the petitioner does carry out a systematic replacement of meters after giving due consideration to parameters like performance, proneness to theft, aging, requirement of additional features and past track record of each type and make of the meters.

Commission's view:

It is clarified that the Commission has specified that the Electricity Supply Code Regulations, 2005 which mention that limits of accuracy as specified by CEA would be applicable for testing of meters. CEA Regulations 2006 on installation of meters state that the consumer meters shall be of class one static type and shall conform to the requirements given in the relevant Indian Standards. In this regard the Commission has observed that the permissible margin of error is ±2.5% in accordance with statutory provisions under IS 15707-2008 (Code of Practice issued by Bureau of Indian Standards) for testing.

Further, the Commission has considered that the consumers should have the option for third party testing of the meters. In this regard the Commission may authorize third parties with National Accreditation Board for Testing & Calibration Laboratories (NABL) certification for testing of consumer meters. A separate notification in this regard may be issued by the Commission. Consumers who are desirous of getting their meters tested can approach the designated agencies and get their meters tested.

Directive

TPL is hereby directed to carry out awareness programs amongst its consumers about meter testing and the third party agencies authorized to perform the same.

2.6 Interest on working capital

Objections:

Objectors have submitted that computing the interest on working capital as per the prescribed norms is erroneous. Objections have been raised during the course of public hearing that since the petitioner is an integrated utility with the entire generation being consumed within the licensed distribution area of the petitioner it is incorrect to consider component of receivables for generation as well as distribution business. The objectors have further explained that a Company cannot have receivables from itself.

TPL's Response:

TPL has submitted that the working capital and the interest on the same have been computed based on the provisions of GERC (Terms & Conditions of tariff) Regulations, 2005. The petitioner has further submitted that the generation and distribution business are treated separately as per the provisions of the Regulations and thus the Aggregate Revenue Requirement (ARR) is filed for both the businesses.

Commission's view:

It is important to note that the petitioner has been selectively applying regulations in its approach towards submission of petition as well as computation of ARR. The Commission has observed that while the petitioner has been categorical in computing working capital considering generation and distribution as separate business, similar principle has not been adopted in maintaining its books of accounts which is mandated as per the regulations. Further, the Commission has noted that merger of all the entities under one common legal entity was expected to bring in economies and bring down common costs like working capital, since a Company cannot have receivables from itself. As the Commission has allowed the generation business to claim receivables, it is of the view that the normative working capital of the distribution business should be computed after deducting the component of receivables of the generation business. In this regard the Commission has taken note of the fact that the entire generation of TPL is consumed within its own licensed area; so there could not be a scenario for receivables from third party.

The Commission, in its MYT order for the current control period, has followed this principle while approving the working capital for Ahmedabad distribution business for the control period. The Commission has continued with the same approach in this order too.

2.7 Fuel Price Adjustment

Objections:

Objectors have submitted that there has been a difference in the fuel adjustment charges between the consumers of Surat License area and the surrounding consumers of the GUVNL DISCOMs. It has been submitted that the FPPPA charges for the consumers of Surat and other DISCOMs of Gujarat should be the same.

TPL's Response:

TPL has submitted that it has been recovering the fuel adjustment charges as per the formula approved by the Commission.

Commission's view:

The Commission has taken note of the submission of the petitioner that the fuel adjustment charges are recovered as per the formula devised by the Commission. The Commission has also noted the fact that TPL has been regularly filing for approval of FPPPA charges on a quarterly basis.

2.8 Power Factor

Objections:

Objectors have submitted that there is a wide gap between power factor penalty imposed on the consumers for decreased power factor and the rebate amount provided to the consumers for increased power factor. Objectors have further submitted that the amount of penalty and the amount of rebate should be made equitable.

TPL's Response:

TPL has submitted that as the term suggests, power factor penalty is imposed to levy penalty and discourage consumers for not being able to achieve the desired power factor. On the other hand, power factor rebate is provided to motivate the consumers to maintain higher power factor and hence it is in the nature of an incentive. Therefore, penalty and incentive cannot be made equitable.

Commission's view:

The Commission has taken note of the submission of both the objectors and the petitioner and is of the opinion that the penalty on lower power factor and rebate for higher power factor should not be treated in a similar manner. Penalties are imposed so as to deter consumers from not maintaining the power factor while rebates are granted as an incentive for achieving better than the targets. Therefore it is desirable that the quantum of penalty should be more than the quantum of rebate.

2.9 Coal Transit Loss

Objections:

Objectors have submitted that the actual transit loss of coal for the petitioner is higher compared to the transit loss prescribed under the Regulations. While the prescribed loss limit is 0.8% under the regulations, the actual transit loss is approximately 3%. The objectors have further submitted that the higher transit loss increases the cost of generation which translates into higher distribution tariff for the consumers.

TPL's Response:

The petitioner has submitted that it has continuously strived to reduce the transit loss levels and has reduced it to 2.86% from the previous year transit loss level of 3.39%. The petitioner has further submitted that it brings indigenous coal from the mines which are located more than 1600 Kms away from the generating stations. During the course of the public hearing the petitioner explained that it has deployed teams for monitoring, supervising and checking the loading of coal by SECL. Further, it is also deploying armed guards at random to accompany rakes from the siding to generation facility at Sabarmati.

Commission's view:

The Commission has taken note of the submissions made by the petitioner and has observed that in the previous year the petitioner had claimed that there was no further scope for reduction in transit loss, however in the current submission the Commission has observed that the transit losses have reduced from the previous year levels. This demonstrates that there is a clear possibility of further reduction in the transit loss levels.

The Commission has noted that though the regulations permit a transit loss level of only 0.8%, a higher transit loss level of 1.4% has been approved, considering the experiences from some of the other utilities in the country. Nevertheless, the Commission is of the view that a linear relationship between the distance over which coal is hauled and the transit loss levels cannot be empirically established. The

Commission, therefore, directs the petitioner to ensure that the transit loss levels are contained within the levels approved under the MYT Order.

2.10 Interest on Security Deposit & Delayed Payment surcharge

Objections:

Objectors have submitted that the rate of interest on the security deposit and the delayed payment charges are different. It has been submitted that the rate of interest on the security deposit is lower than the delayed payment charges.

TPL's Response:

The petitioner has submitted that it pays the interest on security deposit at the Bank Rate notified by the Reserve Bank of India which is in compliance with the provisions of the GERC (Security Deposit) Regulations, 2005. The petitioner has further submitted that interest rate on security deposit cannot be compared with the delayed payment charges since delayed payment charges are penal in nature and are recovered for default.

Commission's view:

The Commission has taken note of the submission made by the petitioner that the interest rate on security deposit is in line with the provisions of the GERC (Security Deposit) Regulations, 2005. Further, in regard to the delayed payment charge the Commission directs the petitioner to ensure that it is charged as per the rate approved by the Commission.

2.11 Surat Municipal Corporation

Objections:

Surat Municipal Corporation (hereinafter referred to as SMC) has submitted that it is statutorily obligated to undertake the lighting of public streets besides various other activities. SMC maintains more than 80,000 streetlights. SMC has further submitted that it has initiated various initiatives to bring in efficiency in electricity consumption which has resulted in a total saving of 4.26 MUs per annum.

SMC has thereafter drawn reference to the proposed increase in the energy rate of street light from Rs.3.15 per unit to Rs. 3.75 per unit which if implemented shall increase the energy bill of street light by 19% which translates into an approximate increase of Rs. 66 lakhs per annum on account of public lighting alone. SMC has also submitted that it is engaged in various other activities wherein its energy consumption is completely on account of public services.

In view of the above and considering the engagement in public utility services, SMC has submitted that it should be provided relaxation from TOU charges, there should be no increase in the tariff for public lighting and there should be a separate category HT tariff category for local authorities.

TPL's Response:

The petitioner has submitted that it has proposed tariff increase and separate tariff category for street light and HT Water-works & sewage pumping stations run by local authorities after giving due consideration to various factors which are in line with the provision of the Electricity Act, 2003. However, the petitioner has submitted that the determination of tariff is the prerogative of the Commission and they would abide by the final decision of the Commission.

Commission's view:

The Commission has noted the submission made by the SMC with respect to street lighting. In regard to the concessional tariff for the services of SMC, the Commission will take a view on this during the process of designing tariff considering the public nature of the services.

2.12 Introduction of BPL category

Suggestion:

Some stakeholders have suggested for introduction of a separate tariff category for BPL consumers as prevailing in other distribution utilities of Gujarat.

TPL's Response:

TPL has stated that it has given due consideration to this aspect and accordingly, its tariff proposal provides for supplying electricity to the lower strata of society at affordable rates keeping the lowest tariff increase in the first slab of the residential category. TPL has further stated that the Commission may take a view in the interest of consumers while issuing the order in accordance with the statutory provisions.

Commission's view:

The Commission has decided not to change any existing tariffs or the tariff structure in this order. The suggestion of introduction of BPL category will be considered during the ARR process of FY 2010-11.

3 Annual Performance Review for FY 2008-09

3.1 Background

The Gujarat Electricity Regulatory Commission (Multi Year Tariff Framework) Regulations, 2007 (referred to as 'MYT Regulations') was notified on 20th December 2007. Under the provisions of these Regulations, the Gujarat Electricity Regulatory Commission (referred to as 'Commission' or 'GERC') notified the first Multi Year Tariff (MYT) control period as the three years period comprising of FY 2008-09, FY 2009-10 and FY2010-11. Under the MYT regulations, for the specified control period, Torrent Power Limited (hereinafter referred to as 'the Petitioner' or 'TPL') submitted the projected Aggregate Revenue Requirement (ARR) for each year of the control period. The Commission undertook an analysis of the submissions made by the petitioner and approved an ARR for each year of the Control Period along with the tariff for the FY 2008-09 vide its Tariff Order dated 17th January 2009. Now, the first year of the MYT Control period has elapsed and the Audited Accounts of the petitioner are available. Therefore the petitioner has approached the Commission for annual performance review for the FY 2008-09 and the determination of tariff for the FY 2009-10.

This chapter of the order deals with the Annual Performance Review for FY 2008-09 for the following businesses of Torrent Power Limited:

- Generation Business (TPL-Generation (APP)
- Two distribution licensees (TPL-Ahmedabad and TPL-Surat)

3.2 TPL – Generation (APP)

This section deals with the annual performance review of TPL-Generation (APP) for the FY 2008-09. The Commission has undertaken the APR for the technical parameters as well the expense items based on the audited accounts and other submissions made by the petitioner.

The technical parameters of the TPL–Generation (APP) are discussed below followed by the expense items.

3.2.1 Availability

Petitioner's Submission

The Petitioner has submitted that it has estimated the availability of individual stations for FY 2008-09 after accounting for the annual planned shutdown to undertake maintenance & statutory inspections and the actual forced outages. The outages schedule for the FY 2008-09 and the station wise availability estimated by TPL-G (APP) are based on nine months actual data. The submission by the Petitioner is provided in the table below.

Table 1: Availability and Outage Schedule estimated by TPL-G (APP) for FY 2008-09

Stations	Outage schedule (days)		Availability (%)	
	MYT Order	TPL-G (APP) Estimate	MYT Order	TPL-G (APP) Estimate
C Station	15	45	93.71	87.73
D Station	35	12	88.06	96.76
E Station	15	17	93.71	95.26
F Station	21	20	92.41	94.51
Vatva Gas CCPP	GTG-1 : 10 GTG-2: 10 STG: 10	GTG-1 : 7 GTG-2: 8 STG: 15	95.68	91.75

The Petitioner has mentioned that availability of Station C & Vatva gas CCPP has reduced on account of the following reasons:

- **C Station**: Due to the collapse of the cooling tower
- **Vatva Gas CCPP**: Shutdown due to problems in STG rotor assembly.

Commission's Analysis

The Commission observed that FY 2008-09 had already elapsed at the time of submission of the petition and the actual information in regard to the station availability would be available with the petitioner. The Commission, therefore, directed TPL-G (APP) to provide the actual information for the twelve months period for the FY 2008-09. The Petitioner subsequently submitted the actual availability data vide its letter dated 18th September 2009 which is provided in the table below:

Table 2: Actual availability for FY 2008-09

(%)

Stations	MYT Order	Actual Availability
C Station	93.71	87.73
D Station	88.06	96.76
E Station	93.71	95.26
F Station	92.41	94.51
Vatva Gas CCPP	95.68	90.37

The Commission thereafter analyzed the actual availability for the last 3 years and found that except for station C and Vatva, all other plants have shown better availability in FY 2008-09 compared to the 3-years historical average.

Table 3: Comparison of historical and actual availability for FY 2008-09

(%)

Stations	FY 2005-06 (Actual)	FY 2006-07 (Actual)	FY 2007-08 (Actual)	3-Years Average	FY 2008-09 (Actual)
C Station	95.95	94.42	91.03	93.80	87.73
D Station	95.27	93.81	94.08	94.39	96.76
E Station	85.54	96.74	97.17	93.15	95.26
F Station	-	89.45	98.77	94.11	94.51
Vatva Gas CCPP	-	-	97.35	97.35	90.37

The Commission further observed that there has been a declining trend in the availability for Station C and reviewed the reasons for reduction in availability for station C and Vatva as submitted by the Petitioner. In respect of station C, the Commission notes the fact that the reduction in availability may be due to old age of the plant.

Based on the above observations and the review of the submission made by the petitioner, the Commission has taken a view regarding stations C and Vatva and revised the PAF accordingly.

The summary of the Commission's analysis is presented in the table below:

Table 4: Summary of Availability for FY 2008-09

(%)

Stations	MYT Order	FY 2008-09 (Actual)	Considered for APR of FY 2008-09
C Station	93.71	87.73	87.73
D Station	88.06	96.76	88.06
E Station	93.71	95.26	93.71
F Station	92.41	94.51	92.41
Vatva Gas CCPP	95.68	90.37	90.37

3.2.2 Plant Load Factor

Petitioner's Submission

The Petitioner has submitted the Plant Load Factor (PLF) for FY2008-09 based on actual data for 9 months which is shown below:

Table 5: PLF as approved in the MYT order and estimated now by the petitioner

(%)

Stations	MYT Order	TPL-G (APP) Estimate
C Station	92.51	89.72
D Station	86.79	98.44
E Station	92.53	97.24
F Station	91.42	96.51
Vatva Gas CCPP	83.54	72.61

The Petitioner has submitted that the PLF of Vatva Gas CCPP is 88.38% for the first 9 months, which is in line with the approved value. However, for the next three months TPL-G (APP) has estimated a lower PLF on account of forced shutdown due to problems in STG rotor assembly.

Commission's Analysis

The Commission observed that the FY 2008-09 had already elapsed at the time of submission of the petition and the actual information in regard to the Plant Load Factor would be available with the petitioner. The Commission directed the Petitioner to submit actual data for 12 months for FY2008-09. Accordingly, TPL-G (APP) submitted the actual PLF data vide its letter dated September 18, 2009. The Commission also reviewed the PLF data in conjunction with the PAF data to verify the consistency of PLF with PAF. Actual PLF for the FY 2008-09 is indicated in the table below:

Table 6: Comparison of PLF and PAF

(%)

Stations	PAF as per MYT Order	PAF (Actual) for FY 2008-09	PLF as per MYT Order	PLF (Actual) for FY 2008-09
C Station	93.71	87.73	92.51	89.71
D Station	88.06	96.76	86.79	98.43
E Station	93.71	95.26	92.53	97.24
F Station	92.41	94.51	91.42	96.51
Vatva Gas CCPP	95.68	90.37	83.54	72.64

The Commission observed that the PLF for all stations is in line with the availability. Further, the Commission analyzed the actual PLF with average of last 3 years and found that except for station C and Vatva, all other plants have shown a significantly higher PLF in FY 2008-09 compared to the average PLF of the last 3 financial years. The reduction for Plants C and Vatva can be attributed to the reduced availability as discussed in section 3.2.1.

Table 7: Comparison of historical PLF with actual PLF for FY 2008-09

(%)

Stations	2005-06 (Actual)	2006-07 (Actual)	2007-08 (Actual)	3 years Average	2008-09 (Actual)
C Station	92.00	93.64	92.07	92.57	89.71
D Station	94.00	92.18	95.46	93.88	98.43
E Station	82.60	96.30	99.08	92.66	97.24
F Station	94.57	90.02	101.04	95.21	96.51
Vatva Gas CCPP	81.76	68.30	63.03	71.03	72.64

Based on the above observations and the review of the submissions made by the petitioner the Commission has taken a view regarding stations C and Vatva and revised the PLF accordingly.

The summary of the Commission's analysis is presented in the table below:

Table 8: Summary of PLF for FY 2008-09

(%)

Stations	MYT Order	FY 2008-09 (Actual)	Considered for APR of FY 2008-09
C Station	92.51	89.71	89.71
D Station	86.79	98.43	86.79
E Station	92.53	97.24	92.53
F Station	91.42	96.51	91.42
Vatva Gas CCPP	83.54	72.64	72.64

3.2.3 Auxiliary consumption

Petitioner's Submission

The Petitioner has submitted the auxiliary consumption data based on 9 months actuals for FY 2008-09 which are provided in the table below:

Table 9: Comparison of estimated auxiliary consumption for FY 2008-09 with MYT Order approved value

(%)

Stations	MYT Order	TPL-G (APP) Estimate
C Station	9.41	9.54
D Station	8.73	8.51
E Station	8.73	8.51
F Station	8.73	8.51
Vatva Gas CCPP	2.92	2.37

Commission's Analysis

The Commission observed that the FY 2008-09 had already elapsed at the time of submission of the petition and the actual information in regard to the auxiliary consumption would be available with the Petitioner. The Commission directed the petitioner to submit actual data of 12 months for FY 2008-09. The Petitioner subsequently submitted the actual auxiliary consumption data vide its letter dated 18th September 2009 which is provided in the table below:

Table 10: Actual auxiliary consumption for FY 2008-09 estimated by TPL-G (APP)

(%)

Stations	MYT Order	Actual auxiliary consumption
C Station	9.41	9.61
D Station	8.73	8.53
E Station	8.73	8.53
F Station	8.73	8.53
Vatva Gas CCPP	2.92	2.38

The Commission observed that except for station C, the petitioner has been able to achieve a better auxiliary consumption for all other stations. The Commission has also analyzed the historical trend in auxiliary consumption and compared it with actual auxiliary consumption achieved in FY 2008-09.

Table 11: Comparison of historical auxiliary consumption with actual auxiliary consumption for FY 2008-09

(%)

Stations	2005-06 (Actual)	2006-07 (Actual)	2007-08 (Actual)	2008-09 (Actual)
C Station	8.94	9.50	9.41	9.61
D Station	8.98	8.86	8.73	8.53
E Station	8.98	8.86	8.73	8.53
F Station	8.98	8.86	8.73	8.53
Vatva Gas CCPP	2.66	2.85	2.92	2.38

The petitioner has attributed the rise in auxiliary consumption of plant C to its old age. The Commission in its MYT Order had approved an auxiliary consumption of 9.41% for station C after considering the high auxiliary consumption achieved in FY 2007-08 and FY 2006-07. Therefore, the Commission is of the opinion that the approved auxiliary consumption of 9.41% for FY 2008-09 was already projected at a higher level which should have been maintained by the petitioner. Hence a further upward revision in the auxiliary consumption for plant c is not tenable.

In regard to stations D, E and F, the actual auxiliary consumption figures for FY2008-09 (8.53%) are lower than the approved auxiliary consumption (8.73%). The petitioner has submitted that it has been able to achieve these figures by taking up regular repairs and maintenance activities. The Commission has verified this submission by observing the historically reducing trend in auxiliary consumption.

In regard to Vatva Station the Commission has observed that the actual auxiliary consumption of 2.38% is lower than the auxiliary consumption of 2.92% approved under the MYT Order. The petitioner has submitted that better gas availability has been the reason for achieving the improved auxiliary consumption.

Based on the above observations and the review of the submissions made by the petitioner the Commission has taken a view regarding station Vatva and revised the auxiliary consumption accordingly.

The summary of Commission's analysis is now presented in the following table:

Table 12: Summary of auxiliary consumption for FY 2008-09

(%)

Stations	MYT Order	2008-09 Actual	Considered for APR of FY 2008-09
C Station	9.41	9.61	9.41
D Station	8.73	8.53	8.73
E Station	8.73	8.53	8.73
F Station	8.73	8.53	8.73
Vatva Gas CCPP	2.92	2.38	2.38

3.2.4 Station Heat Rate (SHR)

Petitioner's Submission

The Petitioner has submitted the details of Station Heat Rates (SHR) achieved for FY 2008-09 for all the Stations. These are indicated in the table below:

Table 13: SHR approved in the MYT order and estimated by petitioner

(kCal/kWh)

Stations	MYT Order	TPL-G (APP) Estimate
C Station	3735	3,720
D Station	2565	2,559
E Station	2675	2,668
F Station	2715	2,707
Vatva Gas CCPP	1950	1,932

The Petitioner has further submitted that it has maintained the SHR for all the Stations within the levels approved by the Commission. The Petitioner has also mentioned that it has calculated SHR for all its stations on the basis of Net Calorific Value (NCV). In this regard the Petitioner has also mentioned that most of the fuel supply contracts are entered into on the basis of NCV.

Commission's Analysis

The Commission has observed that the SHR, as submitted by the Petitioner, has been computed on the basis of the NCV of the fuel whereas it is an established practice that the computation of SHR is done on the basis of the Gross Calorific Value (GCV). The Commission raised its concern during the course of the public hearing on 5th & 6th October 2009. The Petitioner submitted that historically the SHR for its plants have been computed considering NCV of the fuel.

The Commission further noted that in regard to the technical parameters of generating stations of TPL-G (APP), it had requested a study to be conducted by Central Electricity Authority (CEA). The terms of reference for this study were as given below:

1. Computation of normative plant performance parameters such as PAF, PLF, Auxiliary consumption and specific oil consumption of all TPL-G (APP) stations.

2. How do the heat rates furnished by TPL-G (APP) correlate with design heat rates and recommendations of CEA with regard to the operational parameters as listed in (1) based on the vintage, technology etc of the generating plant. And to establish whether the heat rates (as furnished by TPL-G (APP)) are based on net or gross calorific value (GCV or NCV) of coal.

3. What would be the appropriate values of SHR on GCV basis for the thermal plant at Sabarmati based on –
   a. Major R&M activities carried out
   b. Present performance of the plant such as plant load factor, secondary fuel consumption, auxiliary consumption, etc.
   c. The vintage, technology and other related factors
   d. Any other factors within or beyond the control of the power plant operation

4. Whether the calorific value of coal furnished by TPL-G (APP) to GERC and other agencies are Net Calorific Value (NCV) or Gross Calorific Value (GCV) based on laboratory tests and records maintained by them.

In the MYT Order, the Commission, pending the outcome of the CEA study, had provisionally approved the SHR on the basis of the NCV submitted by the Petitioner. CEA has now submitted the findings of its study to the Commission. The study has not made any recommendations in technical parameters for FY 2008-09 considering that the year has already elapsed. The study has also made recommendations for FY 2009-10 but the Commission has not applied these while undertaking the ARR since such a move will leave little time for the petitioner to adopt strategies to absorb their impact. However, the Commission has analyzed the impact of applying the recommendations of FY 2009-10 on cost of generation of TPL-G (APP) in the section 4.2.8.4 of this order.

Further, with regard to the information submitted by the petitioner the Commission observed that the petitioner has submitted information based on actual data only for 9 months of FY 2008-09. The Commission, therefore, directed the Petitioner to submit actual data for 12 months for FY 2008-09. Accordingly, TPL-G (APP) submitted the actual SHR vide its letter dated September 18, 2009 which is indicated in the table below.

Table 14: Actual SHR for FY 2008-09 submitted by TPL-G (APP)

(kCal / kWh)

Stations	MYT Approved	SHR Actual
C Station	3735	3712
D Station	2565	2553
E Station	2675	2661
F Station	2715	2700
Vatva Gas CCPP	1950	1930

The Commission has treated the improvement in SHR as controllable and accordingly has shared the gain / loss as per the MYT regulation. The Commission has adopted the SHRs as provided by the petitioner subject to recommendations of CEA.

The final summary of the Commission's analysis is presented below.

Table 15: SHR summary for FY 2008-09

(kCal / kWh)

Stations	MYT Approved	Actual	Considered for APR of FY 2008-09
C Station	3735	3712	3735
D Station	2565	2553	2565
E Station	2675	2661	2675
F Station	2715	2700	2715
Vatva Gas CCPP	1950	1930	1950

3.2.5 Secondary Fuel Oil Consumption

Petitioner's Submission

The petitioner has estimated the secondary fuel oil consumption for FY 2008-09 as 0.72 gm/kWh against the Commission's approved value of 1.45 gm/kWh under the MYT Order.

Commission's Analysis

On the directions from Commission, the petitioner submitted the total secondary fuel oil consumption of 1441 MT for FY 2008-09 through its letter dated 24th November, 2009. The Commission computed the secondary fuel oil consumption at 0.36 gm/kWh based on the total consumption of 1441 MT for actual gross generation of 4010 MUs in FY 2008-09.

The Commission has considered quantum of secondary oil consumed as controllable.

The Commission's analysis is provided in the table below:

Table 16: Secondary fuel oil consumption for FY 2008-09

(gm / kWh)

Particular	MYT Order	Actual	Considered for APR of FY 2008-09
Secondary fuel oil consumption	1.45	0.36	1.45

3.2.6 Coal Transit & Handling Losses

Petitioner's Submission

The petitioner has estimated coal transit & handling losses for FY 2008-09 at 2.86% based on 9 months actual data against an approved value of 1.40%. Petitioner has mentioned that the high transit losses are on account of uncontrollable factors such as distance from the coal mine, pilferage and the weighing system used by the coal supplier. The petitioner has also stated that the actual transit losses for the first 9 months in FY 2008-09 have been restricted to 2.72% against the previous year actual transit loss of 3.39%.

Commission's Analysis

The Commission observed that the coal transit & handling loss submitted by the petitioner is based on the estimated loss for nine months for FY 2008-09. The Commission, therefore, directed the petitioner to submit actual information for the FY 2008-09. The petitioner accordingly submitted the actual transit loss at 2.73% vide its letter dated 15th October 2009.

The Commission further directed the petitioner to clarify the weighing and billing points for indigenous coal. The Petitioner in its reply dated 6th October 2009 stated that collieries weigh coal at the point of despatch (i.e. coal mines) and the same is measured at the petitioner's generating stations. Transit loss is computed based on the difference in weights between the weights observed at the two handling points. The petitioner also stated that the long distance of more than 1600 kms from its coal linkages (South Eastern Collieries Limited) is the main reason for high transit loss. The petitioner further elaborated on the steps taken to reduce its transit losses such as 24X7 monitoring at coal mines, marking of wagons and deployment of security guards to accompany rakes from siding to the plant.

The Commission has assessed the submission of the Petitioner and is of the view that the coal transit and handling loss of 2.73% estimated by the Petitioner is very high. The approved loss has already been considered at a higher level compared to the loss figure as per the GERC Terms and Conditions of Tariff Regulations, 2005. The Commission had approved a transit loss of 1.4% in the MYT order as compared to 0.8% specified in the GERC Terms & Conditions of Tariff.

Further, the Commission is of the view that the transit & handling loss should be treated as controllable. Based on the above observation the Commission has considered the transit loss at 1.40% for APR.

Table 17: Transit loss for FY 2008-09

Particular	MYT Approved	Actual	Considered for APR of FY 2008-09
Coal transit & handling losses	1.40%	2.73%	1.40%

3.2.7 Gross generation and Net generation

Commission's Analysis

The Commission has undertaken the computation of gross generation and net generation based on the analysis for performance parameters indicated in the previous sections. The Computation of the gross and net generation is provided in the table below:

Table 18: Gross & Net Generation for FY 2008-09

Stations	MYT Order	Actual	Considered for APR of FY 2008-09
C Station			
Capacity in MW	60	60	60
PLF in %	92.51%	89.71%	89.71%
Gross Generation in MUs	486.23	471.52	471.52
Auxiliary Consumption (MUs)	45.75	45.31	44.37
Net Generation in MUs	440.48	426.20	427.15
D Station			
Capacity in MW	120	120	120
PLF in %	86.79%	98.43%	86.79%
Gross Generation in MUs	912.34	1034.70	912.34
Auxiliary Consumption (MUs)	79.65	88.26	79.65
Net Generation in MUs	832.69	946.44	832.69
E Station			
Capacity in MW	110	110	110
PLF in %	92.53%	97.24%	92.53%
Gross Generation in MUs	891.62	937.00	891.62
Auxiliary Consumption (MUs)	77.84	79.93	77.84
Net Generation in MUs	813.78	857.08	813.78
F Station			
Capacity in MW	110	110	110
PLF in %	91.42%	96.51%	91.42%
Gross Generation in MUs	880.92	929.97	880.92
Auxiliary Consumption (MUs)	76.90	79.33	76.90
Net Generation in MUs	804.02	850.64	804.02
Vatva Gas CCPP			
Capacity in MW	100	100	100
PLF in %	83.54%	72.64%	72.64%
Gross Generation in MUs	731.81	636.33	636.33
Auxiliary Consumption (MUs)	21.37	15.14	15.14
Net Generation in MUs	710.44	621.18	621.18

Stations	MYT Order	Actual	Considered for APR of FY 2008-09
Total TPL-G (APP)			
Gross Generation in MUs	3902.92	4009.51	3792.72
Auxiliary Consumption (MUs)	301.51	307.97	293.90
Net Generation in MUs	3601.41	3701.54	3498.82

3.2.8 Estimation of generation based Incentive

Petitioner's Submission

The petitioner has submitted that under Clause 15 (ii) of the GERC Terms and Conditions of Tariff Regulations, 2005 a thermal generating station is entitled to generation incentive for maintaining PLF higher than the normative PLF of 80% as provided in the above clause. In this regard the petitioner has submitted that the actual PLF for plants C, D, E & F has been higher than the Normative PLF on account of which there has been an increase in generation to the tune of 521.09 MUs from plants C, D, E & F. The Petitioner has accordingly requested the Commission to consider the incentive on this increased generation for FY2008-09.

Commission's Analysis

The Commission has observed that plants C, D, E & F have achieved a higher PLF than 80%. The Commission has also noted that higher PLF is entitled to receive incentive under the provisions of Clause 15 (ii) of GERC Terms and Conditions of Tariff Regulations, 2005. But in the MYT framework the benchmark for incentive is the MYT trajectory approved value rather than 80%. In this context the Commission has referred to Regulation 8 of the Multi Year Tariff Framework Regulations which states that:

"….8.2 Where the Commission has stipulated a trajectory for certain variables under this Regulation 8, the norms specified in any other regulation, as the case may be, shall not apply with regard to such variables for such period as the trajectory has been so stipulated…."

The Commission, therefore, holds the view that Clause 8 of the Multi Year Tariff Framework Regulations when read in conjunction with Clause 15 (ii) of GERC Terms and Conditions of Tariff Regulations, 2005 implies that the normative level of trajectory as prescribed under Clause 15 (ii) shall be replaced with the trajectory set under Regulation 8 of the GERC Multi Year Tariff Framework Regulation, 2007.

The Commission has, therefore, recomputed the incentive using the PLF approved in the MYT order of 17 January 2009 (MYT order) as the norm rather than 80% proposed by the Petitioner. The incentive is computed at Rs. 0.25 / kWh (as per GERC Terms & Conditions of Tariff Regulation, 2005) for ex-bus scheduled energy corresponding to scheduled generation in excess of ex-bus energy corresponding to target Plant Load Factor.

Table 19: Estimation of Generation Based Incentive for FY 2008-09

Eligible Stations	Parameters	Net generation *(MUs)*		Extra generation *(MUs)*	Incentive (Rs. crores)
		Using MYT PLF	Using Actual PLF		
D Station	PLF	86.79%	98.43%	113.93	2.85
	Net generation *(MUs)*	834.51	946.44		
E Station	PLF	92.53%	97.24%	41.52	1.04
	Net generation *(MUs)*	815.56	857.08		
F Station	PLF	91.42%	96.51%	44.86	1.12
	Net generation *(MUs)*	805.78	850.64		
Total				**198.31**	**5.01**

Thus the Commission approves a total incentive of Rs. 5.01 crores to TPL-G (APP) for FY 2008-09.

3.2.9 Variable Cost

The Commission has analyzed the variable cost of generation using parameters such as SHR, specific oil consumption, transit loss, fuel NCV, fuel price and blending ratio of coal. The detail of the computation is provided in the subsequent paragraphs:

3.2.9.1 Fuel NCV

Petitioner's Submission

The petitioner has submitted that it has estimated NCV of all fuels for FY 2008-09 estimated based on the actual data of 9 months according to the arrangements with fuel suppliers. The NCV of all fuels as estimated by the petitioner are shown below:

Table 20: NCV as estimated by TPL-G (APP)

Fuel	MYT Approved	TPL-G (APP) Estimate
Indigenous Coal (kCal/kg)	5236.00	5019.73
Imported Coal (kCal/kg)	4929.00	4770.55
Secondary fuel oil (kCal/kg)	9766.00	9721.02
Gas (kCal/'000 SCM)	8305.00	8305.00

Commission's Analysis

The Commission asked the petitioner to submit the actual NCV for FY 2008-09 which the petitioner submitted through its letter dated 24th November, 2009. The Commission observed that the submitted NCV of all fuels except gas were lower than those estimated earlier by the petitioner. The Commission is of the opinion that the calorific value of fuel is an uncontrollable parameter and therefore it has considered the actual NCV submitted by the petitioner for APR.

Table 21: Summary of NCV for all fuel types for FY 2008-09

Fuel	MYT Approved	Actual	Considered for APR of FY 2008-09
Indigenous Coal (kCal/kg)	5236.00	4999.00	4999.00
Imported Coal (kCal/kg)	4929.00	4781.00	4781.00
Secondary fuel oil (kCal/kg)	9766.00	9530.00	9530.00
Gas (kCal/'000 SCM)	8305.00	8305.00	8305.00

3.2.9.2 Fuel price

Petitioner's Submission

The petitioner has estimated price of all fuels for FY 2008-09 based on actual data of 9 months and estimation for 3 months based on the arrangements with fuel suppliers. The estimated prices for all fuel types are higher than the approved values of MYT order.

Table 22: Fuel prices for all fuel types estimated by TPL-G (APP) based on 9 months actual data

Fuel sources	MYT Approved	TPL-G (APP) Estimate
Indigenous Coal (Rs./Tonne)	2757.00	3128.10
Imported Coal (Rs./Tonne)	3035.00	4859.70
Gas (Rs. per '000 SCM)	8095.00	15170.23
Secondary fuel oil (Rs./Tonne)	18053.00	31147.16

Commission's Analysis

The Commission has observed that the estimated fuel prices are higher than the fuel prices approved under the MYT Order. The Commission directed the Petitioner to submit fuel bills to cross verify the fuel prices. The Petitioner accordingly submitted sample invoices vide its letter dated 15th October 2009. The Petitioner also submitted the actual quantity of each type of fuel consumed and the total landed cost paid on 24th November, 2009 based on which the Commission computed the actual fuel prices.

Table 23: Actual fuel prices computed by Commission

Fuel sources	MYT Approved	Computed by Commission
Indigenous Coal (Rs./Tonne)	2757.00	3061.69
Imported Coal (Rs./Tonne)	3035.00	4799.54
Gas (Rs. per '000 SCM)	8095.00	14963.15
Secondary fuel oil (Rs./Tonne)	18053.00	29701.60

The Commission found that the actual fuel prices too were much higher than those approved in the MYT order. The Commission has noted that the MYT order had approved fuel prices based on prices prevailing during 2007-08. The prices of imported coal and secondary fuel oil had increased since then due to rise in global energy prices. Further, the domestic coal prices have increased primarily due to two reasons:

1. Increase in development charges charged by the Government of India's coal mines
2. Change in the freight billing method of railways from the earlier method based on weight of coal loaded to the new method based on wagon capacity contracted

Further, in respect of gas, the petitioner had purchased imported gas on short term basis from the domestic open market whose price increased significantly during FY 2008-09.

The fuel prices are considered as uncontrollable and therefore the Commission considers the actual fuel cost for APR.

Table 24: Fuel prices for all fuel types for FY 2008-09

Fuel sources	MYT Approved	Actual	Considered for APR of FY 2008-09
Indigenous Coal (Rs./Tonne)	2757.00	3061.69	3061.69
Imported Coal (Rs./Tonne)	3035.00	4799.54	4799.54
Gas (Rs. per '000 SCM)	8095.00	14963.15	14963.15
Secondary fuel oil (Rs./Tonne)	18053.00	29701.60	29701.60

3.2.9.3 Blending ratio for coal

Petitioner's Submission

Petitioner has submitted that it uses imported coal due to supply constraints of domestic coal. The Ahmedabad plant normally uses indigenous coal for Station C and blended coal for stations D, E and F at an estimated average blending ratio of 63:37. This results in an average blending ratio of 70:30 for all stations combined, which is close to the Commission's approved blending ratio of 72:28. The petitioner has further stated that this would vary depending upon the availability of indigenous coal and calorific values of indigenous and imported coal.

Commission's Analysis

In the MYT order, the Commission had approved a blending ratio for indigenous and imported coal at an average of 72:28 for Stations C, D, E and F stations. The Commission had asked TPL-G (APP) to submit actual blending ratio during FY 2008-09.

The petitioner had replied to this on October 15th 2009 stating that the overall blending ratio actually used in FY 2008-09 worked out to be 68.1%:31.9%. TPL-G (APP) also stated that due to age of plant C, it is forced to use 100% domestic coal.

The Commission has considered the blending ratio as uncontrollable. Based on the above observation, the Commission approves the blending ratios for each station using the overall blending ratio of 68.1%:31.9% as provided in the following table:

Table 25: Blending ratios for Ahmedabad plant approved by Commission

Stations	MYT Approved	Actual	Considered for APR of FY 2008-09
C Station	72:28	100:0	100:0
D Station	72:28	61:39	61:39
E Station	72:28	61:39	61:39
F Station	72:28	61:39	61:39
Overall	**72:28**	**68.1:31.9**	**68.1:31.9**

3.2.9.4 Computation of variable cost

Based on the fuel parameters which are now approved for FY 2008-09, the Commission has estimated the quantity and cost required for each fuel type. The details of variable charges for each fuel type are provided in the table below:

Table 26: Variable cost for each fuel type computed by Commission

Fuel Type	MYT order	Actual	Considered for APR of FY 2008-09
Indigenous Coal			
Requirement (Mn. Tonnes)	1.26	1.33	1.25
Rate (Rs./Tonne)	2757	3062	3062
Cost (Rs. crores)	347.45	408.08	381.54
Imported Coal			
Requirement (Mn. Tonnes)	0.48	0.61	0.56

Fuel Type	MYT order	Actual	Considered for APR of FY 2008-09
Rate (Rs./Tonne)	3035	4800	4800
Cost (Rs. crores)	146.66	291.47	270.25
Gas			
Requirement (Mn. SCM)	172	148	149
Rate (Rs./'000 SCM)	8095	14963	14963
Cost (Rs. crores)	139.09	221.27	223.56
Secondary fuel oil			
Requirement (Tonnes)	4598.1	1212.3	4576.77
Rate (Rs./Tonne)	18053	29702	29702
Cost (Rs. crores)	8.30	3.60	13.59
Total Coal & Secondary Fuel (Rs. crores)	502	703	665
Total Gas (Rs. crores)	139	221	224
Total Fuel Cost of TPL-G (Rs. crores)	642	924	889

The Commission notes that the total fuel cost computed at Rs. 924 crores is same as the figure in TPL-G (APP)'s segregated audited accounts. However, the Commission considers variable cost of Rs 889 crores for the puropose of APR of FY 2008-09.

3.2.10 Fixed Cost components

3.2.10.1 Operations & Maintenance (O&M) expenses

Petitioner's Submission

The petitioner has submitted that it has estimated the O&M expense for FY 2008-09 based on 9 months of actual data which is provided in the table below:

Table 27: O&M expenses approved in the MYT order and estimated by TPL-G (APP) for FY 2008-09

(*Rs. crores)*

O&M expense sub heads	MYT Order	TPL-G (APP) Estimate
Employee Expenses	49.70	50.67
R&M Expenses	43.27	33.73
A&G Expenses	22.16	25.61
Total O&M	**115.13**	**110.01**

TPL-G (APP) has stated that in case of employee expenses and A&G expenses, the variation is minimal and the estimate is in line with the approved values. Further, TPL-G (APP) has submitted that in case of R&M expenses, some of the activities like rotor refurbishment, maintenance of station building etc. were deferred which resulted in lower R&M expenditure during the FY 2008-09.

Commission's Analysis

The Commission directed TPL-G (APP) to submit actual data for 12 months for FY 2008-09. Accordingly TPL-G (APP) submitted the actual O&M expenses as indicated below vide its letter dated 18th September 2009.

Table 28: Actual employee expenses for FY 2008-09 submitted by TPL-G (APP)

(*Rs. crores)*

Employee expense sub heads	Actuals for FY 2008-09
Salary, Wages & Bonus (Gross)	53.06
Less: Allocated to M&R CE	19.87
Salary, Wages & Bonus (Net of allocation)	33.19
Contribution to PF & other funds	2.98
Employee welfare expenses	3.11
Provisions for Gratuity & LE	9.58
Total	**48.86**

Table 29: Actual R&M expenses for FY 2008-09 submitted by TPL-G (APP)

(*Rs. crores)*

R&M expense sub heads	Actuals for FY 2008-09
Generation	33.53
Total	**33.53**

Table 30: Actual A&G expenses for FY 2008-09 submitted by TPL-G (APP)

(*Rs. crores)*

A&G expense sub heads	Actuals for FY 2008-09
Insurance	5.47
Legal & Professional charges	-
Auditor's remuneration	0.02
Director fees	0.01
Loss on sale of fixed assets	0.03
Misc. expenses	7.22
Printing & Stationery	0.33
Rent, Rates & Hire charges	1.93
Consumable Stores	3.29
Bill Collection charges	-
Advertisement	0.80
Donations	6.00
Total	**25.10**

The Commission has verified the submitted information with segregated audited accounts. The Commission has also analyzed the expense incurred for each of the expense heads and sub-heads and is of the opinion that the expense on account of donations under A&G should not be permitted for the purpose of recovery in ARR through tariff and accordingly it is disapproved.

The Commission treats the O&M expenses as controllable which is in line with the MYT Regulations. The analysis of the Commission is presented in the table below.

Table 31: O&M expense summary for FY 2008-09

(*Rs. crores)*

Particulars	MYT order	Actual	Considered for APR of FY 2008-09
Employee expenses	49.70	48.86	49.70
R&M expenses	43.27	33.53	43.27
A&G expenses	22.16	19.10	22.16
Total O&M expenses	**115.13**	**101.49**	**115.13**

3.2.10.2 Capital expenditure, Capitalization & Sources of financing

Petitioner's Submission

The petitioner has estimated a lower capital expenditure than the amount approved in the MYT Order. The petitioner has further submitted that it has deferred the capital expenditure on various projects due to economic slowdown.

Table 32: Estimated capital expenditure for FY 2008-09

(*Rs. crores)*

Capital expenditure items	MYT order	TPL- G (APP) Estimated
E station upgradation	20.00	-
ESP field extension, overhauling of existing ESP, control replacement, Ash handling system extension	20.00	-
Pollution control scheme	2.05	-
Normal capital expenditure – Sabarmati	19.29	12.20
Normal capital expenditure – Vatva	3.05	1.27
Total	**64.39**	**13.47**

The reasons for reduction of expenditure are explained below:

(a) Rs. 20 crores, planned for E-station upgradation has been deferred to FY 2009-10. TPL-G (APP) now proposes to undertake the entire work of upgradation relating to the capital expenditure approved by the Commission in FY 2009-10.

(b) ESP extension work has been deferred to FY 2009-10 as overhauling of ESP carried out in FY 2007-08 along with upgradation of controllers has brought in improvement in performance of the ESP.

(c) TPL-G (APP) has made efforts to reduce effluent discharge through reduction of waste water generation. However, TPL-G (APP) has initiated action to identify better engineering solution for pollution control and will implement the same in FY 2009-10.

The Petitioner has revised the capital expenditure plan for future years accordingly. The actual amount of capital expenditure for FY 2008-09 is Rs. 13.47 crores, mainly on account of normal capital expenditure for all the stations.

Commission's Analysis

The Commission has reviewed the reason of economic slowdown stated by the petitioner for deferment / reduction of capital expenditure. Except normal capital expenditure most of the intended projects as approved in the MYT order have been deferred to FY 2009-10. Based on a review of the reasoning submitted by the Petitioner, the Commission has treated capital expenditure as an uncontrollable expense. In this regard the Commission has drawn reference to Clause 9.6 of MYT regulations which provides for economy wide influences such as economic slowdown to be treated as uncontrollable factor:

9.6 … For the purpose of these Regulations, the term uncontrollable factors shall include the following factors which were beyond the control of, and could not be mitigated by, the applicant, as determined by the Commission-
(a) …
(b) …
(c) Economy-wide influences, such as unforeseen changes in inflation rate, market-interest rates, taxes and statutory levies.

Further, the Commission directed the petitioner to provide data on actual capitalization achieved in FY 2008-09. The petitioner provided the details of capitalization vide its letter dated 24th August 2009.

Table 33: Estimated and actual capitalization for FY 2008-09

(*Rs. crores)*

Asset	Estimated by TPL-G (APP) based on 9 months actuals	12 months Actuals submitted by TPL-G (APP)
Land	0.00	0.00
Buildings	7.95	8.00
Railway siding	1.76	1.76
Hydraulic works	0.00	0.00
Other civil works	0.00	0.00
Plant & Machinery	62.08	57.70
Lines & Cables	0.00	0.00
Vehicles	0.00	(0.01)
Furniture & Fixtures	0.36	0.37
Office Equipments	0.00	2.14
Computer & SAP	0.39	0.42
Intangible Assets	0.00	0.00
Net capitalization	**72.54**	**68.37**

The Commission has verified the above submission from the segregated audited accounts. The Commission has further estimated the quantum of debt and equity using the normative debt equity ratio of 70:30.

Table 34: Capitalization and sources of financing for FY 2008-09

(*Rs. crores)*

Particulars	MYT Order	Actual	Considered for APR of FY 2008-09
Capitalization	42.34	68.37	68.37
Debt %	70%	70%	70%
Debt	29.64	47.86	47.86
Equity	12.70	20.51	20.51

The Commission has observed that often utilities actually incur significantly lesser capital expenditure than what was approved while determining the tariff. The Commission reiterates its earlier directive that TPL shall undertake cost benefit analsyis for all capital expenditure abover Rs. 5 crores and submit the details to the Commission. Further for the next control period, only the scheme approved in principle by the Commission based on cost benefit analysis submitted by TPL would be admitted in the MYT petition.

3.2.10.3 Interest Expenses

Petitioner's Submission

In its petition, the petitioner has estimated the interest expenses on the existing loans on the basis of opening balances of the loans for FY 2008-09 which is in line with the MYT order. Thus TPL-G (APP) has worked out the interest on existing loans as follows:

Table 35: Estimated Interest Expense on existing loans for 2008-09

(*Rs. crores*)

Existing loan sub-heads	MYT order	TPL-G (APP) Estimated
IDFC Term Loan II		
Opening balance	25.00	25.00
Repayments	7.14	7.14
Closing balance	17.86	17.86
Interest rate	8.17%	8.17%
Interest on loan	1.70	1.75
LIC I		
Opening balance	100.00	100.00
Repayments	2.50	0.00
Closing balance	97.50	100.00
Interest rate	12.00%	12.00%
Interest on loan	11.85	10.98
Total	**13.55**	**12.73**

Further, TPL-G (APP) has also estimated interest expenses on new loans on a normative basis at Rs. 3.05 crores.

Commission's Analysis

The Commission directed TPL-G (APP) to submit loan sanction letters for existing loans for verification of TPL-G (APP)'s claims. TPL-G (APP) submitted the loan sanction letters on 8th October 2009. It also submitted the repayment schedule for FY 2008-09 for each lending agency on October 28th 2009. Based on these data submitted the Commission has recalculated the interest on loans as follows.

Table 36: Revised computation of Interest Expense for FY 2008-09

(*Rs. crores)*

Loan sub-heads	Actual for FY 2008-09
IDFC Term Loan II - Rs. 50 crores	
Opening balance	25.00
Repayments	7.14
Closing balance	17.86
Interest rate (%)	8.17%
Interest on loan	1.70
LIC I - Rs. 47.86 crores*	
Opening balance	47.86
Repayments@	1.20
Closing balance	46.66
Interest rate (%)	11.00%
Interest on loan	5.74
Total	**7.44**

** A total of Rs. 200 crores worth loans from LIC have been disbursed in all to TPL-G (APP) (Rs. 47.86 crores), TPL-Ahmedabad (Rs. 52.14 crores) and TPL-Surat (Rs. 100 crores)*

@ The repayment of LIC loan has to be made in 4 quarterly instalments with each company paying the following amounts as quarterly instalment: TPL-G (APP) – Rs. 1.20 crores, TPL-Ahmedabad – Rs. 1.30 crores and TPL-Surat – Rs. 2.50 crores. The repayment of LIC loan started in last quarter of FY 2008-09 and hence the repayment shown in the table corresponds to only one quarter.

The Commission has verified the above computation with the audited segregated accounts of TPL-G (APP). Further, the Commission has treated interest expense as uncontrollable since capital expenditure has been considered as uncontrollable.

The final summary for interest expense is shown below:

Table 37: Interest expense for FY 2008-09

(*Rs. crores)*

Particulars	MYT Order	Actual	Considered for APR of FY 2008-09
Interest exp.	13.55	7.44	7.44

3.2.10.4 Depreciation

Petitioner's Submission

In its petition the petitioner has estimated depreciation based on the audited GFA for FY2007-08 and the revised estimate for capitalization as shown below:

Table 38: Depreciation for FY 2008-09 estimated by petitioner

(*Rs. crores)*

Item	MYT Order	TPL-G (APP) Estimate
Depreciation	30.72	25.46

Commission's Analysis

The Commission directed TPL-G (APP) to submit audited actual GFA and capitalization data for FY 2008-09. Accordingly TPL-G (APP) submitted the actual data in its letter dated 15th October 2009 from which the opening and closing GFA details have been derived as shown below.

Table 39: Audited opening and closing GFA for FY 2008-09

(*Rs. crores)*

Gross Block as on 31.03.2008	Addition to Gross Block during 2008-09	Gross Block as on 31.03.2009
667.99	68.37	736.36

The petitioner has computed the depreciation using CERC depreciation rates on different categories of assets like plant & machinery, buildings, cables, etc as permitted by GERC Terms & Conditions of Tariff Regulations, 2005. The Commission computed the actual depreciation expense for FY 2008-09 by employing the weighted average depreciation rate of 3.62% used by the petitioner. Thus the Commission estimated the actual depreciation expense to be Rs. 25.77 crores.

Since capital expenditure has been considered as uncontrollable the Commission has treated depreciation as uncontrollable. The final summary for depreciation expenses is presented below:

Table 40: Depreciation expense for FY 2008-09

(*Rs. crores)*

Particulars	MYT Order	Actual	Considered for APR of FY 2008-09
Depreciation exp.	30.72	25.77	25.77

3.2.10.5 Interest on Working Capital

Petitioner's Submission

In its petition, TPL-G (APP) has estimated the interest on working capital on a normative basis based on the revised estimate for the various components of working capital:

Table 41: Interest on Working Capital as estimated by petitioner for FY 2008-09

(*Rs. crores)*

Particulars	MYT order	Estimated by TPL-G (APP)
Coal & Secondary Fuel for 2 months	83.73	119.14
Cost of gas for 1 month	11.59	18.71
O&M Expenses for 1 month	9.59	9.17
1% of GFA for maintenance spares	7.31	7.41
Receivables equivalent to 2 months	147.61	199.53
Normative Working Capital	259.83	353.95
Interest on Working Capital	**26.63**	**36.28**

Commission's Analysis

The actual interest on working capital incurred during the year as submitted by the petitioner on direction from the Commission was nil for FY 2008-09. The Commission has treated the overall Interest on Working Capital as controllable. The Commission notes that the actual recovery of interest on working capital has happened at the MYT order approved value itself. Hence the MYT order approved value has been considered for APR. Consequently, the gain / loss would be computed by comparing the actual expense with the MYT order approved expense.

The summary of Commission's analysis on interest on working capital is shown below:

Table 42: Summary of Interest on working capital expense for FY 2008-09

(*Rs. crores)*

Particulars	MYT Order	Actual	Considered for APR of FY 2008-09
Interest on Working Capital	26.63	0.00	26.63

3.2.10.6 Return on Equity

Petitioner's Submission

TPL-G (APP) has computed the opening equity using opening equity of the integrated utility as approved in the MYT order of Rs. 1506.37 crores and apportioning it to TPL-G (APP) on the basis of audited opening GFA. Using the audited actual GFA for TPL-G (APP) of Rs. 667.99 crores the opening equity has accordingly been estimated at Rs. 287.40 crores. The petitioner has computed the return on equity on a normative basis using a normative equity addition (as 30% of capitalization) during the year.

Table 43: Return on Equity as estimated by TPL-G (APP) for FY 2008-09

(*Rs. crores)*

Particulars	MYT order	TPL-G (APP) Estimate
Opening equity	311.45	287.40
Equity addition during the year	12.70	21.76
Equity at end of the year	324.15	309.16
Average equity	317.80	298.28
Return on Equity @ 14%	**44.49**	**41.76**

Commission's Analysis

The Commission approves the opening equity figure estimated by TPL-G (APP) as it is an audited figure. The Commission has recomputed the Return on Equity on a normative basis as 30% of the approved value of net capitalization.

Table 44: Return on Equity for 2008-09 as calculated by Commission

(*Rs. crores)*

Particulars	Actual for FY 2008-09
Opening equity	287.40
Equity addition during the year	20.51
Closing equity	307.91
Return on Equity @ 14%	**41.67**

Since capital expenditure has been considered as uncontrollable the Commission has treated return on equity as uncontrollable. Accordingly the analysis for return on equity for FY 2008-09 is summarized below:

Table 45: Summary of Return on Equity for FY 2008-09

(*Rs. crores)*

Particulars	MYT Order	Actual	Considered for APR of FY 2008-09
Return on Equity	44.49	41.67	41.67

3.2.10.7 Income Tax

Petitioner's Submission

In its MYT order, the Commission had computed income tax as per the GERC Terms & Conditions of Tariff Regulations, 2005 by applying the rate of 33.99% on the permissible return i.e. return on equity (RoE). TPL-G (APP) has revised the tax calculation by considering RoE as the post tax return (PAT). The petitioner has considered a tax rate of 33.99%. The submission of the petitioner is indicated in the table below:

Table 46: Income Tax as estimated by TPL-G (APP) for FY 2008-09

(*Rs. crores)*

Particulars	Estimated by TPL-G (APP)

Particulars	Estimated by TPL-G (APP)
ARR including non-tariff income	1,203.12
Total expense	1,139.86
PBT	63.26
Income tax	21.50
PAT	41.76

Commission's Analysis

The Commission has drawn reference to the provisions for income tax as contained in the regulations. In this regard the Commission has analyzed the relevant extract of GERC Terms & Conditions of Tariff Regulations, 2005 on income tax which is indicated below:

*7. **Tax on Income:***

"…..
(2) Under-recovery or over-recovery of any amount from the beneficiaries or the consumers on account of such tax having been passed on to them shall be adjusted every year on the basis of income-tax assessment under the Income-Tax Act, 1961, as certified by the statutory auditors. The generating company, or the transmission or distribution licensee, as the case may be, may make such adjustments directly and without making any application to the Commission in this regard.

Provided that tax on any income stream other than the core business shall not constitute a pass through component in tariff and tax on such other income shall be borne by the generating company or transmission licensee or the distribution licensee, as the case may be.

Provided further that the generating station-wise profit before tax in the case of the generating company, and the area of supply wise profit before tax for the transmission and distribution licensees respectively estimated for a year in advance shall constitute the basis for distribution of the corporate tax liability to all the generating stations and transmission and distribution licensees respectively…."

Based on the observation of the above provisions, the Commission is of the opinion that the income tax should be considered on the actual amount which has been paid and is therefore an uncontrollable parameter.

Thereafter, the Commission directed TPL-G (APP) to submit copies of income tax returns and tax challans for the amount of tax actually paid in FY 2008-09. The petitioner submitted the same through its letter dated 6th October 2009. The Commission found that at a corporate level, TPL has paid a tax of Rs. 56.65 crores in FY 2008-09. The Commission also observed that the amount of tax paid as per the annual report is Rs. 55 crores which includes tax paid towards other non regulated businesses. The Commission apportioned the amount of tax paid as per the audited accounts amongst each business using PBT of each as shown in the audited segregated accounts.

Table 47: Income tax computed by Commission

(*Rs. crores)*

Particulars	TPL Corporate	TPL-G (APP)	TPL-Ahmedabad	TPL-Surat
PBT	484.81	100.37	134.82	20.95
Tax	55	11.39	15.29	2.38

The Commission has treated income tax as an uncontrollable expense and passed it through in the APR. Accordingly the final summary for income tax is shown below:

Table 48: Summary of Income tax

(*Rs. crores)*

Particulars	MYT Order	Actual	Considered for APR of FY 2008-09
Income tax	15.12	11.39	11.39

3.2.10.8 Non Tariff Income

Petitioner's Submission

TPL-G (APP), in its petition, estimated non tariff income for FY 2008-09 based on actual 9 months data. It also accounted for the rise in income due to sale of surplus power to GUVNL.

Table 49: Non Tariff income estimated by TPL-G (APP) for FY 2008-09

(*Rs. crores)*

Particulars	MYT order	TPL-G (APP) Estimated
Non tariff income	1.50	5.94

Commission's Analysis

TPL-G (APP) submitted the actual non tariff income vide its letter dated 18th September 2009 at Rs. 6.99 crores which consisted of Rs. 2.23 crores of miscellaneous income and Rs. 4.76 crores of revenues due to export of surplus power (20.74 MUs) to GUVNL. The Commission compared these figures with the audited segregated accounts for TPL-G (APP) wherein the non tariff income was shown to be only Rs. 2.23 crores. The Commission has now considered only miscellaneous income under non-tariff income since the surplus power has already been taken into account by reducing the energy requirement of Ahmedabad license area from GUVNL.

The Commission has treated non tariff income as uncontrollable. The final summary for non tariff income is presented below.

Table 50: Summary of Non tariff income of TPL-G (APP) for FY 2008-09

(*Rs. crores)*

Particulars	MYT Order	Actual	Considered for APR of FY 2008-09
Non tariff income	1.50	2.23	2.23

3.2.11 Summary of APR of TPL-G (APP) for FY 2008-09

Table 51: Summary of TPL-G (APP) APR for FY 2008-09

(*Rs. crores*)

Particulars	MYT Order	Actual	Considered for APR of FY 2008-09
Variable Costs			
Station C	101.85	110.61	111.02
Station D	131.76	204.75	182.38
Station E	134.22	193.23	185.76
Station F	134.57	194.58	186.23
Station Vatva	139.09	221.27	223.56
Total Variable Costs	**641.51**	**924.43**	**888.94**
Fixed Costs			
Employee Expenses	49.70	48.86	49.70
R&M Expenses	43.27	33.53	43.27
A&G Expenses	22.16	19.10	22.16
Depreciation	30.72	25.77	25.77
Interest on loans	13.55	7.44	7.44
Interest on Working Capital	26.63	0.00	26.63
Return on Equity	44.49	41.67	41.67
Income Tax	15.12	11.39	11.39
Total Fixed Costs	**245.65**	**187.76**	**228.03**
Gross ARR	**887.15**	**1112.19**	**1116.98**
Non-tariff income	1.50	2.23	2.23
Net ARR	**885.65**	**1109.96**	**1114.75**

3.3 Ahmedabad Distribution

3.3.1 Sales

Petitioner's submission

TPL-Ahmedabad has, in its petition, estimated sales for FY 2008-09 based on actual sales for the first 9 months of FY 2008-09. TPL-Ahmedabad has submitted that 65% of total sales in Ahmedabad are attributed to the industrial and commercial consumers whose growth largely depends on the economic conditions. The current economic slowdown therefore has hit the growth significantly. The petitioner has further submitted that, the major impact on sales will be seen in the next year i.e. FY 2009-10. The summary of estimated sales is provided below:

Table 52: Sales for FY 2008-09 as estimated by TPL-Ahmedabad

(MUs)

Particulars	MYT Order	9 months actual	Revised estimate
Sales	4,922.00	3710.60	4,753.21

TPL-Ahmedabad submitted that it has applied a lower YoY growth rate of 5.82% vis-à-vis 9.57% approved by Commission in its MYT order mainly because of current economic slowdown which has hit the consumption of the industrial and commercial consumers. The category wise sales estimated are shown below:

Table 53: Consumer category wise sales for FY 2008-09 as estimated by TPL-Ahmedabad

(*MUs)*

Category	MYT order	9 months actual	Revised estimate
Residential General Purpose	1429.00	1156.79	1437.34
Commercial General Purpose	758.00	602.02	774.19
Low Tension Power	271.00	195.68	256.47
Low Tension Maximum Demand	828.00	542.98	719.06
High Tension Maximum Demand	1423.00	1059.13	1366.66
HT-Local Authority	97.00	67.57	87.83
Others	116.00	79.58	104.79
DoE	0.00	6.86	6.86

Category	MYT order	9 months actual	Revised estimate
Total	**4922.00**	**3710.60**	**4753.21**

The petitioner has submitted the following reasons for deviation in sales estimation for each category:

Residential General Purpose

It accounts for about 30 % of total sales. The growth in sales is mainly attributed to the growth in the initial part of the year.

Commercial General Purpose & Industrial General Purpose

It accounts for about 16% of total sales. This category mainly includes the commercial complexes including the mid sized and small shops. In the past few years Ahmedabad city had witnessed a sudden surge in the number of shopping malls. The growth in sales is mainly attributable to the high growth rate in the initial part of year.

Low Tension Power

It accounts for about 5 % of total sales. The sales under this category are mainly contributed by small scale textile and engineering industries. The industrial sales under this category are affected in FY 2008-09 due to economic slowdown. This effect is only visible in the recent months prior to which this category was growing in line with the past growth trends.

Low Tension Maximum Demand

It accounts for around 15 % of the total sales. The sale in this category is mainly contributed by commercial complexes and industries like power loom, casting and moulding, chemical, ice factories, plastic etc. All these industries have been affected by the economic slowdown. Many of the commercial complexes, textile industries, casting & moulding foundry , diamond industries etc. in the city have been either closed down or the operation has been scaled down to a large extent.

High Tension Maximum Demand

It accounts for 29% of the total sales. Due to the economic recession many of the commercial complexes are either closing down or have considerably scaled down their operations. Big retail outlets like Subhiksha, Spencer retail etc., have completely pulled themselves out of the city whereas the Big Bazaar, Pantaloon, Reliance Hypermart etc. have drastically scaled down their operations.

High Tension – Local Authority

It accounts for about 2% of total sales. The sale under this category is mainly on account of water pumping and drainage pumping stations. The main reason for reduction in growth in this category is availability of Narmada/ Raska water to the city of Ahmedabad. This has increased the level of ground water and thus the power required for pumping this water to the societies has reduced.

Others

It account for about 2% of total sales. The sales in this category are mainly contributed by LT sales of local authority, agriculture, temporary, streetlights and general lighting purpose categories.

Commission's analysis

The Commission directed TPL-Ahmedabad to submit 12 months actual sales for FY 2008-09 which has been submitted by the petitioner vide its letter dated 24th August 2009.

Table 54: Actual 12 months sales for FY 2008-09 submitted by TPL-Ahmedabad

(MUs)

Category	Estimated in petition	Actuals submitted on 24th Aug 2009
Residential General Purpose	1437.34	1425.03
Commercial General Purpose	774.19	761.40
Low Tension Power	256.47	257.08
Low Tension Maximum Demand	719.06	773.42
High Tension Maximum Demand	1366.66	1365.63
HT-Local Authority	87.83	87.64
Others	104.79	58.06
DoE	6.86	9.08
Total	**4753.21**	**4737.35**

According to the petitioner's submission, the actual sales in Ahmedabad and Surat totals to 7644 MUs. The Commission verified this figure with the sales figure mentioned in the Annual Report for FY 2008-09. The Annual Report mentions actual sales for FY 2008-09 for Ahmedabad and Surat to be 7665 MUs which also includes 21 MUs of surplus exported by TPL-Ahmedabad to GUVNL which is not included in the 7644 MUs submitted by the petitioner.

The Commission considers sales as an uncontrollable parameter and considers the actual sales submitted by TPL-Ahmedabad for APR of FY 2008-09. The summary of Commission's analysis is presented below.

Table 55: Summary of FY 2008-09 sales for TPL-Ahmedabad

(MUs)

Category	MYT order	Actuals	Considered for APR of FY 2008-09
Residential General Purpose	1429.00	1425.03	1425.03
Commercial General Purpose	758.00	761.40	761.40
Low Tension Power	271.00	257.08	257.08
Low Tension Maximum Demand	828.00	773.42	773.42
High Tension Maximum Demand	1423.00	1365.63	1365.63
HT-Local Authority	97.00	87.64	87.64
Others	116.00	58.06	58.06
DoE	0.00	9.08	9.08
Total	**4922.00**	**4737.35**	**4737.35**

3.3.1.1 Number of installations

Petitioner's submission

The petitioner has estimated the number of installations for Ahmedabad supply area based on the actual data available for April, 2008 to December, 2008 and the feedback from end use survey. The approved and revised estimates for the number of installations for FY 2008-09 are tabulated below.

Table 56: No. of installations for TPL-Ahmedabad estimated by petitioner for FY 2008-09

Category	MYT order	Revised estimate
Residential General Purpose	1115988	1140373
Commercial General Purpose	306450	304063
Low Tension Power	48043	52190
Low Tension Maximum Demand	10835	11116
High Tension Maximum Demand	682	675
HT-Local Authority	131	137

Category	MYT order	Revised estimate
Others	3636	3241
Total	**1485765**	**1511795**

Commission's analysis

The Commission has considered the number of installations estimated by TPL-Ahmedabad as actual and also considered the same for APR as the number of installations is an uncontrollable parameter.

Table 57: No. of installations approved for FY 2008-09

Category	MYT order	Actual	Considered for APR of FY 2008-09
Residential General Purpose	1115988	1140373	1140373
Commercial General Purpose	306450	304063	304063
Low Tension Power	48043	52190	52190
Low Tension Maximum Demand	10835	11116	11116
High Tension Maximum Demand	682	675	675
HT-Local Authority	131	137	137
Others	3636	3241	3241
Total	**1485765**	**1511795**	**1511795**

3.3.2 Revenue from sale of power

Petitioner's submission

TPL-Ahmedabad had estimated revenues of Rs. 2155.22 crores for FY 2008-09 estimated based on 9 months of actual figures.

Commission's analysis

The Commission directed TPL-Ahmedabad to submit the 12 months actual revenue for FY 2008-09 which it submitted through its letter dated 24th August 2009. The Commission verified the revenue submitted by TPL-Ahmedabad of Rs. 2145.18 crores from segregated audited accounts and has considered the same for APR of FY 2008-09.

Table 58: Revenue for TPL-Ahmedabad approved by Commission

(*Rs. crores)*

Particular	MYT order	Actuals	Considered for APR of FY 2008-09
Revenue from sale of power	1881.07	2145.18	2145.18

3.3.3 Distribution loss

Petitioner's submission

The Commission, in its MYT order had approved distribution loss for Ahmedabad area at 10.43% after considering a reduction of 0.05% over actual loss of 10.48% in FY 2007-08. TPL-Ahmedabad, in its petition has now estimated a loss of 9.10% for FY 2008-09.

Commission's analysis

The Commission directed TPL-Ahmedabad to submit the actual loss achieved in FY 2008-09. As per the letter dated 24th August 2009, TPL-Ahmedabad submitted the actual distribution loss at 8.69%.

The Commission is of the view that distribution loss should be treated as controllable. The gain on account of reduction in distribution loss has been accordingly shared with consumers as per the MYT regulations.

The final summary for distribution loss is provided below:

Table 59: Distribution loss for FY 2008-09 for TPL-Ahmedabad approved by Commission

Particular	MYT order	Actuals	Considered for APR of FY 2008-09
Distribution loss	10.43%	8.69%	10.43%

3.3.4 Energy Requirement

Petitioner's submission

The Commission, in its MYT order, had estimated the energy requirement considering a distribution loss of 10.43% and a transmission loss of 3 MUs. The transmission loss of 3 MUs was on account of purchase from SUGEN and Wind power. TPL-Ahmedabad, in its petition, did not estimate any power from SUGEN; thus the transmission loss estimated by the petitioner of 0.38 MUs is on account of purchase of 18.87 MUs from wind energy (excluding purchase from surplus captive sources).

Table 60: Energy requirement estimated by TPL-Ahmedabad

(*MUs)*

Particulars	MYT order	Revised estimate
Energy Sales	4922.00	4,753.21
Distribution loss (%)	10.43%	9.10%
Distribution loss	573.14	475.84
Energy input at distribution level	5495.14	5,229.05
Transmission loss	3.00	0.38
Energy requirement	5498.14	5,229.43

Commission's analysis

In order to calculate the actual energy requirement, the Commission has used the actual sales figure and distribution loss and computed the transmission loss based on the transmission loss percentage derived from the petitioner's submission.

The effective transmission loss due to wind energy, as per petitioner's estimate, works out to be 2.01% considering the loss of 0.38 MUs on account of purchase of 18.87 MUs. The Commission has computed the total transmission loss on account of wind energy purchase only as in FY 2008-09 there was no purchase from SUGEN. The Commission has considered the actual energy purchased in FY 2008-09 of 18.61 MUs from wind based on data submitted by TPL-Ahmedabad on 27th October 2009. The actual transmission loss is now calculated by applying the loss percentage of 2.01% on 18.61 MUs thus arriving at the actual loss of 0.37 MUs.

Based on the above analysis the Commission has calculated the actual energy requirement as shown below and considered the same for APR of FY 2008-09 since energy requirement is uncontrollable:

Table 61: Summary of Energy requirement for TPL-Ahmedabad

(MUs)

Particulars	MYT order	Actual	Considered for APR of FY 2008-09
Energy Sales	4922.00	4737.35	4737.35
Distribution loss (%)	10.43%	8.69%	8.69%*
Distribution loss	573.00	450.85	450.85
Energy input at distribution level	5495.00	5188.20	5188.20
Transmission loss	3.00	0.37	0.37
Energy requirement	5498.00	5188.57	5188.57

**Since energy requirement is uncontrollable, the requirement considered for APR has been calculated on the basis of actual distribution loss even though the distribution loss considered for gain / loss computation in APR is the MYT order approved value*

3.3.5 Energy Availability

Petitioner's submission

The Commission, in its MYT order, had approved TPL-G (APP), TPL-G (SUGEN), GUVNL and Wind Energy as power sources for TPL-Ahmedabad. TPL-Ahmedabad, in its petition, has revised the availability mix based on revised estimates of net generation from TPL-G (APP) and availability from wind and GUVNL. No energy availability has been estimated from SUGEN in FY 2008-09.

Table 62: Energy availability estimated by TPL-Ahmedabad

(MUs)

Energy sources	MYT order	Revised estimate
TPL-G (APP)	3601.00	3681.45
TPL-G (SUGEN)	32.00	0.00
GUVNL	1668.00	1525.12
Wind energy	197.00	22.87
Total	5498.00	5229.43

Commission's analysis

The Commission has computed the actual energy availability based on actual data. The availability from TPL-G (APP) has been considered at the actual net generation. Nil availability from SUGEN has been considered in line with the petitioner's submission. The energy availabilities from GUVNL and wind have been considered as per the actual data provided by TPL-Ahmedabad on 24th August 2009 and October 27th 2009 respectively.

Based on the actual data obtained as explained above the Commission has calculated the actual energy availability as shown below and considered the same for APR of FY 2008-09 since energy availability is uncontrollable:

Table 63: Summary of Energy availability

(MUs)

Energy sources	MYT order	Actual	Considered for APR of FY 2008-09
TPL-G (APP)	3601.41	3701.54	3701.54
TPL-G (SUGEN)	32.00	0.00	0.00
GUVNL	1668.00	1468.04	1468.04
Wind energy	197.00	18.61	18.61
Total *	5498.41	5188.19	5188.19

** The actual and approved values are slightly different than energy requirement due to rounding error while computing energy availability from TPL-G (APP)*

3.3.6 Power purchase cost

Petitioner's submission

The power purchase rates from various sources approved by Commission in its MYT order and the rates now estimated by TPL-Ahmedabad are shown below. TPL-Ahmedabad has revised rate from TPL-G (APP) based on revised cost of net generation. The rate for GUVNL has increased due to the fuel cost adjustment charges levied by GUVNL. The rate for wind energy is the rate estimated for purchase of wind power at generation bus-bar:

Table 64: Power purchase rates for FY 2008-09 estimated by TPL-Ahmedabad

(Rs. / kWh)

Sources	MYT order	Revised estimate
TPL-G (APP)	2.46	3.25
TPL-G (SUGEN)	3.10	-
GUVNL	3.10	3.83
Wind energy	3.51	3.37

Commission's analysis

The Commission has determined the actual rates based on revised computations done by the Commission and actual data submitted by the petitioner. The rate from TPL-G (APP) has been computed to be Rs. 3.00 per kWh based on actual net cost of generation of TPL-G (APP) computed by the Commission. The rate for GUVNL has been determined to be Rs. 3.82 per kWh based on actual information submitted by TPL-Ahmedabad on 24th August 2009. The rate for wind has been considered at Rs. 3.37/kWh which is the actual rate for purchase of wind power at generation bus-bar.

Based on the actual data obtained as explained above the Commission has calculated the actual power purchase cost from various sources as shown below and considered the same for APR of FY 2008-09 since power purchase cost is uncontrollable:

Table 65: Power purchase cost approved by Commission

Sources	MYT order	Actual	Considered for APR of FY 2008-09
TPL-G (APP)			
Quantity in MUs	3601.41	3701.54	3701.54
Rate in Rs./kWh	2.46	3.00	3.00
Cost in Rs. crores	885.65	1109.96	1109.96
TPL-G (SUGEN)			
Quantity in MUs	32.00	0.00	0.00
Rate in Rs./kWh	3.10	3.10	3.10
Cost in Rs. crores	9.92	0.00	0.00
GUVNL			
Quantity in MUs	1668.00	1468.04	1468.04
Rate in Rs./kWh	3.10	3.82	3.82
Cost in Rs. crores	517.08	560.79	560.79

Sources	MYT order	Actual	Considered for APR of FY 2008-09
Wind energy			
Quantity in MUs	197.00	18.61	18.61
Rate in Rs./kWh	3.51	3.37	3.37
Cost in Rs. crores	69.15	6.27	6.27
Total			
Quantity in MUs	**5498.41**	**5188.19**	**5188.19**
Rate in Rs./kWh	**2.69**	**3.23**	**3.23**
Cost in Rs. crores	**1481.80**	**1677.02**	**1677.02**

3.3.7 Fixed Cost components

3.3.7.1 Operations & Maintenance (O&M) expenses

Petitioner's Submission

The petitioner has submitted that it has estimated the O&M expense for FY2008-09 based on 9 months of actual data which is provided in the table below:

Table 66: O&M expenses estimated by TPL-Ahmedabad

(*Rs. crores)*

O&M expense sub heads	MYT Order	TPL-Ahmedabad Estimate
Employee Expenses	62.62	66.83
R&M Expenses	73.20	73.19
A&G Expenses	31.75	28.93
Total O&M	**167.57**	**168.95**

TPL-Ahmedabad has stated that it has made all possible attempts to restrict the operations & maintenance expenses and the revised estimate is very near to the approved value. Except employee expense, the R&M and A&G expenses have reduced. TPL-Ahmedabad has submitted that the rise in employee expenses is due to the fact that they are subjected to a higher inflationary increase than R&M and A&G expenses.

Commission's Analysis

The Commission directed TPL-Ahmedabad to submit actual data for 12 months for FY 2008-09. Accordingly TPL-Ahmedabad submitted the actual O&M expenses as indicated below vide its letter dated 18th September 2009.

Table 67: Actual employee expenses for FY 2008-09 submitted by TPL-Ahmedabad

(*Rs. crores)*

Employee expense sub heads	Actuals for FY 2008-09
Salary, Wages & Bonus (Gross)	82.72
Less: Allocated to M&R CE	41.91
Salary, Wages & Bonus (Net of allocation)	40.81
Contribution to PF & other funds	4.35
Employee welfare expenses	5.80
Provisions for Gratuity & LE	13.97
Total	**64.93**

Table 68: Actual R&M expenses for FY 2008-09 submitted by TPL-Ahmedabad

(*Rs. crores)*

R&M expense sub heads	Actuals for FY 2008-09
EHV	6.68
HV	9.70
LV	48.36
Others	5.73
Total	**70.47**

Table 69: Actual A&G expenses for FY 2008-09 submitted by TPL-Ahmedabad

(*Rs. crores)*

A&G expense sub heads	Actuals for FY 2008-09
Insurance	1.03
Legal & Professional charges	2.62
Auditor's remuneration	0.06
Director fees	0.08
Loss on sale of fixed assets	1.70

A&G expense sub heads	Actuals for FY 2008-09
Misc. expenses	16.92
Printing & Stationery	1.32
Rent, Rates & Hire charges	1.45
Consumable Stores	-
Bill Collection charges	1.05
Advertisement	1.48
Donations	6.32
Total	**34.03**

The Commission has verified the submitted information with certified segregated accounts. The Commission has also analyzed the expense incurred for each of the expense heads and sub-heads and is of the opinion that the expense on account of donations under A&G cannot be permitted.

The Commission has considered the O&M expenses as controllable.

Based on the above analysis, Commission has approved O & M expenses as below:

Table 70: O&M expense summary for FY 2008-09

(*Rs. crores)*

Particulars	MYT order	Actual	Considered for APR of FY 2008-09
Employee expenses	62.62	64.93	62.62
R&M expenses	73.20	70.47	73.20
A&G expenses	31.75	27.71	31.75
Total O&M expenses	**167.57**	**163.11**	**167.57**

3.3.7.2 Capital expenditure, Capitalization & Sources of financing

Petitioner's Submission

For FY 2008-09, TPL-Ahmedabad has estimated a lower capital expenditure than approved value. TPL-Ahmedabad has explained that it has reassessed the capital expenditure requirement for FY 2008-09. TPL-Ahmedabad has deferred some projects and has also re-looked the investment projected in the MYT order due to operational difficulties in FY 2008-09. It further stated that it has already achieved significant loss reduction through effective investments and is one of the best performing utility in the country. However, to ensure the sustenance of low loss level and better quality of supply, optimal capital expenditure has to be incurred. Some of these capital expenditure initiatives are towards meeting the new load of the HT and LT consumers and others are towards the network up-gradation and modernisation. Further, TPL-Ahmedabad is also investing on renovation and modernisation in order to have better quality of supply. TPL-Ahmedabad has reduced capital expenditure pertaining to last mile connectivity i.e. LT in the face of slowdown affecting commercial and industrial consumer categories.

Table 71: Capital expenditure estimated by TPL-Ahmedabad for FY 2008-09

(*Rs. crores)*

Capital expenditure items	MYT order	TPL-Ahmedabad Estimated
EHV	274.54	152.24
HT Network	103.98	83.36
LT Network	44.44	30.32
Metering	28.41	18.85
Special projects	19.59	3.85
Customer Care & IT Initiatives	34.30	10.21
Total	**505.26**	**298.83**

The main reasons for reduction in investments as provided by TPL-Ahmedabad are discussed below:

1. Investment in EHV Network

(a) TPL-Ahmedabad has deferred the investment in 400 kV Gota Import Point under the head of bulk supply points, keeping in mind the reduction in the demand due to the economic slowdown.

(b) 132 kV DU F-1 and F-2 has been partly deferred for the control period due to non availability of shutdown period while upgradation of 66 kV transmission line from Sabarmati to Gandhinagar has been deferred to FY 2009-10.

(c) EHV substation projects of 132 kV sub-station at Prahlad Nagar, Dudeshwar and upgradation of Gandhinagar substation from 66 kV to 132 kV has been deferred from FY 2008-09 to FY 2009-10 and FY 2010-11.

(d) Out of the planned eight 33 kV sub-stations, three have been deferred to FY 2009-10 due to lower load growth on account of economic slowdown. The projects which have been deferred are IIM Vastrapur, Manekhadi and Aryoday Ginning.

(e) Investment in upgradation for EHV sub-stations and Mains Receiving Stations (MRS) has been deferred from FY 2008-09 to FY 2009-10 and FY 2010-11 due to operational difficulties.

(f) Investment in Automation for MRS and switch houses were carried out as per plan, however EHV substation automation and panel retrofitting have been deferred to FY 2009-10 and has been clubbed with the capital expenditure of central control room.

Investment in HT Network

(a) Number of schemes proposed in HT Network & Distribution transformer, 11 kV Switchgears & Substations and other costs has been reduced due to lower load growth rate achieved during the first 9-months of FY 2008-09.

(b) The cost under the head of safety has increased due to inclusion of the cost of replacement of 53 switchgears which was originally included under the head of replacement.

Investment in LT Network

(a) The investment for services on existing mains and extension/ reduction of load has been revised due to reduction in load growth achieved during FY 2008-09.

(b) The investment under “others” covers the expenditure incurred in upgrading the LV network in case of repeated cable faults. This has reduced due to better network maintenance activities carried out by TPL-Ahmedabad.

Investment in Metering: The reduction in investment is due to the lower growth rate in the current scenario.

Investment in Special Projects: Due to deferment of projects like Distribution Automation, High Voltage Distribution Systems (HVDS), Automated Meter Reading (AMR), procurement of test benches for Meter Testing Laboratory (MTL). The part of the planned expenditure under Geographical Information Systems (GIS) project for FY 2008-09 has been deferred to FY 2009-10.

Investment in Customer Care & IT: Due to deferment in the procurement of software for call centre and SAP Project.

Summarizing, TPL-Ahmedabad has stated that most of the capital expenditure is being deferred to the future years due to operational difficulties and current market scenario. Further, the capital expenditure under some of the schemes has been reduced keeping in mind the lower demand growth.

Commission's Analysis

The Commission has reviewed the reason of economic slowdown stated by the petitioner for deferment / reduction of capital expenditure. A significant portion of the capital expenditure as approved in the MYT order has been deferred to FY 2009-10. Based on a review of the reasoning submitted by the Petitioner, the Commission has treated capital expenditure as an uncontrollable expense. In this regard the Commission has drawn reference to Clause 9.6 of MYT regulations which provides for economy wide influences such as economic slowdown to be treated as uncontrollable factor:

9.6 … For the purpose of these Regulations, the term uncontrollable factors shall include the following factors which were beyond the control of, and could not be mitigated by, the applicant, as determined by the Commission-
(a) …
(b) …
(c) Economy-wide influences, such as unforeseen changes in inflation rate, market-interest rates, taxes and statutory levies.

Further, the Commission directed the petitioner to provide data on actual capitalization achieved in FY 2008-09. The petitioner provided the details of capitalization vide its letter dated 24th August 2009.

Table 72: Estimated and actual capitalization for FY 2008-09

(*Rs. crores*)

Asset	Estimated by TPL-Ahmedabad based on 9 months actuals	12 months Actuals submitted by TPL- Ahmedabad
Land	45.49	45.43
Buildings	4.38	10.14

Asset	Estimated by TPL-Ahmedabad based on 9 months actuals	12 months Actuals submitted by TPL- Ahmedabad
Railway siding	0.00	0.00
Hydraulic works	0.00	0.00
Other civil works	0.00	0.00
Plant & Machinery	144.99	122.56
Lines & Cables	90.80	119.74
Vehicles	1.41	1.68
Furniture & Fixtures	0.06	0.23
Office Equipments	1.78	3.59
Computer & SAP	4.23	4.21
Intangible Assets	0.00	0.00
Total (Gross capitalization)	**293.14**	**307.57**
Less SLC	45.01	46
Net Capitalization	**248.13**	**261.57**

The Commission has verified the above submission from the segregated audited accounts. The Commission has further estimated the quantum of debt and equity using the normative debt equity ratio of 70:30.

Table 73: Summary of capitalization and sources of financing for FY 2008-09

(*Rs. crores)*

Particulars	MYT Order *	Actual	Considered for APR of FY 2008-09
Capitalization	-	261.57	261.57
Debt %	-	70%	70%
Debt	-	183.10	183.10
Equity	-	78.47	78.47

**The MYT order had not approved any numbers for capitalization and sources of financing*

The Commission has observed that often utilities actually incur significantly lesser capital expenditure than what was approved while determining the tariff. The Commission is therefore,of the view that before including any scheme in the tariff proposal, the licensee shall obtain approval of the Commission as provided in Section 65(c) of the GERC (Terms and Conditions of Tariff) Regulations, 2005.

3.3.7.3 Interest Expenses

Petitioner's Submission

In the MYT order, the Commission had approved the interest expenses for the entire distribution business (Ahmedabad & Surat combined) based on the actual opening balance of the loans for FY 2008-09 and apportioned between Ahmedabad and Surat license areas in proportion to approved capital expenditure for the respective year. In its petition, TPL-Ahmedabad has identified loans for each area and reallocated the interest expenses on the existing loans on the basis of opening balances of the loans for FY 2008-09 for each area. Thus TPL-Ahmedabad has worked out the interest on existing loans as follows:

Table 74: Interest Expense on existing loans for FY 2008-09 estimated by TPL-Ahmedabad

(*Rs. crores)*

Existing loan sub-heads	Estimated in the petition
APDRP	
Opening balance	36.18
Interest rate	9.00%
Interest expense	3.22
HDFC 2A	
Opening balance	48.08
Interest rate	11.50%
Interest expense	5.08
HDFC 3A	
Opening balance	5.00
Interest rate	11.50%
Interest expense	0.55
SBI	
Opening balance	175.00
Interest rate	11.00%
Interest expense	19.18
Total	
Opening balance	264.26

Existing loan sub-heads	Estimated in the petition
Interest rate	9.00% to 11.50%
Interest expense	28.03

Further, TPL-Ahmedabad has also estimated interest expenses on new loans on a normative basis at Rs. 10.42 crores.

Commission's Analysis

The Commission directed TPL-Ahmedabad to submit loan sanction letters for existing loans for verification of TPL-Ahmedabad's claims. TPL-Ahmedabad submitted the loan sanction letters on 8th October 2009. It also submitted the repayment schedule for FY 2008-09 for each lending agency on October 28th 2009. Based on these data submitted the Commission has recalculated the interest on loans as follows. The loan for APDRP has been verified from Annual Report.

Table 75: Interest Expense on loans for FY 2008-09 computed by Commission

(*Rs. crores)*

Loan sub-heads	Actuals for FY 2008-09
APDRP A (Rs. 38.70 crores)	
Opening	36.18
Repayment	0.97
Additions	0
Closing	35.21
Interest rate	9%
Interest expense	3.22
HDFC 2A (Rs. 50 crores)	
Loan opening	48.08
Repayment	7.69
Loan closing	40.38
Interest rate	11.50%
Interest expense	5.08
HDFC 3A (Rs. 100 crores)	
Loan opening	100.00
Addition	0.00
Repayment	0.00

Loan sub-heads	Actuals for FY 2008-09
Loan closing	100.00
Interest rate	11.00%
Interest expense	11.43
SBI (Rs. 350 crores)	
Loan opening	175
Addition	35.89
Repayment	17.59
Loan closing	193.3
Interest rate	11.00%
Interest expense	22.39
LIC (Rs. 100 crores)	
Loan opening	52.14
Addition	0.00
Repayment	1.30
Loan closing	50.84
Interest rate	11.00%
Interest expense	6.27
Total interest on loans	**48.39**

The Commission has verified the above computation with the audited segregated accounts of TPL-Ahmedabad. Further, the Commission has treated interest expense as uncontrollable since capital expenditure has been considered as uncontrollable.

The final summary for interest expense is shown below:

Table 76: Summary of interest expense for FY 2008-09

(*Rs. crores*)

Particulars	MYT Order	Actual	Considered for APR of FY 2008-09
Interest expenses	70.59	48.39	48.39

3.3.7.4 Depreciation

Petitioner's Submission

In its petition the Petitioner has estimated depreciation based on the audited GFA for FY2007-08 and the revised estimate for capitalization as shown below:

Table 77: Depreciation for FY 2008-09 estimated by petitioner

(*Rs. crores)*

Item	MYT Order	TPL-Ahmedabad Estimate
Depreciation	71.53	62.92

Commission's Analysis

The Commission directed TPL-Ahmedabad to submit audited actual GFA and capitalization data for FY 2008-09. Accordingly TPL-Ahmedabad submitted the actual data in its letter dated 15th October 2009 from which the opening and closing GFA details have been derived as shown below.

Table 78: Audited opening and closing GFA for FY 2008-09

(*Rs. crores)*

Gross Block as on 31.03.2008	Addition to Gross Block during 2008-09	Gross Block as on 31.03.2009
1792.92	261.57*	2054.49

**After deducting SLC*

The petitioner has computed the depreciation using CERC depreciation rates on different categories of assets like plant & machinery, buildings, cables, etc as permitted by GERC Terms & Conditions of Tariff Regulations, 2005. The Commission computed the actual depreciation expense for FY 2008-09 by employing the weighted average depreciation rate of 3.28% used by TPL-Ahmedabad. Thus the Commission estimated the actual depreciation expense to be Rs. 61.48 crores.

Since capital expenditure has been considered as uncontrollable the Commission has treated depreciation as uncontrollable. The final summary for depreciation expenses is presented below:

Table 79: Summary of depreciation expense for FY 2008-09

(*Rs. crores)*

Particulars	MYT Order	Actual	Considered for APR of FY 2008-09
Depreciation exp.	71.53	61.48	61.48

3.3.7.5 Interest on Working Capital

Petitioner's Submission

In its petition, TPL-Ahmedabad has estimated the interest on working capital on a normative basis based on the revised estimate for the various components of working capital:

Table 80: Interest on Working Capital as estimated by petitioner for FY 2008-09

(*Rs. crores)*

Particulars	MYT order	Estimated by TPL-Ahmedabad
O&M Expenses for 1 month	13.96	14.08
1% of GFA for maintenance spares	9.07	20.62
Receivables equivalent to 2 months*	170.88	372.01
Normative Working Capital	193.91	406.71
Interest on Working Capital	**19.61**	**41.69**

** The wide difference in the MYT order value and the petitioner's estimate is due to the fact that the petitioner has not subtracted TPL-G (APP)'s receivables as has been done in the MYT order. Further, computations by the Commission have followed the MYT order approach.*

Commission's Analysis

The actual interest on working capital incurred during the year as submitted by the petitioner on direction from the Commission was only Rs. 0.40 crores since the petitioner has mostly used internal funds to finance working capital requirements for FY 2008-09. The Commission has treated the overall Interest on Working Capital as controllable but since some of its components are derived from uncontrollable factors, the Commission has recomputed the interest on working capital on a normative basis using the component values as considered for APR. For the purpose of APR, the gain / loss would be computed by comparing the actual expense with the expense considered for APR.

Table 81: Interest on Working Capital as computed by Commission for APR on a normative basis

(*Rs. crores)*

Particulars	MYT order	Computed by Commission on a normative basis using APR values
O&M Expenses for 1 month	13.96	13.96
1% of GFA for maintenance spares	9.07	17.93
Receivables equivalent to 2 months*	170.88	170.49
Normative Working Capital	193.91	202.39
Interest on Working Capital	**19.61**	**20.74**

** Receivables of TPL-G (APP) have been subtracted*

The summary of Commission's analysis on interest on working capital is shown below:

Table 82: Summary of Interest on working capital expense

(*Rs. crores)*

Particulars	MYT Order	Actual	Considered for APR of FY 2008-09
Interest on Working Capital	19.61	0.40	20.74

3.3.7.6 Interest on security deposit

Petitioner's submission

The Commission, in its MYT order, had approved the interest on security deposit for TPL-D as a whole, as 6% on the average balance of security deposit for the year. The expenses had been apportioned to Ahmedabad and Surat license areas based on the interest charges. TPL-Ahmedabad, in its petition, revised the estimate based on the opening balances and addition identified to each licensee area and estimated the expense to be Rs. 7.46 crores as against the MYT order approved value of Rs. 7.72 crores.

Commission's analysis

The Commission observed that as per the audited segregated accounts, TPL-Ahmedabad actually paid an amount of Rs. 8.11 crores towards interest on security deposit in FY 2008-09. The Commission is of the opinion that the interest on security deposit should be treated as uncontrollable. The final summary of interest on security deposit is presented below:

Table 83: Summary of Interest on security deposit for FY 2008-09

(*Rs. crores)*

Particulars	MYT Order	Actual	Considered for APR of FY 2008-09
Interest on security deposit	7.72	8.11	8.11

3.3.7.7 Return on Equity

Petitioner's Submission

TPL-Ahmedabad has computed the opening equity using opening equity of the integrated utility as approved in the MYT order of Rs. 1506.37 crores and apportioning it to TPL-Ahmedabad on the basis of audited opening GFA. Using the audited actual GFA for TPL-Ahmedabad of Rs. 1793.45 crores the opening equity has accordingly been estimated at Rs. 771.61 crores. The petitioner has computed the return on equity on a normative basis using a normative equity addition (as 30% of capitalization) during the year.

Table 84: Return on Equity as estimated by TPL-Ahmedabad for FY 2008-09

(*Rs. crores)*

Particulars	MYT order	TPL-Ahmedabad Estimate
Opening equity	734.23	771.61
Equity addition during the year	129.95	74.44
Equity at end of the year	864.18	846.05
Average equity	799.21	808.83
Return on Equity @ 14%	**111.89**	**113.24**

Commission's Analysis

The Commission approves the opening equity figure estimated by TPL-Ahmedabad as it is an audited figure. The Commission has recomputed the Return on Equity on a normative basis as 30% of the approved value of net capitalization post deduction of SLC.

Table 85: Return on Equity for FY 2008-09 as calculated by Commission

(*Rs. crores)*

Particulars	Actual for FY 2008-09
Opening equity	771.61
Equity addition during the year	78.47
Closing equity	850.08
Return on Equity @ 14%	**113.52**

Since capital expenditure has been considered as uncontrollable the Commission has treated return on equity as uncontrollable. Accordingly the analysis for return on equity for FY 2008-09 is summarized below:

Table 86: Summary of Return on Equity of TPL-Ahmedabad for FY 2008-09

(*Rs. crores)*

Particulars	MYT Order	Actual	Considered for APR of FY 2008-09
Return on Equity	111.89	113.52	113.52

3.3.7.8 Income Tax

Petitioner's Submission

In its MYT order, the Commission had computed income tax as per the GERC Terms & Conditions of Tariff Regulations, 2005 by applying the rate of 33.99% on the permissible return i.e. return on equity (RoE). TPL-Ahmedabad has revised the tax calculation by considering RoE as the post tax return (PAT). The petitioner has considered a rate of 33.99% for computing income tax:

Table 87: Income Tax as estimated by TPL-Ahmedabad for FY 2008-09

(*Rs. crores)*

Particulars	Estimated by TPL-Ahmedabad
ARR including non-tariff income	2,284.52
Total expense	2,112.91
PBT	171.54
Income tax	58.31
PAT	113.24

Commission's Analysis

The Commission has drawn reference to the provisions for income tax as contained in the regulations. In this regard the GERC Terms & Conditions of Tariff Regulations, 2005 states the following about approval of income tax:

*7. **Tax on Income:***

"…..

(2) Under-recovery or over-recovery of any amount from the beneficiaries or the consumers on account of such tax having been passed on to them shall be adjusted every year on the basis of income-tax assessment under the Income-Tax Act, 1961, as certified by the statutory auditors. The generating company, or the transmission or distribution licensee, as the case may be, may make such adjustments directly and without making any application to the Commission in this regard.

Provided that tax on any income stream other than the core business shall not constitute a pass through component in tariff and tax on such other income shall be borne by the generating company or transmission licensee or the distribution licensee, as the case may be.

Provided further that the generating station-wise profit before tax in the case of the generating company, and the area of supply wise profit before tax for the transmission and distribution licensees respectively estimated for a year in advance shall constitute the basis for distribution of the corporate tax liability to all the generating stations and transmission and distribution licensees respectively…."

Based on the above analysis the Commission is of the opinion that the income tax should be considered on the actual amount paid during the year and as such is it is an uncontrollable parameter.

Thereafter, the Commission directed TPL-Ahmedabad to submit income tax returns and tax challans for the income tax actually paid in FY 2008-09. The petitioner submitted the same through its letter dated 6th October 2009. The Commission found that at a corporate level, TPL paid an advance tax of Rs. 56.65 crores in FY 2008-09. The Commission also observed that the amount of tax paid as per the annual report is Rs. 55 crores which includes tax paid towards other non regulated businesses. The Commission apportioned the current tax paid amongst each business using profit before tax (PBT) of each business as shown in the audited segregated accounts.

Table 88: Income tax computation of TPL-Ahmedabad for FY 2008-09

(*Rs. crores)*

Particulars	TPL Corporate	TPL-G (APP)	TPL-Ahmedabad	TPL-Surat
PBT	484.81	100.37	134.82	20.95
Tax	55	11.39	15.29	2.38

The Commission has treated income tax as an uncontrollable expense and passed it through in the APR. Accordingly the final summary for income tax is shown below:

Table 89: Income tax approved by the Commission

(*Rs. crores)*

Particulars	MYT Order	Actual	Considered for APR of FY 2008-09
Income tax	38.03	15.29	15.29

3.3.7.9 Provision for bad debts

Petitioner's submission

In its petition, TPL-Ahmedabad has provided for bad debts to the extent of Rs. 3.25 crores as against the MYT order approved value of Rs. 1.88 crores.

Commission's analysis

The Commission had asked TPL-Ahmedabad to submit details of actual provision made for bad debts during FY 2008-09. The petitioner submitted the figure at Rs. 1.48 crores through its letter dated 18th September 2009 which the Commission verified with audited segregated accounts.

Further, the Commission is of the opinion that provision for bad debts should be treated as a controllable item.

The final summary for provision for bad debts is now shown below:

Table 90: Summary of Provision for bad debts of TPL-Ahmedabad for FY 2008-09

(*Rs. crores)*

Particulars	MYT Order	Actual	Considered for APR of FY 2008-09
Provision for bad debts	1.88	1.48	1.88

3.3.7.10 Contingency Reserves

Petitioner's submission

TPL-Ahmedabad has kept the contingency reserve unchanged with respect to MYT order approved value, i.e. Rs. 0.6 crores.

Commission's analysis

The Commission has approved the estimation made by the petitioner and considered the same for APR. The Commission has treated this reserve as a controllable item.

The final summary for contingency reserve is shown below:

Table 91: Summary of Contingency reserve of TPL-Ahmedabad for FY 2008-09

(*Rs. crores)*

Particulars	MYT Order	Actual	Considered for APR of FY 2008-09
Contingency reserve	0.60	0.60	0.60

3.3.7.11 Non Tariff Income

Petitioner's submission

TPL-Ahmedabad, in its petition, estimated non tariff income for FY 2008-09 based on actual 9 months data. TPL-Ahmedabad submitted that the non tariff income was low since the Commission had escalated certain non recurring items such as sale of surplus power to GUVNL and insurance claim.

Table 92: Non Tariff income estimated by TPL-Ahmedabad for FY 2008-09

(*Rs. crores)*

Particulars	MYT order	TPL-Ahmedabad Estimated
Non tariff income	76.24	52.46

Commission's analysis

TPL-Ahmedabad submitted the actual non tariff income vide its letter dated 18th September 2009 at Rs. 54.08 crores. The Commission verified these figures with the audited segregated accounts for TPL-Ahmedabad. It further observed that the sub-items stated by the petitioner within non tariff income head, such as street light maintenance contracts, hire of meters, provision of earlier years written back, recovery of bad debts, other interest and insurance claim were eligible to be counted under non tariff income.

The Commission has treated non tariff income as uncontrollable. The final summary for non tariff income is presented below.

Table 93: Summary of Non tariff income of TPL-Ahmedabad for FY 2008-09

(*Rs. crores)*

Particulars	MYT Order	Actual	Considered for APR of FY 2008-09
Non tariff income	76.24	54.08	54.08

3.3.8 Summary of APR of TPL-Ahmedabad for FY 2008-09

Table 94: Summary of APR of TPL-Ahmedabad for FY 2008-09

(*Rs. crores*)

Particulars	MYT Order	Actual	Considered for APR of FY 2008-09
Power Purchase Costs			
TPL-G (APP)	885.65	1109.96	1109.96
SUGEN	9.92	0.00	0.00
GUVNL	517.08	560.79	560.79
Wind Energy	69.15	6.27	6.27
Total Power Purchase Costs	**1481.80**	**1677.02**	**1677.02**
Fixed Costs			
Employee expenses	62.62	64.93	62.62
R&M expenses	73.20	70.47	73.20
A&G expenses	31.75	27.71	31.75
Depreciation	71.53	61.48	61.48
Interest on loans	70.59	48.39	48.39
Interest on security deposit	7.72	8.11	8.11
Interest on working capital	19.61	0.40	24.79
Return on equity	111.89	113.52	113.52
Provision for bad debts	1.88	1.48	1.88
Contingency reserve	0.60	0.60	0.60
Income tax	38.03	15.29	15.29
Incentive to be paid to TPL-G (APP)	0.00	5.01	5.01
Total Fixed Costs	**489.42**	**417.39**	**446.63**
Gross ARR	**1971.22**	**2094.41**	**2123.66**
Non-tariff income	76.24	54.08	54.08
Net ARR	**1894.98**	**2040.33**	**2069.58**

3.4 Surat Distribution

3.4.1 Sales

Petitioner's submission

TPL-Surat has, in its petition, estimated sales for FY 2008-09 based on actual sales for the first 9 months of FY 2008-09. TPL-Surat has submitted that 80% of total sales in Surat are attributed to the industrial and commercial consumers whose growth largely depends on the economic conditions. The current economic slowdown therefore has hit the growth significantly. However, the major impact on sales will be seen in the next year as effect of economic scenario has been seen in the later part of the year. The summary of sales estimated is provided below:

Table 95: Sales for FY 2008-09 as estimated by TPL-Surat

(MUs)

Particulars	MYT Order	9 months actual	Revised estimate
Sales	3,186.00	2231.33	2,902.29

TPL-Surat submitted that it has applied a lower YoY growth rate of -2.71% vis-à-vis 6.81% approved by Commission in its MYT order mainly because of current economic slowdown which has hit the diamond and textile industries. The category wise sales estimated are shown below:

Table 96: Consumer category wise sales for FY 2008-09 as estimated by TPL-Surat

(*MUs)*

Category	MYT order	9 months actual	Revised estimate
Residential	556	427.26	532.25
Commercial	444	332.28	427.69
LTP	1695	1151.52	1537.33
LTMD	228	130.98	159.87
HTMD	237	166.28	215.56
Others	26	19.52	26.1
DoE	--	3.49	3.49
Total	**3186**	**2231.33**	**2902.29**

The petitioner has submitted the following reasons for deviation in sales estimation for each category:

Residential

It accounts for about 18 % of total sales. The residential category in Surat license area also consists of immigrants employed by various diamond and textile industries. The trend in consumption for this category is mainly contributed by the employment opportunity in the city. With the current economic slowdown, the immigrants are moving out of the city.

Commercial

It accounts for about 15% of total sales. In this category about 50% of the consumption relates to the load from the industrial LTP services and the remaining 50% comes from the pure commercial category consisting of shops, showrooms, offices etc.

Low Tension Power

It accounts for about 53 % of total sales. The sales under this category are mainly contributed by textile and diamond industry which has suffered slowdown due to the current economic conditions.

Low Tension Maximum Demand

It accounts for around 6 % of the total sales. The consumption in this category is mainly contributed by diamond industries which have suffered a slowdown due to the current economic conditions prevailing in the international and national level.

High Tension Maximum Demand

It accounts for 7% of the total sales. The consumption in this category is mainly attributed to the textile and diamond industries in the Surat license area. Further, the recession has also hit the consumption in this category as the diamond industries are scaling down their operation. Moreover the textile houses of higher load factor are likely to get replaced by occupants of lower load factor.

Others

It account for less than 1% of total sales. The sales in this category include GLP, Agriculture and Temporary.

Commission's analysis

The Commission directed the petitioner to submit 12 months actual sales for FY 2008-09. Accordingly, the petitioner submitted the information through its letter dated 24th August 2009.

Table 97: Estimated and actual sales

(MUs)

Category	Estimated in petition	Actuals submitted on 24th Aug 2009
Residential	532.25	537.76
Commercial	427.69	423.90
LTP	1537.33	1530.63
LTMD	159.87	164.42
HTMD	215.56	220.24
Others	26.1	25.77
DoE	3.49	4.46
Total	**2902.29**	**2907.18**

According to the petitioner's submission, the actual sales in Ahmedabad and Surat totals to 7644 MUs. The Commission verified this figure with the sales figure mentioned in the Annual Report FY 2008-09. The Annual Report mentions actual sales for FY 2008-09 for Ahmedabad and Surat to be 7665 MUs which also includes 21 MUs of surplus exported by TPL-Surat to GUVNL which is not included in the 7644 MUs submitted by the petitioner.

The Commission considers sales as an uncontrollable parameter and considers the actual sales submitted by TPL-Surat for APR of FY 2008-09. The summary of sales analysis is presented below.

Table 98: Summary of 2008-09 sales for TPL-Surat

(*MUs)*

Category	MYT order	Actuals	Considered for APR of FY 2008-09
Residential	556	537.76	537.76
Commercial	444	423.90	423.90
LTP	1695	1530.63	1530.63

Category	MYT order	Actuals	Considered for APR of FY 2008-09
LTMD	228	164.42	164.42
HTMD	237	220.24	220.24
Others	26	25.77	25.77
DoE	--	4.46	4.46
Total	**3186**	**2907.18**	**2907.18**

3.4.1.1 Number of installations

Petitioner's submission

The petitioner has estimated the number of installations for Surat supply area based on the actual data available for April, 2008 to December, 2008 and the feedback from end use survey. The approved and revised estimates for the number of installations for FY 2008-09 are tabulated below.

Table 99: No. of installations for TPL-Surat estimated by petitioner for FY 2008-09

Category	MYT order	Revised estimate
Residential	378254	374418
Commercial	161080	160805
LTP	59053	57995
LTMD	1112	1045
HT	169	173
Others	2420	2546
Total	**602088**	**596982**

Commission's analysis

The Commission has considered the number of installations estimated by TPL-Surat as actual and also considered the same for APR as the number of installations is an uncontrollable parameter.

Table 100: No. of installations approved for FY 2008-09

Category	MYT order	Actual	Considered for APR of FY 2008-09
Residential	378254	374418	374418

Category	MYT order	Actual	Considered for APR of FY 2008-09
Commercial	161080	160805	160805
LTP	59053	57995	57995
LTMD	1112	1045	1045
HT	169	173	173
Others	2420	2546	2546
Total	**602088**	**596982**	**596982**

3.4.2 Revenue from sale of power

Petitioner's submission

TPL-Surat had estimated revenues of Rs. 1377.23 crores for FY 2008-09 estimated based on 9 months of actual figures.

Commission's analysis

The Commission directed TPL-Surat to submit the 12 months actual revenue for FY 2008-09 which it submitted through its letter dated 24th August 2009. The Commission verified the revenue submitted by TPL-Surat of Rs. 1330.49 crores from segregated audited accounts and has considered the same for APR of FY 2008-09.

Table 101: Revenue for TPL-Surat approved by Commission

(*Rs. crores)*

Particular	MYT order	Actuals	Considered for APR of FY 2008-09
Revenue from sale of power	1215.65	1330.49	1330.49

3.4.3 Distribution loss

Petitioner's submission

The Commission, in its MYT order had approved distribution loss for Surat area at 6.00% after considering the actual loss of 6.01% in FY 2007-08. TPL-Surat, in its petition has now estimated a loss of 5.91% for FY 2008-09.

Commission's analysis

The Commission directed the petitioner to submit the actual loss achieved in FY 2008-09. As per the petitioner's letter dated 24th August 2009, TPL-Surat submitted the actual distribution loss at 5.51%.

The Commission is of the view that distribution loss should be treated as controllable. The gain on account of reduction in distribution loss has been accordingly shared with consumers as per the MYT regulations.

The final summary for distribution loss is provided below:

Table 102: Distribution loss approved by Commission

Particular	MYT order	Actuals	Considered for APR of FY 2008-09
Distribution loss	6.00%	5.51%	6.00%

3.4.4 Energy Requirement

Petitioner's submission

The Commission, in its MYT order, had estimated the energy requirement considering a distribution loss of 6.00% and a transmission loss of 2 MUs. The transmission loss of 2 MUs was on account of purchase from SUGEN and Wind power. TPL-Surat, in its petition, did not estimate any power from SUGEN; thus the transmission loss estimated by the petitioner of 0.25 MUs is on account of purchase of 12.58 MUs from wind energy (excluding purchase from surplus captive sources).

Table 103: Energy requirement estimated by TPL-Surat

(*MUs)*

Particulars	MYT order	Revised estimate
Energy Sales	3186	2,902.29
Distribution loss (%)	6.00%	5.91%
Distribution loss	203	182.3
Energy input at distribution level	3389	3,084.59

Particulars	MYT order	Revised estimate
Transmission loss	2	0.25
Energy requirement	3391	3,084.84

Commission's analysis

In order to calculate the actual energy requirement, the Commission has used the actual sales figure and distribution loss and computed the transmission loss based on the transmission loss percentage derived from the petitioner's submission.

The effective transmission loss due to wind energy, as per petitioner's estimate, works out to be 1.99% considering the loss of 0.25 MUs on account of purchase of 12.58 MUs. The Commission has computed the total transmission loss on account of wind energy purchase only as in FY 2008-09 there was no purchase from SUGEN. The Commission has considered the actual energy purchased in FY 2008-09 of 13.28 MUs from wind based on data submitted by TPL-Surat on 27th October 2009. The actual transmission loss is now calculated by applying the loss percentage of 1.99% on 13.28 MUs thus arriving at the actual loss of 0.26 MUs.

Based on the above analysis the Commission has calculated the actual energy requirement as shown below and considered the same for APR of FY 2008-09 since energy requirement is uncontrollable:

Table 104: Energy requirement for TPL-Surat approved by Commission

(*MUs)*

Particulars	MYT order	Actual	Considered for APR of FY 2008-09
Energy Sales	3186	2907.18	2907.18
Distribution loss (%)	6.00%	5.51%	5.51%*
Distribution loss	203	169.53	169.53
Energy input at distribution level	3389	3076.70	3076.70
Transmission loss	2	0.26	0.26
Energy requirement	3391	3076.96	3076.96

**Since energy requirement is uncontrollable, the requirement considered for APR has been calculated on the basis of actual distribution loss even though the distribution loss considered for gain / loss computation in APR is the MYT order approved value*

3.4.5 Energy Availability

Petitioner's submission

The Commission, in its MYT order, had approved TPL-G (SUGEN), GUVNL and Wind Energy as power sources for TPL-Surat. TPL-Surat, in its petition, revised the availability mix based on revised estimates of net generation from TPL-G (APP) and availability from wind and GUVNL. No energy availability has been estimated form SUGEN in FY 2008-09.

Table 105: Energy availability as estimated by TPL-Surat

(*MUs)*

Energy sources	MYT order	Revised estimate
TPL-G (SUGEN)	171	0.00
GUVNL	3093	3,068.26
Wind energy	127	16.58
Total	3391	3,084.84

Commission's analysis

The Commission has computed the actual energy availability based on actual data. As per the data received from Gujarat SLDC, the Commission has observed that the SUGEN plant actually injected 173.15 MUs of infirm power into the GUVNL network during the period November 2008 to March 2009 which was in turn procured by TPL-Surat. Hence the availability from SUGEN has been determined at 173.15 MUs. The energy availabilities from GUVNL and wind have been considered as per the actual data provided by TPL-Surat on 24th August 2009 and October 27th 2009 respectively.

Based on the actual data received as explained above the Commission has calculated the actual energy availability as shown below and considered the same for APR of FY 2008-09 since energy availability is uncontrollable:

Table 106: Energy availability approved by the Commission

(MUs)

Energy sources	MYT order	Actual	Considered for APR of FY 2008-09
TPL-G (SUGEN)	171	173.15	173.15
GUVNL	3093	2890.52	2890.52
Wind energy	127	13.28	13.28
Total	3391	3076.96	3076.96

3.4.6 Power purchase cost

Petitioner's submission

The power purchase rates from various sources approved by Commission in its MYT order and the rates now estimated by TPL-Surat are shown below. The rate for GUVNL has increased due to the fuel cost adjustment charges levied by GUVNL. The rate for wind energy is the rate estimated for purchase of wind power at generation bus-bar::

Table 107: Power purchase rates estimated by TPL-Surat

(Rs. / kWh)

Sources	MYT order	Revised estimate
TPL-G (SUGEN)	3.10	-
GUVNL	3.10	3.73
Wind energy	3.51	3.37

Commission's analysis

The Commission has determined the actual rates based on actual data submitted by the petitioner. It has been found that GUVNL has refunded an amount of Rs. 64.11 crores to SUGEN in lieu of injection of 173.15 MUs of infirm power by SUGEN. Based on this data an effective rate of Rs. 3.70 has been used as the power purchase cost from SUGEN. **This rate will be reviewed based on treatment of this cost in the SUGEN tariff order when it is issued by CERC**.

The rate for GUVNL has been determined to be Rs. 3.71 per kWh based on actual information submitted by TPL-Surat on 24th August 2009. The rate for wind has been considered at Rs. 3.37/kWh which is the actual rate for purchase of wind power at generation bus-bar.

Based on the actual data obtained as explained above the Commission has calculated the actual power purchase cost from various sources as shown below and considered the same for APR of FY 2008-09 since power purchase cost is uncontrollable:

Table 108: Power purchase cost for TPL-Surat approved by Commission

Sources	MYT order	Actual	Considered for APR of FY 2008-09
TPL-G (SUGEN)			
Quantity in MUs	171.00	173.15	173.15
Rate in Rs./kWh	3.10	3.70	3.70
Cost in Rs. crores	53.01	64.11	64.11
GUVNL			
Quantity in MUs	3093.00	2890.52	2890.52
Rate in Rs./kWh	3.10	3.71	3.71
Cost in Rs. crores	958.83	1072.38	1072.38
Wind energy			
Quantity in MUs	127.00	13.28	13.28
Rate in Rs./kWh	3.51	3.37	3.37
Cost in Rs. crores	44.58	4.48	4.48
Total			
Quantity in MUs	**3391.00**	**3076.96**	**3076.96**
Rate in Rs./kWh	**3.12**	**3.71**	**3.71**
Cost in Rs. crores	**1056.42**	**1140.97**	**1140.97**

3.4.7 Fixed Cost components

3.4.7.1 Operations & Maintenance (O&M) expenses

Petitioner's Submission

The Petitioner has submitted that it has estimated the O&M expense for FY 2008-09 based on 9 months of actual data which is provided in the table below:

Table 109: O&M expenses approved in the MYT order and estimated by petitioner

(*Rs. crores)*

O&M expense sub heads	MYT Order	TPL-Surat Estimate
Employee Expenses	33.68	33.21
R&M Expenses	26.51	21.45
A&G Expenses	24.65	24.67
Total O&M	**84.84**	**79.33**

TPL-Surat has stated that it has made all possible attempts to control the operations & maintenance expenses and hence the revised estimate is lesser than approved value. The estimate of R&M expense is less than the approved values, which is on account of deferment of some of the proposed activities.

Commission's Analysis

The Commission directed TPL-Surat to submit actual data for 12 months for FY 2008-09. Accordingly TPL-Surat submitted the actual O&M expenses as indicated below vide its letter dated 18th September 2009.

Table 110: Actual employee expenses for FY 2008-09 submitted by TPL-Surat

(*Rs. crores)*

Employee expense sub heads	Actual for FY 2008-09
Salary, Wages & Bonus (Gross)	32.71
Less: Allocated to M&R CE	6.51
Salary, Wages & Bonus (Net of allocation)	26.21
Contribution to PF & other funds	2.22
Employee welfare expenses	1.63
Provisions for Gratuity & LE	3.24
Total	**33.30**

Table 111: Actual R&M expenses for FY 2008-09 submitted by TPL-Surat

(*Rs. crores)*

R&M expense sub heads	Actual for FY 2008-09
EHV	1.87
HV	3.55
LV	15.31

R&M expense sub heads	Actual for FY 2008-09
Others	0.82
Total	**21.55**

Table 112: Actual A&G expenses for FY 2008-09 submitted by TPL-Surat

(*Rs. crores)*

A&G expense sub heads	Actuals for FY 2008-09
Insurance	0.90
Legal & Professional charges	0.38
Auditor's remuneration	0.03
Director fees	0.03
Loss on sale of fixed assets	4.95
Misc. expenses	8.89
Printing & Stationery	0.97
Rent, Rates & Hire charges	0.72
Consumable Stores	-
Bill Collection charges	1.45
Advertisement	0.75
Donations	3.42
Total	**22.48**

The Commission has verified the submitted information with certified segregated accounts. The Commission has also analyzed the expense incurred for each of the expense heads and sub-heads and is of the opinion that the expense on account of donations under A&G cannot be permitted.

The Commission has considered the O&M expenses as controllable expenses. The findings of the Commission are summarized in the table below:

Table 113: O&M expense summary for FY 2008-09

(*Rs. crores)*

Particulars	MYT order	Actual	Considered for APR of FY 2008-09
Employee expenses	33.68	33.30	33.68
R&M expenses	26.51	21.55	26.51
A&G expenses	24.65	19.06	24.65
Total O&M expenses	**84.84**	**73.91**	**84.84**

3.4.7.2 Capital expenditure, Capitalization & Sources of financing

Petitioner's Submission

For FY 2008-09, TPL-Surat has estimated a lower capital expenditure than the amount approved under the MYT Order. TPL-Surat has submitted that it has reassessed the capital expenditure requirement for FY 2008-09 and to ensure the sustenance of low loss level and better quality of supply, optimal capital expenditure has to be incurred. Some of these initiatives are towards meeting the new load of the HT and LT consumers and others are towards the network up-gradation and modernisation. Further, TPL-Surat is also investing on renovation and modernisation in order to have better quality of supply. TPL-Surat has reduced capital expenditure pertaining to last mile connectivity i.e. LT in the face of slowdown affecting commercial and industrial consumer categories.

Table 114: Capital expenditure approved in the MYT order and estimated by petitioner

(*Rs. crores)*

Capital expenditure items	MYT order	TPL- Surat Estimated
EHV	2.16	1.03
HT Network	42.11	25.32
LT Network	17.48	14.71
Metering	15.92	10.04
Customer Care & IT Initiatives	17.15	6.13
220 kV line	115.07	68.67
Total	**209.89**	**125.90**

The main reasons for reduction in investments as provided by TPL-Surat are discussed below:

1. Investment in EHV Network

(a) Deferment in shifting of power transformer from FY 2008-09 to FY 2009-10, revision of cost estimates for testing and measuring equipment & deferment in the procurement of forecasting software.

(b) Reduction in capital expenditure for automation due to bus bifurcation being carried out through isolator instead of 66 kV breaker.

Investment in HT Network

(a) Considering effect of lower load growth the capital expenditure proposed in HT network strengthening & development, distribution transformer, 11 kV switchgears, substations and others has been revised at lower cost on the basis of re-assessment.

(b) The capital expenditure for automation has been increased based on the latest feedback from the market. Further, the expenditure that was planned in FY 2008-09 has been deferred to FY 2009-10.

(c) The capital expenditure for LT panel has been revised due to higher per unit cost.

Investment in LT Network: The reduction in investment for network strengthening & development was mainly because of reduction in load growth. Capital expenditure for LT Capacitor has increased due to implementation of the balance approved investment of FY 2007-08.

Investment in Metering: The reduction in investment is due to reduction in load growth because of which installation of meters has reduced.

Investment in Customer Care & IT

(a) Information Technology – The Change in investment for IT is mainly on account of revision of cost of hardware & software and revision in implementation plan of SAP.

(b) Geographical Information System – The investment in GIS for FY 2008-09 is substantially lower owing to deferment of procurement of GIS software to FY 2009-10.

(c) Customer Care – The main expenditure under this head is for customer interaction centre and civil cost.

(d) Customer interaction Centre (CIC) – Capital expenditure proposed was mainly on account of establishing Customer Interaction Center (CIC) at A & B station. The balance work related to CIC at A station and the complete setting up of CIC at B station, which has been deferred from FY 2008-09, will be carried out in FY 2009-10.

(e) Civil - In order to meet required administrative ease and customer satisfaction, some changes will be carried out in existing structure at A station. This activity was originally planned in FY 2008-09 but will be taken up in FY 2009-10 and FY 2010-11.

Investment in 220 kV line (between Surat distribution area and TPL-G (SUGEN)): The reason for deferment of this project is the delay in commissioning of Gas Insulated Sub-station project. This being a new technology, the finalisation of specification of the equipments, design of structure etc. as well as the selection of vendor for placing the order took some extra time.

Thus, in summary, TPL-Surat has stated that most of the capital expenditure is being deferred to the future years due to operational difficulties and current market scenario. Further, the capital expenditure under some of the schemes has been reduced keeping in mind the lower demand growth.

Commission's Analysis

The Commission has reviewed the reason of economic slowdown stated by the petitioner for deferment / reduction of capital expenditure. A significant portion of the capital expenditure as approved in the MYT order has been deferred to FY 2009-10. Based on a review of the reasoning submitted by the Petitioner, the Commission has treated capital expenditure as an uncontrollable expense. In this regard the Commission has drawn reference to Clause 9.6 of MYT regulations which provides for economy wide influences such as economic slowdown to be treated as uncontrollable factor:

9.6 … For the purpose of these Regulations, the term uncontrollable factors shall include the following factors which were beyond the control of, and could not be mitigated by, the applicant, as determined by the Commission-

(a) …

(b) …

(c) Economy-wide influences, such as unforeseen changes in inflation rate, market-interest rates, taxes and statutory levies.

Further, the Commission directed the petitioner to provide data on actual capitalization achieved in FY 2008-09. The petitioner provided the details of capitalization vide its letter dated 24th August 2009.

Table 115: Estimated and actual capitalization for FY 2008-09

(*Rs. crores)*

Asset	Estimated by TPL-Surat based on 9 months actuals	12 months Actuals submitted by TPL- Surat
Land	0.50	0.00
Buildings	3.02	1.56
Railway siding	0.00	0.00
Hydraulic works	0.00	0.00
Other civil works	0.00	0.00
Plant & Machinery	29.51	25.47
Lines & Cables	82.65	80.17
Vehicles	0.50	0.09
Furniture & Fixtures	0.47	0.09
Office Equipments	7.90	5.35
Computer & SAP	0.00	0.00
Intangible Assets	0.00	0.00
Total (Gross capitalization)	**124.55**	**112.74**
Less SLC	10.95	11.00
Net Capitalization	**113.60**	**101.74**

The Commission has verified the above submission from the segregated audited accounts. The Commission has further estimated the quantum of debt and equity using the normative debt equity ratio of 70:30.

Table 116: Summary of capitalization and sources of financing for FY 2008-09

(*Rs. crores)*

Particulars	MYT Order*	Actual	Considered for APR of FY 2008-09
Capitalization	-	101.74	101.74
Debt %	-	70%	70%
Debt	-	71.22	71.22
Equity	-	30.52	30.52

** The MYT order had not approved any numbers for capitalization and sources of financing*

The Commission has observed that often utilities actually incur significantly lesser capital expenditure than what was approved while determining the tariff. The Commission is therefore,of the view that before including any scheme in the tariff proposal, the licensee shall obtain approval of the Commission as provided in Section 65(c) of the GERC (Terms and Conditions of Tariff) Regulations, 2005.

3.4.7.3 Interest Expenses

Petitioner's Submission

In the MYT order, the Commission had approved the interest expenses for the entire distribution business (Ahmedabad & Surat combined) based on the actual opening balance of the loans for FY 2008-09 and apportioned between Ahmedabad and Surat license areas in proportion to approved capital expenditure for the respective year. In its petition, TPL-Surat has identified loans for each area and reallocated the interest expenses on the existing loans on the basis of opening balances of the loans for FY 2008-09 for each area. Thus TPL-Surat has worked out the interest on existing loans as follows:

Table 117: Interest Expense estimated by TPL-Surat on existing loans for FY 2008-09

(*Rs. crores*)

Existing loan sub-heads	Estimated in the petition
APDRP	
Opening balance	25.07
Interest rate	9%
Interest expense	2.23
IDFC-I	
Opening balance	64.28
Interest rate	8.00%
Interest expense	4.60
HDFC-II	
Opening balance	48.08
Interest rate	11.50%
Interest expense	5.08
LIC	
Opening balance	100.00
Interest rate	12.00%

Existing loan sub-heads	Estimated in the petition
Interest expense	10.98
IDFC II	
Opening balance	200.00
Interest rate	12.00%
Interest expense	21.98
Total	
Opening balance	437.43
Interest rate	8.00% to 12.00%
Interest expense	44.87

Further, TPL-Surat has also estimated interest expenses on new loans on a normative basis at Rs. 4.77 crores.

Commission's Analysis

The Commission directed TPL-Surat to submit loan sanction letters for existing loans for verification of TPL-Surat's claims. TPL-Surat submitted the loan sanction letters on 8th October 2009. It also submitted the repayment schedule for FY 2008-09 for each lending agency on October 28th 2009. Based on these data submitted the Commission has recalculated the interest on loans as follows. The loan for APDRP has been verified from Annual Report.

Table 118: Interest Expense on loans for FY 2008-09 computed by Commission

(*Rs. crores*)

Loan sub-heads	Actual for FY 2008-09
APDRP Surat (Rs. 26.81 crores)	
Opening	25.07
Repayment	0.67
Additions	0
Closing	24.40
Interest rate	9%
Interest expense	2.23
HDFC 2 Surat (Rs. 50 crores)	
Loan opening	48.08
Additions	0

Loan sub-heads	Actual for FY 2008-09
Repayment	7.69
Loan closing	40.39
Interest rate	11.50%
Interest exp	3.34
LIC – (Rs. 100 crores)	
Loan opening	100
Repayment	2.5
Loan closing	97.5
Interest rate	11.00%
Interest exp	10.98
IDFC-1 Surat (Rs. 100 crores)	
Loan opening	64.28
Repayment	14.29
Loan closing	49.99
Interest rate	8.23%
Interest exp	4.60
IDFC-2 Surat (Rs. 250 crores)	
Loan opening	200
Additions	50
Repayment	0
Loan closing	250
Interest rate	11.00%
Interest exp	24.15
IDBI Surat (Rs. 200 crores)	
Loan opening	0
Additions	20.96
Repayment	0
Loan closing	20.96
Interest rate	11.25%
Interest exp	1.40
Total interest on loans	**46.70**

The Commission has verified the above computation with the audited segregated accounts of TPL-Surat. Further, the Commission has treated interest expense as uncontrollable since capital expenditure has been considered as uncontrollable.

The final summary for interest expense is shown below:

Table 119: Summary of interest expense for FY 2008-09

(*Rs. crores)*

Particulars	MYT Order	Actual	Considered for APR of FY 2008-09
Interest exp.	29.32	46.70	46.70

3.4.7.4 Depreciation

Petitioner's Submission

In its petition the Petitioner has estimated depreciation based on the audited GFA for FY2007-08 and the revised estimate for capitalization as shown below:

Table 120: Depreciation for FY 2008-09 estimated by petitioner

(*Rs. crores)*

Item	MYT Order	TPL-Surat Estimate
Depreciation	37.14	33.40

Commission's Analysis

The Commission directed TPL-Surat to submit audited actual GFA and capitalization data for FY 2008-09. Accordingly TPL-Surat submitted the actual data in its letter dated 15th October 2009 from which the opening and closing GFA details have been derived as shown below.

Table 121: Audited opening and closing GFA for FY 2008-09

(*Rs. crores)*

Gross Block as on 31.03.2008	Addition to Gross Block during 2008-09	Gross Block as on 31.03.2009
1040	101.74*	1141.54

**After deducting SLC*

The petitioner has computed the depreciation using CERC depreciation rates on different categories of assets like plant & machinery, buildings, cables, etc as permitted by GERC Terms & Conditions of Tariff Regulations, 2005. The Commission computed the actual depreciation expense for FY 2008-09 by employing the weighted average depreciation rate of 3.03% used by TPL-Surat. Thus the Commission estimated the actual depreciation expense to be Rs. 32.97 crores.

Since capital expenditure has been considered as uncontrollable the Commission has treated depreciation as uncontrollable. The final summary for depreciation expenses is presented below:

Table 122: Summary of depreciation expense for FY 2008-09

(*Rs. crores)*

Particulars	MYT Order	Actual	Considered for APR of FY 2008-09
Depreciation exp.	37.14	32.97	32.97

3.4.7.5 Interest on Working Capital

Petitioner's Submission

In its petition, TPL-Surat has estimated the interest on working capital on a normative basis based on the revised estimate for the various components of working capital:

Table 123: Interest on Working Capital estimated by petitioner for FY 2008-09

(*Rs. crores)*

Particulars	MYT order	Estimated by TPL-Surat
O&M Expenses for 1 month	7.02	6.61
1% of GFA for maintenance spares	2.86	11.64
Receivables equivalent to 2 months	220.21	237.83
Normative Working Capital	230.14	256.08
Interest on Working Capital	**23.59**	**26.25**

Commission's Analysis

The actual interest on working capital incurred during the year as submitted by the petitioner on direction from the Commission was only Rs. 1.01 crores since the petitioner has mostly used internal funds to finance working capital requirements for FY 2008-09. The Commission has treated the overall Interest on Working Capital as controllable but since some of its components are derived from uncontrollable factors, the Commission has recomputed the interest on working capital on a normative basis using the component values as considered for APR. For the purpose of APR, the gain / loss would be computed by comparing the actual expense with the expense considered for APR.

Table 124: Interest on Working Capital as computed by Commission for APR on a normative basis

(Rs. crores)

Particulars	MYT order	Computed by Commission on a normative basis using APR values
O&M Expenses for 1 month	7.02	7.07
1% of GFA for maintenance spares	2.86	10.40
Receivables equivalent to 2 months	220.21	221.75
Normative Working Capital	230.14	239.21
Interest on Working Capital	**23.59**	**24.52**

The summary of Commission's analysis on interest on working capital is shown below:

Table 125: Summary of Interest on working capital expense

(Rs. crores)

Particulars	MYT Order	Actual	Considered for APR of FY 2008-09
Interest on Working Capital	23.59	1.01	24.52

3.4.7.6 Interest on security deposit

Petitioner's submission

The Commission, in its MYT order, had approved the interest on security deposit for TPL-D as a whole, as 6% on the average balance of security deposit for the year. The expenses had been apportioned to Ahmedabad and Surat license areas based on the interest charges. TPL-Surat, in its petition, revised the estimate based on the opening balances and addition identified to each licensee area and estimated the expense to be Rs. 7.87 crores as against the MYT order approved value of Rs. 7.68 crores.

Commission's analysis

The Commission observed that as per the audited segregated accounts, TPL-Ahmedabad actually paid an amount of Rs. 7.79 crores towards interest on security deposit in FY2008-09. The Commission is of the opinion that the interest on security deposit should be treated as uncontrollable. The final summary of interest on security deposit is presented below:

Table 126: Summary of Interest on security deposit

(*Rs. crores)*

Particulars	MYT Order	Actual	Considered for APR of FY 2008-09
Interest on security deposit	7.68	7.79	7.79

3.4.7.7 Return on Equity

Petitioner's Submission

TPL-Surat has computed the opening equity using opening equity of the integrated utility as approved in the MYT order of Rs. 1506.37 crores and apportioning it to TPL-Surat on the basis of audited opening GFA. Using the audited actual GFA for TPL-Surat of Rs. 1039.8 crores the opening equity has accordingly been estimated at Rs. 447.36 crores. The petitioner has computed the return on equity on a normative basis using a normative equity addition (as 30% of capitalization) during the year.

Table 127: Return on Equity as estimated by TPL-Surat for FY 2008-09

(*Rs. crores)*

Particulars	MYT order	TPL-Surat Estimate
Opening equity	460.69	447.36
Equity addition during the year	69.52	34.08
Equity at end of the year	530.21	481.44
Average equity	495.45	464.40
Return on Equity @ 14%	**69.26**	**65.02**

Commission's Analysis

The Commission approves the opening equity figure submitted by TPL-Surat as it is an audited figure. The Commission has recomputed the Return on Equity on a normative basis as 30% of the approved value of net capitalization post deduction of SLC.

Table 128: Return on Equity for FY 2008-09 as calculated by Commission

(*Rs. crores)*

Particulars	Actual for FY 2008-09
Opening equity	447.36
Equity addition during the year	30.52
Closing equity	477.88
Return on Equity @ 14%	**64.77**

Since capital expenditure has been considered as uncontrollable the Commission has treated return on equity as uncontrollable. Accordingly the analysis for return on equity for FY 2008-09 is summarized below:

Table 129: Summary of Return on Equity

(*Rs. crores)*

Particulars	MYT Order	Actual	Considered for APR of FY 2008-09
Return on Equity	69.26	64.77	64.77

3.4.7.8 Income Tax

Petitioner's Submission

In its MYT order, the Commission had computed income tax as per the GERC Terms & Conditions of Tariff Regulations, 2005 by applying the rate of 33.99% on the permissible return i.e. return on equity (RoE). TPL-Surat has revised the tax calculation by considering RoE as the post tax return (PAT). The petitioner has considered a tax rate of 33.99%. The submission of the petitioner is provided in the table below:

Table 130: Income Tax as estimated by TPL-Surat for FY 2008-09

(*Rs. crores)*

Particulars	Estimated by TPL-Surat
ARR including non-tariff income	1,445.83
Total expense	1,347.34
PBT	98.49
Income tax	33.48
PAT	65.02

Commission's Analysis

The Commission has drawn reference to the provisions for income tax as contained in the regulations. In this regard the GERC Terms & Conditions of Tariff Regulations, 2005 states the following about approval of income tax:

*7. **Tax on Income:***

"…..
(2) Under-recovery or over-recovery of any amount from the beneficiaries or the consumers on account of such tax having been passed on to them shall be adjusted every year on the basis of income-tax assessment under the Income-Tax Act, 1961, as certified by the statutory auditors. The generating company, or the transmission or distribution licensee, as the case may be, may make such adjustments directly and without making any application to the Commission in this regard.

Provided that tax on any income stream other than the core business shall not constitute a pass through component in tariff and tax on such other income shall be borne by the *generating company or transmission licensee or the distribution licensee, as the case may be.*

Provided further that the generating station-wise profit before tax in the case of the generating company, and the area of supply wise profit before tax for the transmission and distribution licensees respectively estimated for a year in advance shall constitute the basis for distribution of the corporate tax liability to all the generating stations and transmission and distribution licensees respectively…"

Based on the above provisions the Commission is of the opinion that the income tax has to be approved based on the actual amount of tax paid during the financial year. Further, the Commission is of the view that income tax should be considered as an uncontrollable parameter.

The Commission, therefore, directed TPL-Surat to submit copies of income tax return and tax challans for the tax actually paid in FY 2008-09. The petitioner submitted the same through its letter dated 6th October 2009. The Commission found that at a corporate level, TPL paid an advance tax of Rs. 56.65 crores in FY 2008-09. The Commission also observed that the amount of tax paid as per the annual report is Rs. 55 crores which includes tax paid towards other non regulated businesses. The Commission apportioned the current tax paid amongst each business using PBT of each as shown in the audited segregated accounts.

Table 131: Income tax as calculated by Commission

(*Rs. crores)*

Particulars	TPL Corporate	TPL-G (APP)	TPL-Ahmedabad	TPL-Surat
PBT	484.81	100.37	134.82	20.95
Tax	55	11.39	15.29	2.38

The Commission has treated income tax as an uncontrollable expense and passed it through in the APR. Accordingly the final summary for income tax is shown below:

Table 132: Summary of Income tax of TPL-Surat for FY 2008-09

(*Rs. crores)*

Particulars	MYT Order	Actual	Considered for APR of FY 2008-09
Income tax	23.54	2.38	2.38

3.4.7.9 Provision for bad debts

Petitioner's submission

In its petition, TPL-Surat has provided for bad debts to the extent of Rs. 1.20 crores as against the MYT order approved value of Rs. 1.22 crores.

Commission's analysis

The Commission had asked TPL-Surat to submit details of actual provision made for bad debts during FY 2008-09. The petitioner submitted the figure at Rs. 0.19 crores through its letter dated 18th September 2009 which the Commission verified with audited segregated accounts.

Further, the Commission is of the opinion that provision for bad debts should be treated as a controllable item.

The final summary for provision for bad debts is now shown below:

Table 133: Summary of Provision for bad debts of TPL-Surat for FY 2008-09

(*Rs. crores)*

Particulars	MYT Order	Actual	Considered for APR of FY 2008-09
Provision for bad debts	1.22	0.19	1.22

3.4.7.10 Contingency Reserves

Petitioner's submission

TPL-Surat has kept the contingency reserve unchanged with respect to MYT order approved value, i.e. Rs. 0.4 crores.

Commission's analysis

The Commission has approved the estimation made by the petitioner and considered the same for APR. The Commission has treated this reserve as a controllable item.

The final summary for contingency reserve is shown below:

Table 134: Summary of Contingency reserve of TPL-Surat for FY 2008-09

(*Rs. crores)*

Particulars	MYT Order	Actual	Considered for APR of FY 2008-09
Contingency reserve	0.40	0.40	0.40

3.4.7.11 Non Tariff Income

Petitioner's submission

TPL-Surat, in its petition, estimated non tariff income for FY 2008-09 based on 9 months actual data. The submission of the petitioner is outlined in the table below:

Table 135: Non Tariff income estimated by TPL-Surat for FY 2008-09

(*Rs. crores)*

Particulars	MYT order	TPL-Surat Estimated
Non tariff income	26.73	18.86

Commission's analysis

TPL-Surat submitted the actual non tariff income vide its letter dated 18th September 2009 at Rs. 22.62 crores. The Commission verified the revised figures with the certified segregated accounts for TPL-Surat. The Commission also checked the items included under non tariff income head such as hire of meters, recovery of bad debts, insurance claim and other interest and found them to be appropriate for inclusion under non tariff income.

The Commission has treated non tariff income as uncontrollable. The final summary for non tariff income is presented below.

Table 136: Summary of Non tariff income of TPL-Surat for FY 2008-09

(Rs. crores)

Particulars	MYT Order	Actual	Considered for APR of FY 2008-09
Non tariff income	26.73	22.62	22.62

3.4.8 Summary of APR of TPL-Surat for FY 2008-09

Table 137: Summary of APR of TPL-Surat for FY 2008-09

(Rs. crores)

Particulars	MYT Order	Actual	Considered for APR of FY 2008-09
Power Purchase Costs			
SUGEN	53.01	64.11	64.11
GUVNL	958.83	1072.38	1072.38
Wind Energy	44.58	4.48	4.48
Total Power Purchase Costs	**1056.42**	**1140.97**	**1140.97**
Fixed Costs			
Employee expenses	33.68	33.30	33.68
R&M expenses	26.51	21.55	26.51
A&G expenses	24.65	19.06	24.65
Depreciation	37.14	32.97	32.97
Interest on loans	29.32	46.70	46.70
Interest on security deposit	7.68	7.79	7.79
Interest on working capital	23.59	1.01	24.52
Return on equity	69.26	64.77	64.77
Provision for bad debts	1.22	0.19	1.22
Contingency reserve	0.40	0.40	0.40
Income tax	23.54	2.38	2.38
Total Fixed Costs	**276.99**	**230.12**	**265.59**
Gross ARR	**1333.41**	**1371.08**	**1406.55**
Non-tariff income	26.73	22.62	22.62
Net ARR	**1306.68**	**1348.46**	**1383.93**

3.5 Estimation of Gains and Losses

The Commission has already identified various controllable and uncontrollable parameters. In this section, the Commission has computed the gains and losses due to these parameters. The Commission has drawn reference to the MYT regulations while determining the amount of gains and losses and also the mechanism of sharing and pass through. In this regards Clause 11 of the MYT Regulations states the following about sharing of gains or losses on account of controllable factors:

"..

1. *The approved aggregate gain to the Generating Company or Licensee on account of controllable factors shall be dealt with in the following manner:*
   a. *One-third of the amount of such gain shall be passed on as a rebate in tariffs over such period as may be specified in the Order of the Commission under Regulation 9.7;*
   b. *One-third of the amount of such gain shall be retained in a special reserve by the Generating Company or Licensee for the purpose of absorbing the impact of any future losses on account of controllable factors under clause (b) of Regulation 11.2; and*
   c. *The balance amount of gain may be utilized at the discretion of the Generating Company or Licensee.*

2. *The approved aggregate loss to the Generating Company or Licensee on account of controllable factors shall be dealt with in the following manner:*
   a. *One-third of the amount of such loss may be passed on as an additional charge in tariffs over such period as may be specified in the Order of the Commission under Regulation 9.7; and*
   b. *The balance amount of loss shall be absorbed by the Generating Company or Licensee.*

Further, Clause 10 of the MYT Regulations states the following about pass through of gains or losses on account of uncontrollable factors:

"…

10.1. The approved aggregate gain or loss to the Generating Company or Licensee on account of uncontrollable factors shall be passed through as an adjustment in the tariff of the Generating Company or Licensee over such period as may be specified in the Order of the Commission passed under Regulation 9.7 (a).

10.2. Nothing contained in this Regulation 10 shall apply in respect of any gain or loss arising out of variations in the price of fuel and power purchase which shall be dealt with as specified by the Commission from time to time.

The Commission has identified and classified the following parameters as controllable / uncontrollable.

Table 138: List of controllable and uncontrollable parameters

Controllable	Uncontrollable
Distribution loss	Power purchase cost
Employee expenses	Depreciation expense
R&M expenses	Interest on loans
A&G expenses	Interest on security deposit
Interest on Working Capital	Return on equity
Provision for bad debts	Income tax
Contingency reserve	Incentive
	Non-tariff income

The aggregate gains due to controllable parameters can be shared in the following manner:

- 1/3rd to consumers in the form of a rebate on tariff
- 1/3rd in reserve to absorb future losses
- 1/3rd to utility

However the Commission has decided to utilize the amount added to reserve and pass it on to consumers additionally along with the 1/3rd share already available with consumers.

The aggregate losses due to controllable parameters have been shared in the following manner:

- 1/3rd to consumers in the form of a charge on tariff
- 2/3rd to utility

Any gains or losses due to uncontrollable parameters have been fully passed through as rebate / charges on tariff.

The computation of gains and losses and mechanism of sharing / pass through for TPL-Ahmedabad and TPL-Surat is now described below.

3.5.1 Computation of gains / losses for TPL-G (APP)

The Commission has computed the gain / loss for TPL-G (APP) based on the difference between the Actual Net ARR and the Net ARR Considered for APR.

Table 139: Computation of gain / loss for TPL-G (APP)

(Rs. crores)

Particulars	Amount
Actual Net ARR	1109.96
Net ARR Considered for APR	1114.75
Gain / (Loss)	4.79
Rebate in tariff (2/3rd of Gain)	**3.19**

The rebate in tariff computed above will be passed through to consumers of TPL-Ahmedabad since TPL-G (APP) supplies all its power to the Ahmedabad license area in both the years FY 2008-09 and FY 2009-10.

3.5.2 Computation of gains / losses for TPL-Ahmedabad

3.5.2.1 Gain / Loss due to distribution loss

Table 140: Gains / Losses computation for TPL-Ahmedabad (2008-09) due to distribution loss

No.	Particulars	Gain / (Loss) computation
1	Energy sales as per MYT order *(MUs)*	4922
2	MYT order distribution loss (%)	10.43%
3	MYT order distribution loss *(MUs)*	573.14
4	Actual distribution loss (%)	8.69%
5	Distribution loss *(MUs)* corresponding to actual distribution loss %	468.43

No.	Particulars	Gain / (Loss) computation
6	Reduction in energy requirement *(MUs)* (3-5)	104.71
7	Average power purchase cost (Rs./kWh)	3.23
8	Gain / (Loss) due to distribution loss (Rs. crores) (6*7)	33.85
9	**Rebate in tariff (Rs. crores) (2/3rd of Gain)**	**22.56**

3.5.2.2 Gain / loss due to controllable fixed costs

The Commission has computed this gain / loss based on the difference between the Actual Net ARR and the Net ARR Considered for APR.

Table 141: Gains / Losses computation for TPL-Ahmedabad (2008-09) due to controllable fixed costs

(*Rs. crores)*

Particulars	Amount
Actual Net ARR	2040.33
Net ARR Considered for APR	2069.58
Gain / (Loss)	29.25
Rebate in tariff (2/3rd of Gain)	**19.50**

3.5.2.3 Summary of Gains / Losses

Table 142: Final Gains / Losses computation for TPL-Ahmedabad (2008-09)

(*Rs. crores)*

Particulars	Amount
Total rebates on tariff (including from TPL-G (APP)	45.25
Total charges on tariff	0.00
Net rebate on tariff	**45.25**

3.5.3 Computation of gains / losses for TPL-Surat

3.5.3.1 Gain / loss due to distribution loss

Table 143: Gains / Losses computation for TPL-Surat (2008-09) due to distribution loss

No.	Particulars	Gain / (Loss) computation
1	Energy sales as per MYT order *(MUs)*	3186
2	MYT order distribution loss (%)	6.00%
3	MYT order distribution loss *(MUs)*	203.36
4	Actual distribution loss (%)	5.51%
5	Distribution loss *(MUs)* corresponding to actual distribution loss %	185.79
6	Reduction in energy requirement *(MUs)* (3-5)	17.57
7	Average power purchase cost (Rs./kWh)	3.71
8	Gain / (Loss) due to distribution loss (Rs. crores) (6*7)	6.52
9	**Rebate in tariff (Rs. crores) (2/3rd of Gain)**	**4.34**

3.5.3.2 Gain / loss due to controllable fixed costs

The Commission has computed this gain / loss based on the difference between the Actual Net ARR and the Net ARR Considered for APR.

Table 144: Gains / Losses computation for TPL-Surat (2008-09) due to controllable parameters

(*Rs. crores)*

Particulars	Amount
Actual Net ARR	1348.46
Net ARR Considered for APR	1383.93
Gain / (Loss)	35.47
Rebate in tariff (2/3rd of Gain)	**23.65**

3.5.3.3 Summary of gains / losses

Table 145: Final Gains / Losses computation for TPL-Surat (2008-09)

(*Rs. crores)*

Particulars	Amount
Total rebates on tariff	27.99
Total charges on tariff	0.00
Net rebate on tariff	**27.99**

3.6 Resultant Gap / Surplus for FY 2008-09

3.6.1 TPL-Ahmedabad

Table 146: Resultant Gap / Surplus for TPL-Ahmedabad for FY 2008-09

(*Rs. crores)*

Particulars	MYT Order	Estimated by TPL-Ahmedabad	Considered for APR of FY 2008-09
Net ARR	1894.98	2232.06	2069.58
Revenue	1881.07	2155.22	2145.19
Initial (Gap) / Surplus	(13.91)	(76.84)	75.61
Rebates / (Charges) on tariff	-	-	45.25
Resultant (Gap) / Surplus (FY 2008-09)	**(13.91)**	**(76.84)**	**120.87**

3.6.2 TPL-Surat

Table 147: Resultant Gap / Surplus for TPL-Surat for FY 2008-09

(*Rs. crores)*

Particulars	MYT Order	Estimated by TPL-Surat	Considered for APR of FY 2008-09
Net ARR	1306.68	1426.97	1383.93
Revenue	1215.65	1377.23	1330.48
Initial (Gap) / Surplus	(91.03)	(49.74)	(53.45)
Rebates / (Charges) on tariff	-	-	27.99
Resultant (Gap) / Surplus (FY 2008-09)	(91.03)	(49.74)	**(25.46)**

4 Aggregate Revenue Requirement for FY 2009-10

4.1 Approach

This section deals with the revision of Aggregate Revenue Requirement (ARR) for FY 2009-10. Regulation 9.7 of the MYT Regulations provides that the Commission shall, subsequent to the annual performance review of a year, revise the forecast for the remaining period of the control period. Accordingly, after undertaking the annual performance review for FY 2008-09, the Commission has considered the revision of ARR for the FY 2009-10. In this regard the Commission has reviewed the submission of the petitioner.

The Commission is of the view that controllable items should be considered as per the level approved under the MYT Framework, unless there are justifiable reasons to revise the same. Reasons for revision of the controllable parameters would be analyzed within the framework of Regulation 9.6 of the MYT Regulations. In regard to the uncontrollable parameters the Commission is of the view that such parameters shall be revised based on the analysis and verification of the submissions made by the petitioner and the results of APR of FY 2008-09.

Based on the above approach the Commission has undertaken the revision of the ARR for TPL-Generation, TPL-Ahmedabad and TPL-Surat in the following sections.

4.2 TPL-Generation

4.2.1 Availability

Petitioner's submission

In its petition, TPL-G (APP) has submitted that it has scheduled the outages for its coal based stations as per the Central Electricity Authority (CEA) guidelines for plants that have undergone renovation & modernization. According to TPL-G (APP), CEA recommends an outage for statutory and efficiency related job for boiler overhaul and capital maintenance of turbine & generator. TPL-G (APP) has computed the availabilities of individual stations after accounting for the annual planned shut down for the stations to undertake maintenance and statutory inspections and the assumed forced outages during FY 2009-10. The availability of Stations E, F, G and Vatva have been retained at the Commission's approved level. However, the availability for Stations C and D have been revised as per the revised outage schedule due to synchronisation of IDCT in Station C and ESP extension work in Station D. TPL-G (APP) has estimated the outage schedule for all the stations as shown below.

Table 148: Station wise outage schedule for FY 2009-10 as estimated by TPL-G (APP)

(*days)*

Stations	MYT order	Estimated
C Station	10	35
D Station	10	38
E Station	90	90
F Station	10	10
Vatva Gas CCPP	GTG 1 – 22 GTG 2 – 16 STG – 15	GTG 1 – 22 GTG 2 – 16 STG – 15

TPL-G (APP) has stated that it has planned the following schedule during FY 2009-10 for preventive maintenance and up gradation:

(a) C station for boiler & turbine inspection and synchronisation of Induced Draught Cooling Tower (IDCT);
(b) D station for boiler annual maintenance and ESP extension work;
(c) E station for turbine up rating work from 110 to 120 MW;
(d) F station for boiler annual maintenance and HPH replacement;
(e) GTG -1 for 1 day for gas turbine compressor washing and 21 days for GT generator inspection, HRSG annual survey and AVR retrofit;
(f) GTG – 2 for 16 days for GT lube oil cooler replacement; and
(g) STG for 15 days for generator inspection work.

Based on maintenance and up-gradation schedule and other technical constraints, TPL-G (APP) has projected the following PAF.

Table 149: Station wise Availability for FY 2009-10 as estimated by TPL-G (APP)

(%)

Stations	MYT order	Estimated
C Station	95.05	90.00

Stations	MYT order	Estimated
D Station	94.73	89.39
E Station	73.63	73.63
F Station	95.36	95.36
Vatva Gas CCPP	93.81	93.81

Commission's analysis

The Commission has reviewed the submission made by the petitioner for the FY 2009-10 with significant focus on the reasons for estimated drop in PAF of stations C and D. Although the reasons mentioned by the petitioner for drop in PAF of these stations are uncontrollable, the Commission treats PAF as a controllable parameter. Further, the Commission is of the opinion that the performance parameters approved in the MYT Order for each control period already factors the probable variations for each year. Hence PAFs for all stations have been maintained at MYT order approved values.

Based on the above observation and the controllable nature of PAF the Commission approves the PAF at the same level approved under the MYT Order. Any variation in actual PAF will be considered during the annual performance review of FY 2009-10.

The approved level of PAF is indicated in the table below:

Table 150: Availability for FY 2009-10 approved by Commission

(%)

Stations	MYT order	Estimated	Revised Approved for FY 2009-10
C Station	95.05	90.00	95.05
D Station	94.73	89.39	94.73
E Station	73.63	73.63	73.63
F Station	95.36	95.36	95.36
Vatva Gas	93.81	93.81	93.81

4.2.2 Plant Load Factor (PLF)

Petitioner's submission

TPL-G (APP) has estimated the following PLF for FY 2009-10 for each of its stations:

Table 151: PLF as estimated by TPL-G (APP)

(%)

Stations	MYT order	Estimated
C Station	93.84	83.50
D Station	93.37	87.12
E Station	72.71	72.71
F Station	94.34	94.34
Vatva Gas	87.97	87.97

With regards to the reduction in PLF for station C & D, TPL-G (APP) has submitted that PLF varies with plant availability and system demand. The revision in PLF for FY 2009-10 is on account of revised PAF which is based on the revised outage schedule and lower demand, because of the expected economic slowdown, in both the Ahmedabad and Surat distribution area.

Commission's analysis

The Commission has reviewed the submission made by the petitioner for the FY 2009-10 with significant focus on stations C and D who's PLFs have been reduced. Although the reasons mentioned by the petitioner for drop in PLF of these stations are uncontrollable, the Commission treats PLF as a controllable parameter. Moreover the drop in system demand due to economic slowdown, under the current scenario, is not completely true. This is because the FY 2009-10 has started to show signs of economic recovery according to RBI's estimates. Further, the Commission is of the opinion that the performance parameters approved in the MYT Order for each control period already factors the probable variations for each year. Hence PLFs for all stations have been maintained at MYT order approved values.

Based on the above observation and the controllable nature of PLF the Commission approves the PLF at the same level approved under the MYT Order. Any variation in actual PLF will be considered during the annual performance review of FY 2009-10:

Table 152: PLF approved by Commission

(%)

Stations	MYT order	Estimated	Revised Approved for FY 2009-10
C Station	93.84	83.50	93.84
D Station	93.37	87.12	93.37
E Station	72.71	72.71	72.71
F Station	94.34	94.34	94.34
Vatva Gas	87.97	87.97	87.97

4.2.3 Auxiliary Consumption

Petitioner's submission

TPL-G (APP) has submitted the auxiliary consumption for FY 2009-10 at the same level as approved under the MYT Order. The submission of the petitioner is outlined in the table below:

Table 153: Auxiliary consumption as estimated by TPL-G (APP)

(%)

Stations	MYT order	Estimated
C Station	9.41	9.41
D Station	8.73	8.73
E Station	8.73	8.73
F Station	8.73	8.73
Vatva Gas	2.92	2.92

Commission's analysis

The Commission has observed that the petitioner has submitted the auxiliary consumption at the same level as approved in the MYT Order. Therefore, the Commission is of the view that since the petitioner has considered auxiliary consumption at the same level as approved under the MYT Order, the submission of the petitioner should be accepted. Further, the Commission is of the opinion that any variation in actual auxiliary consumption should be considered during the annual performance review for FY 2009-10.

Based on the above observation, the Commission approves the auxiliary consumption as outlined in the table below:

Table 154: Auxiliary consumption approved by Commission

(%)

Stations	MYT order	Estimated	Revised Approved for FY 2009-10
C Station	9.41	9.41	9.41
D Station	8.73	8.73	8.73
E Station	8.73	8.73	8.73
F Station	8.73	8.73	8.73
Vatva Gas	2.92	2.92	2.92

4.2.4 Station Heat Rate

Petitioner's submission

TPL-G (APP), in its petition, has considered the SHRs for all the stations at the levels approved in the MYT order. **It is to be noted that these SHR values are said to be in terms of net calorific value (NCV).**

Table 155: SHR estimated by TPL-G (APP)

(kCal / kWh)

Stations	MYT order	Estimated
C Station	3,700	3,700
D Station	2,565	2,565
E Station	2,675	2,675
F Station	2,715	2,715
Vatva Gas	1,950	1,950

Commission's analysis

The Commission has observed that the petitioner has submitted the SHR for FY 2009-10 at the same level as approved under the MYT Order. Since SHR is a controllable parameter, the Commission has maintained it at the MYT order approved level. The

Commission notes that the petitioner's actual SHR for all plants in FY 2008-09 was lower than the MYT order approved value for that year. Any variation in actual SHR for FY 2009-10 would be considered during the annual performance review for FY 2009-10.

Based on the above approach the Commission approves the SHR for the FY 2009-10 which is indicated in the table below:

Table 156: Approved SHR for FY 2009-10

(kCal / kWh)

Stations	MYT order	Estimated	Revised Approved for FY 2009-10
C Station	3,700	3,700	3,700
D Station	2,565	2,565	2,565
E Station	2,675	2,675	2,675
F Station	2,715	2,715	2,715
Vatva Gas	1,950	1,950	1,950

The Commission further takes note of the SHR values as recommended by CEA for FY 2009-10 on GCV basis (explained in detail in section 4.2.8.4). The Commission observes that the SHR recommended by CEA for some of the stations is lower than that estimated by the petitioner. This is inspite of the fact that the CEA recommended values are on GCV basis whereas the petitioner has used values on NCV basis.

Table 157: Comparison of SHR recommended by CEA and estimated by petitioner

(kCal / kWh)

Stations	Estimated by TPL-G (APP)	Recommended by CEA
C Station	3,700	3240
D Station	2,565	2515
E Station	2,675	2790
F Station	2,715	2790
Vatva Gas	1,950	2200

4.2.5 Secondary Fuel Oil Consumption

Petitioner's submission

TPL-G (APP) has estimated fuel oil consumption for 2009-10 at MYT order approved value of 1.45 gm/kWh.

Commission's analysis

The Commission has observed that the petitioner has considered secondary fuel oil consumption at the same level as approved under the MYT Order for FY 2009-10. The actual consumption achieved by the petitioner in FY 2008-09 was much lower at 0.36 gm/kWh. Since secondary fuel oil consumption is controllable, the Commission has maintained it at the same level as approved under the MYT Order and any variation would be considered along during the annual performance review for FY 2009-10.

Based on the above approach the Commission approves the specific fuel oil submitted for the FY 2009-10 which is indicated in the table below:

Table 158: Approved secondary fuel oil consumption for FY 2009-10

(gm / kWh)

Particulars	MYT order	Estimated	Revised Approved for FY 2009-10
Secondary fuel oil consumption	1.45	1.45	1.45

4.2.6 Coal Transit & Handling Losses

Petitioner's submission

TPL-G (APP) has estimated a coal transit & handling loss of 1.4% for FY 2009-10 which is in line with the MYT order approved value.

Commission's analysis

The Commission has observed that the petitioner has estimated the coal transit & handling loss for FY 2009-10 at the same level as approved under the MYT Order. Since the coal transit & handling loss is controllable the Commission is of the opinion that for FY 2009-10 it should be maintained at the same level as approved under the MYT Order and variation should be considered along with the annual performance review for FY 2009-10.

Based on the above approach the Commission approves the transit loss for FY 2009-10 as submitted by the petitioner which is indicated in the table below:

Table 159: Approved Transit loss for FY 2009-10

Particulars	MYT order	Estimated	Revised Approved for FY 2009-10
Coal Transit & Handling loss	1.40%	1.40%	1.40%

4.2.7 Gross & Net Generation

Based on the parameters approved for FY 2009-10, the Commission has computed the gross and net generation from each of the plants which are summarized below.

Table 160: TPL-G (APP) Gross & Net Generation for FY 2009-10

Stations	MYT order	Estimated	Revised Approved for FY 2009-10
C Station			
Capacity in MW	60	60	60
PLF in %	93.84%	83.50%	93.84%
Gross Generation in MUs	493.22	438.88	493.22
Auxiliary Consumption (MUs)	46.41	41.30	46.41
Net Generation in MUs	446.81	397.58	446.81
D Station			
Capacity in MW	120	120	120
PLF in %	93.37%	87.12%	93.37%
Gross Generation in MUs	981.51	915.81	981.51
Auxiliary Consumption (MUs)	85.69	79.95	85.69
Net Generation in MUs	895.82	835.86	895.82
E Station			

Stations	MYT order	Estimated	Revised Approved for FY 2009-10
Capacity in MW	110	110	110
PLF in %	72.71%	72.71%	72.71%
Gross Generation in MUs	700.63	700.63	700.63
Auxiliary Consumption (MUs)	61.17	61.17	61.17
Net Generation in MUs	639.47	639.47	639.47
F Station			
Capacity in MW	110	110	110
PLF in %	94.34%	94.34%	94.34%
Gross Generation in MUs	909.06	909.06	909.06
Auxiliary Consumption (MUs)	79.36	79.36	79.36
Net Generation in MUs	829.70	829.70	829.70
Vatva Gas CCPP			
Capacity in MW	100	100	100
PLF in %	87.97%	87.97%	87.97%
Gross Generation in MUs	770.62	770.62	770.62
Auxiliary Consumption (MUs)	22.50	22.50	22.50
Net Generation in MUs	748.12	748.12	748.12
Total TPL-G (APP)			
Gross Generation in MUs	3855.04	3734.99	3855.04
Auxiliary Consumption (MUs)	295.13	284.28	295.13
Net Generation in MUs	3559.91	3450.72	3559.91

4.2.8 Variable Cost

In this section the Commission has discussed key parameters bearing effect on cost of generation such as fuel calorific value, fuel price and blending ratio of coal and recomputed the variable cost of generation using approved parameters.

4.2.8.1 Fuel Calorific Value

Petitioner's submission

In its petition, TPL-G (APP) has estimated NCV of all fuels for FY2009-10 at approved values as per MYT order.

Table 161: NCV estimated by TPL-G (APP) for all fuel types for FY 2009-10

Fuel	MYT order	Estimated
Indigenous Coal (kCal/kg)	5236.00	5236.00
Imported Coal (kCal/kg)	4929.00	4929.00
Secondary fuel oil (kCal/kg)	9766.00	9766.00
Gas (kCal/'000 SCM)	8305.00	8305.00

Commission's analysis

The Commission has noted that the actual NCV for FY 2008-09 was lower than the MYT order approved levels for all fuel types.

Table 162: Actual NCV for FY 2008-09

Fuel	MYT order	Actual
Indigenous Coal (kCal/kg)	5236.00	4999.00
Imported Coal (kCal/kg)	4929.00	4781.00
Secondary fuel oil (kCal/kg)	9766.00	9530.00
Gas (kCal/'000 SCM)	8305.00	8305.00

Nevertheless, the Commission has decided to maintain the NCV at MYT order approved values for FY 2009-10 even though it is an uncontrollable parameter. This is because already the petitioner has been using NCV instead of GCV as recommended by the Commission despite repeated directions from the Commission in this regard.

The Commission considers net calorific value (NCV) of a fuel as an uncontrollable parameter and has maintained it at the values estimated by the petitioner. Any variation in the actual NCV will be passed on to consumers through the FPPPA mechanism.

Based on the above approach the Commission approves the calorific value of the fuels as outlined in the table below:

Table 163: Approved calorific value for FY 2009-10

Fuel	MYT order	Estimated	Revised Approved for FY 2009-10
Indigenous Coal (kCal/kg)	5236.00	5236.00	5236.00
Imported Coal (kCal/kg)	4929.00	4929.00	4929.00
Secondary fuel oil (kCal/kg)	9766.00	9766.00	9766.00
Gas (kCal/'000 SCM)	8305.00	8305.00	8305.00

4.2.8.2 Fuel price

Petitioner's submission

In its petition, TPL-G (APP) has maintained price of all fuels for 2009-10 at MYT order approved values.

Table 164: Fuel price estimated by TPL-G (APP) for all fuel types for FY 2009-10

Fuel	MYT order	Estimated
Indigenous Coal (Rs./Tonne)	2757.00	2757.00
Imported Coal (Rs./Tonne)	3035.00	3035.00
Gas (Rs. per '000 SCM)	8095.00	8095.00
Secondary fuel oil (Rs./Tonne)	18053.00	18053.00

Commission's analysis

The Commission notes that the actual fuel prices in FY 2008-09 were higher than approved in the MYT order.

Table 165: Actual fuel prices for FY 2008-09

Fuel	MYT order	Actual
Indigenous Coal (Rs./Tonne)	2757.00	3061.69

Fuel	MYT order	Actual
Imported Coal (Rs./Tonne)	3035.00	4799.54
Gas (Rs. per ‘000 SCM)	8095.00	14963.15
Secondary fuel oil (Rs./Tonne)	18053.00	29701.60

The rise in fuel prices of imported coal and secondary fuel oil was attributable primarily to global fuel price rise. The global prices have now reduced to levels before FY 2008-09. With regards to gas, the price is expected to reduce this year with the petitioner signing a long term gas supply contract with Reliance for the gas from KG D-6 basin. Hence even though the Commission considers fuel price as an uncontrollable parameter, it has maintained it at the MYT order approved values which is also in line with the petitioner’s estimates. Any variation in the actual fuel price will be passed on to consumers through the FPPPA mechanism.

Table 166: Fuel price for FY 2009-10 approved by Commission

Fuel	Approved	Estimated	Revised Approved for FY 2009-10
Indigenous Coal (Rs./Tonne)	2757.00	2757.00	2757.00
Imported Coal (Rs./Tonne)	3035.00	3035.00	3035.00
Gas (Rs. per ‘000 SCM)	8095.00	8095.00	8095.00
Secondary fuel oil (Rs./Tonne)	18053.00	18053.00	18053.00

4.2.8.3 Blending ratio for coal

Petitioner’s submission

In the MYT order, the Commission had approved a blending ratio for indigenous and imported coal at 72:28 for C, D, E and F stations. In the petition, TPL-G (APP) submitted that it normally uses indigenous coal for C station and blended coal for stations D, E and F at an estimated average blending ratio of 64:36. This results in an average blending ratio of 71:29, combined for all the stations, which is close to the blending ratio of 72:28 approved by the Commission. TPL-G (APP) has further submitted that this ratio varies depending upon the availability of indigenous coal and calorific value of indigenous and imported coal.

Commission's analysis

For FY 2008-09 the Commission has considered the submission of the petitioner that imported coal cannot be used for station C. Further, the Commission has also considered the submission in regard to other stations.

The Commission has analysed the submission of the petitioner that subsequent to the changes in blending ratio, the overall blending ratio for all the stations is 71:29 which is close to the ratio approved in the MYT Order. In this regard the Commission has observed that blending ratio is an uncontrollable parameter which depends on factors which are not readily within the control of the petitioner.

After analysing the submission of the petitioner the Commission approves the blending ratio for FY 2009-10 as proposed by the petitioner which is indicated in the table below:

Table 167: Approved blending ratio

Station	MYT order	Estimated	Revised Approved for FY 2009-10
C	72:28	100:0	100:0
D	72:28	64:36	64:36
E	72:28	64:36	64:36
F	72:28	64:36	64:36

4.2.8.4 Computation of variable cost

Based on the revised approved values, the Commission has estimated the cost and the required quantity for each fuel type.

Table 168: Computation of variable cost for TPL-G (APP) for FY 2009-10

Fuel Type	MYT order Approved	Estimated	Revised Approved for FY 2009-10
Indigenous Coal			
Requirement (Mn. Tonnes)	1.23	1.15	1.22
Rate (Rs./Tonne)	2757	2757	2757
Cost (Rs. crores)	337.80	317.42	335.31

Fuel Type	MYT order Approved	Estimated	Revised Approved for FY 2009-10
Imported Coal			
Requirement (Mn. Tonnes)	0.47	0.47	0.48
Rate (Rs./Tonne)	3035	3035	3035
Cost (Rs. crores)	142.57	143.41	145.45
Gas			
Requirement (Mn. SCM)	181	181	181
Rate (Rs./'000 SCM)	8095	8095	8095
Cost (Rs. crores)	146.47	146.47	146.47
Secondary fuel oil			
Requirement (Tonnes)	4472.40	4298.24	4472.41
Rate (Rs./Tonne)	18053	18053	18053
Cost (Rs. crores)	8.07	7.76	8.07
Total Coal & Secondary Fuel (Rs. crores)	488	469	489
Total Gas (Rs. crores)	146	146	146
Total Fuel Cost of TPL-G (APP) (Rs. crores)	635	615	635

Performance parameters for generating stations - Scenario analysis for usage of GCV based SHR

Under the MYT Order the Commission had considered the performance parameters of the generating stations like SHR on a provisional basis. The Commission has stated in its MYT Order dated 17th January 2009, *"The working out of heat rates based on NCV by TPL is not correct. The heat rate has to be worked out based on Gross Calorific Value (GCV) of coal as fired, as per CERC and GERC Regulations. Hence, calorific value of coal as fired and the corresponding heat rates for arriving at the fuel cost should be specified in terms of GCV as is the case universally."*

The Commission has further stated in its Tariff Order for FY 2007-08, *"With a view to establish exact correlation of SHR with age, size, technology, PLF, type and quality of fuel, Commission proposes to get a study conducted to assess the normative value of SHR, through a consultant like CEA. The study will cover old thermal units of less than 200 MW capacities in operation in Gujarat."*

The Commission subsequently initiated a CEA study for evaluating the performance parameters of the generating stations in Gujarat including those which are being operated by TPL-G (APP). In the MYT Order the Commission had also indicated, *"Pending the study and its outcome, it is decided to adopt the heat rates and calorific value of fuel as approved in the Tariff Order 2007-08 for the calculation of fuel costs. After the study and its outcome, necessary review will be made."*

In the light of above, the Commission has noted that the approved performance parameters for generating stations are provisional in nature and shall be subject to the final outcome of the CEA study.

The CEA study report has been submitted in October 2009 and the Commission has reviewed the recommendations. While the Commission has not implemented the recommendations to approve any parameters for FY 2009-10, it has computed the impact of the recommended parameters for FY 2009-10 provided in the CEA report. The impact on the variable cost of the CEA recommended parameters is provided in the table below:

Table 169: Scenario analysis using CEA recommendations for FY 2009-10

Stations	Approved in the MYT order for FY 2009-10	Recommended by CEA for FY 2009-10
Station C		
SHR (kCal/kWh)	3700	3240
Sec fuel oil consumption (ml/kWh)	1.39	2.0
Auxiliary consumption	9.41%	9.50%
Station D		
SHR (kCal/kWh)	2565	2515
Sec fuel oil consumption (ml/kWh)	1.39	1.0
Auxiliary consumption	8.73%	9.00%
Station E		
SHR (kCal/kWh)	2675	2790
Sec fuel oil consumption (ml/kWh)	1.39	1.0
Auxiliary consumption	8.73%	9.00%

Stations	Approved in the MYT order for FY 2009-10	Recommended by CEA for FY 2009-10
Station F		
SHR (kCal/kWh)	2715	2790
Sec fuel oil consumption (ml/kWh)	1.39	1.0
Auxiliary consumption	8.73%	9.00%
Station Vatva		
SHR (kCal/kWh)	1950	2200
Sec fuel oil consumption (ml/kWh)	1.39	2.0
Auxiliary consumption	2.92%	3.00%
Total variable cost of generation (Rs. crores)	**634.92**	**587.79**

The Commission has observed that if the variable cost of generation as approved in the MYT order for FY 2009-10 were to be computed using the CEA recommended parameters the variable cost of generation would decrease from Rs. 634.92 crores to Rs. 587.79 crores, i.e. **a decrease of Rs. 47.13 crores or 7.42%.** As FY 2009-10 is almost over, the Commission has not used the CEA recommended parameters while estimating the ARR for FY 2009-10. Nevertheless, the Commission may consider using the CEA recommendations while approving the ARR for FY 2010-11.

4.2.9 Fixed Costs

4.2.9.1 Operations & Maintenance expenses

TPL-G (APP), in its petition for FY 2009-10, has estimated the following O&M expenses:

Table 170: O&M expenses estimated by TPL-G (APP) for FY 2009-10

(*Rs. crores)*

O&M expenses	MYT order	Estimated
Employee Expenses	52.69	56.12
R&M Expenses	60.12	60.12
A&G Expenses	23.49	23.49

O&M expenses	MYT order	Estimated
O&M Expenses	**136.3**	**139.73**

Employee expense

Petitioner's submission

TPL-G (APP) has estimated employee expenses higher than that approved in the MYT order. It has submitted that as per prevailing market conditions, the inflationary increase applicable for employee wages and salaries is well above that of R&M expenses and A&G expenses. As an organization committed to being at the forefront of efficiency and superior service, TPL-G (APP) incurs regular expenditure as per market standards to retain and motivate the best talent. Hence it has applied an 11% growth rate as opposed to the 6% growth rate specified in the MYT trajectory.

Commission's analysis

The Commission is of the opinion that employee expense is a controllable expense. Based on this approach for the FY 2009-10 the Commission approves the employee expense at the same level as approved under the MYT order. Any variation in actual expense will be considered during the annual performance review for FY 2009-10. The summary of employee expense for FY 2009-10 is provided in the following table:

Table 171: Approved Employee expenses for FY 2009-10

(*Rs. crores)*

Particulars	MYT order	Estimated	Revised Approved for FY 2009-10
Employee Expenses	52.69	56.12	52.69

Repairs & Maintenance (R&M) expense

Petitioner's submission

TPL-G (APP) has stated that R&M expenses include expenses on repairs and maintenance of plant and machinery, building, other civil works, vehicles, furniture & fixtures, office equipment, etc. TPL-G (APP) has to carry out regular repairs and maintenance of its generating plants to ensure maximum generation through optimum utilization of generation assets. It has asked for a 6% annual escalation in line with the MYT order.

Commission's analysis

The Commission is of the opinion that R&M expense is a controllable expense. Based on this approach for the FY 2009-10 the Commission approves the R&M expense at the same level as approved under the MYT order. Any variation in actual expense will be considered during the annual performance review for FY 2009-10. The summary of R&M expense for FY 2009-10 is provided in the following table:

Table 172: Approved R&M expenses for FY 2009-10

(*Rs. crores*)

Particulars	MYT order	Estimated	Revised Approved for FY 2009-10
R&M Expenses	60.12	60.12	60.12

Administration & General (A&G) expense

Petitioner's submission

TPL-G (APP) has stated that A&G expenses include rents, rates and taxes, legal expenses, professional fees, insurance, conveyance expenses, training expenses, printing and stationery etc. It has asked for a 6% annual escalation in line with the MYT order.

Commission's analysis

The Commission is of the opinion that A&G expense is a controllable expense. Based on this approach for the FY 2009-10 the Commission approves the A&G expense at the same level as approved under the MYT order. Any variation in actual expense will be considered during the annual performance review for FY 2009-10. The summary of A&G expense for FY 2009-10 is provided in the following table:

Table 173: Approved A&G expenses for FY 2009-10

(*Rs. crores)*

Particulars	MYT order	Estimated	Revised Approved for FY 2009-10
A&G Expenses	23.49	23.49	23.49

4.2.9.2 Capital Expenditure, Capitalization & Sources of Financing

Petitioner's submission

TPL-G (APP), in its petition, stated that the Commission had approved the capital expenditure of Rs. 115.31 crores for FY 2009-10 wherein the majority of the capital expenditure was planned for upgradation. TPL-G (APP) has proposed to carry out some of the capital expenditures which have been deferred from FY 2008-09 like the E Station upgradation, ESP field extension, overhauling of existing ESP, control replacement, Ash handling system extension and normal capital expenditure for Sabarmati and Vatva. Therefore TPL-G (APP) has revised the capital expenditure for FY 2009-10 to Rs. 171.03 crores. TPL-G (APP) has deferred the capital expenditure for reducing waste water generation, pollution control scheme, renovation of down stream conveyor from existing crusher house to D, E & F station bunkers and construction of new cooling towers, which was initially planned for FY 2009-10. TPL-G (APP) has provided the details of approved capital expenditure and revised estimate for FY 2008-09 and FY 2009-10 in the table below:

Table 174: Estimated capital expenditure for FY 2008-09 and FY 2009-10

(*Rs. crores)*

Particulars	2008-09 (MYT order)	2008-09 (Estimated in petition)	2009-10 (MYT order)	2009-10 (Estimated in petition)
C station cooling tower – IDCT	0.00	0.00	0.00	9.00
E Station upgradation	20.00	0.00	85.00	105.00
ESP field extension, overhauling of existing ESP, control replacement, Ash handling system extension	20.00	0.00	0.00	17.00
Renovation and refurbishment of civil structures/buildings	0.00	0.00	0.00	7.00

Particulars	2008-09 (MYT order)	2008-09 (Estimated in petition)	2009-10 (MYT order)	2009-10 (Estimated in petition)
Installation of new conveyor from conveyor N4B discharge end	0.00	0.00	0.00	2.00
Pollution control scheme	2.05	0.00	7.95	0.00
Renovation of down stream conveyor from existing crusher house to D,E & F station bunkers	0.00	0.00	6.25	0.00
Construction of new cooling towers	0.00	0.00	2.00	0.00
Normal Capital expenditure – Sabarmati	19.29	12.27	12.08	17.34
Carry over of earlier years	0.00	0.00	0.00	10.76
Normal Capital expenditure – Vatva	3.05	1.27	2.03	2.93
Total	**64.39**	**13.47**	**115.31**	**171.03**

TPL-G (APP) has further considered a normative debt equity ratio of 70:30 for funding the capital expenditure as per regulations. Break up of sources of fund between debt and equity is presented in the table below.

Table 175: Capitalization and sources of financing estimated by petitioner

(*Rs. crores)*

Particulars	Approved	Estimated
Capital expenditure	115.31	171.03
Capitalisation	136.61	136.61
Debt %	70%	70%
Debt	95.63	95.63
Equity	40.98	40.98

Commission's analysis

The Commission has reviewed the reasons for a rise in the capital expenditure which has been primarily due to deferred projects of FY 2008-09 being implemented in FY 2009-10. The Commission has performed a preliminary numerical check to verify the petitioner's submission and found that the capital expenditure reduction shown in FY 2008-09 has been reflected to a large extent as an increase in capital expenditure in FY 2009-10. Hence the Commission approves the capital expenditure as proposed by the petitioner.

With regards to capitalization, the Commission had directed the petitioner to submit details of present status of ongoing projects, proposed capital expenditure and its cost - benefit analysis, timelines which the petitioner has failed to submit. In the absence of the data on project timelines, it is difficult for the Commission to take a view on the capitalization for FY 2009-10. Hence for the time being, the Commission approves the capitalization proposed by the Petitioner. Since the Commission has treated capital expenditure as uncontrollable, any deviation in the actual expenditure and capitalization will be reviewed during APR of FY 2009-10.

The summary of the Commission's analysis is provided in the following table:

Table 176: Approved capitalization and sources of financing

(*Rs. crores)*

Particulars	MYT order	Estimated	Revised Approved for FY 2009-10
Capital expenditure	115.31	171.03	171.03
Capitalization	136.61	136.61	136.61
Debt %	70%	70%	70%
Debt	95.63	95.63	95.63
Equity	40.98	40.98	40.98

4.2.9.3 Interest expenses

Petitioner's submission

In its petition, TPL-G (APP) has estimated the interest expenses on the existing loans on the basis of opening balances of the loans for FY 2009-10. Thus TPL-G (APP) has worked out the interest on existing loans as follows:

Table 177: Interest Expense on existing loans for FY 2009-10 estimated by petitioner

(Rs. crores)

Existing loan sub-heads	Estimated
IDFC Term Loan II	
Opening balance	17.86
Repayments	7.14
Closing balance	10.71
Interest rate	8.17%
Interest on loan	1.12
LIC I	
Opening balance	100
Repayments	10
Closing balance	90
Interest rate	12.00%
Interest on loan	10.23
Total	**11.35**

Further, TPL-G (APP) has estimated interest expenses on new loans based on normative parameters considering 70% of capitalization as debt requirement and an interest rate of 12%.

Table 178: Interest Expense on new loans for FY 2009-10 estimated by petitioner

(Rs. crores)

New loan sub-heads	Estimated
Capital expenditure during the year	171.03
Capitalization during the year	136.61
Normative Debt @ 70%	95.63
Opening balance	50.78
Additions	95.63
Repayments	8.46
Closing balance	137.94
Average balance	94.36
Interest expenses @ 12%	11.32

Commission's analysis

The Commission has computed the interest expense for FY 2009-10 as the sum of interest expense on existing loans in FY 2008-09 and interest expense on new loan corresponding to 70% of approved capitalization amount.

The computation of interest expense for existing loans is shown in the following table:

Table 179: Interest expense on existing loans for FY 2009-10 as computed by Commission

(*Rs. crores)*

Loan sub-heads	FY 2008-09	FY 2009-10
IDFC Term Loan II - Rs. 50 crores		
Opening balance	25.00	17.86
Repayments	7.14	7.14
Closing balance	17.86	10.72
Interest rate (%)	8.17%	8.17%
Effective interest rate*	7.93%	7.93%
Interest on loan	1.70	1.13
LIC I - Rs. 47.86 crores		
Opening balance	47.86	46.66
Repayments@	1.20	4.80
Closing balance	46.66	41.86
Interest rate (%)	11.00%	11.00%
Effective interest rate*	12.15%	12.15%
Interest on loan	5.74	5.38
Total	**7.44**	**6.51**

** Computed by dividing actual interest paid by average of opening and closing loan balance for FY 2008-09. It has been used to compute interest expense for FY 2009-10*

@ The repayment of LIC loan has to be made in 4 quarterly instalments with each company paying the following amounts as quarterly instalment: TPL-G (APP) – Rs. 1.20 crores, TPL-Ahmedabad – Rs. 1.30 crores and TPL-Surat – Rs. 2.50 crores. The repayment of LIC loan started in last quarter of FY 2008-09. The repayment shown in for FY 2009-10 is for all 4 quarters.

Further, the Commission has computed interest expense on new loans by assuming loan amount as 70% of approved capitalization, interest rate of 12% and repayment tenure of 7 years inclusive of 1 year moratorium. The interest rate and repayment tenure adopted by the Commission are in line with the loan terms available to the petitioner currently from various lending institutions.

Table 180: Interest expense for FY 2009-10 on new loan as computed by Commission

(*Rs. crores)*

Particulars	Amount
Opening balance	0.00
Loan addition	95.63
Repayment	0.00
Closing balance	95.63
Average balance	47.81
Interest rate	12.00%
Interest expense	**5.74**

Thus the Commission approves a total interest expense of Rs. 12.25 crores for FY 2009-10.

The summary of interest expense for FY 2009-10 is provided in the following table:

Table 181: Approved Interest expense for FY 2009-10

(*Rs. crores)*

Particulars	MYT order	Estimated	Revised Approved for FY 2009-10
Interest expense	17.96	22.67	12.25

4.2.9.4 Depreciation

Petitioner's submission

In its petition, TPL-G (APP) has estimated depreciation using CERC rates, based on the revised GFA and capitalization for FY 2009-10. The depreciation has been calculated using straight line method.

Table 182: Depreciation for FY 2009-10 estimated by TPL-G (APP)

(*Rs. crores)*

Particular	MYT order	Estimated
Depreciation	33.94	29.24

Commission's analysis

The Commission computed the opening and closing GFA for FY 2009-10 based on the closing GFA of FY 2008-09 and capitalization for FY 2009-10.

Table 183: Opening and closing GFA for FY2009-10

(*Rs. crores)*

Gross Block as on 31.03.2009	Addition to Gross Block during 2009-10	Gross Block as on 31.03.2010
736.36	136.61	872.97

The petitioner has computed the depreciation for FY 2009-10 using CERC depreciation rates on different categories of assets like plant & machinery, buildings, cables, etc as permitted by GERC Terms & Conditions of Tariff Regulations, 2005. The Commission computed the actual depreciation expense for FY 2009-10 by employing the weighted average depreciation rate of 3.15% used by the petitioner. Thus the Commission has estimated the actual depreciation expense to be Rs. 25.33 crores.

Since capital expenditure has been considered as uncontrollable the Commission has treated depreciation as uncontrollable. Any variation in depreciation will be considered during the annual performance review for FY 2009-10. The final summary for depreciation expenses is presented below:

Table 184: Approved Depreciation for FY 2009-10

(*Rs. crores)*

Particulars	MYT order	Estimated	Revised Approved for FY 2009-10
Depreciation	33.94	29.24	25.33

4.2.9.5 Interest on Working Capital

Petitioner's submission

In its petition, TPL-G (APP) has revised the estimate for interest on working capital and recomputed the same based on normative parameters:

Table 185: Interest on Working Capital estimated by petitioner

(*Rs. crores)*

Working capital components	MYT order	Estimated
Coal & Secondary Fuel for 2 months	81.41	78.1
Cost of gas for 1 month	12.21	12.21
O&M Expenses for 1 month	11.36	11.64
1% of GFA for maintenance spares	7.74	8.77
Receivables equivalent to 2 months	152.24	150.31
Normative Working Capital	264.95	261.03
Interest on Working Capital	**27.16**	**26.76**

Commission's analysis

The Commission is of the view that although on an overall basis, the interest on working capital is a controllable expense; some of its components are derived from uncontrollable factors. Hence the Commission has recomputed the interest on working capital on a normative basis using the revised approved values for FY 2009-10.

Table 186: Interest on Working Capital as computed by Commission for FY 2009-10 on a normative basis

(*Rs. crores)*

Particulars	MYT order	Computed by Commission on a normative basis using revised approved values
Coal & Secondary Fuel for 2 months	81.41	81.47
Cost of gas for 1 month	12.21	12.21
O&M Expenses for 1 month	11.36	11.36
1% of GFA for maintenance spares	7.74	7.36
Receivables equivalent to 2 months	152.24	149.22
Normative Working Capital	264.95	261.62
Interest on Working Capital	**27.16**	**26.82**

The Commission accordingly approves the interest on working capital based on the above computation. Any variation in actual interest on working capital will be considered during the annual performance review for FY 2009-10. The summary of interest on working capital for FY 2009-10 is provided in the following table:

Table 187: Approved Interest on working capital for FY 2009-10

(*Rs. crores)*

Particulars	MYT order	Estimated	Revised Approved for FY 2009-10
Interest on working capital	27.16	26.76	26.82

4.2.9.6 Return on Equity

Petitioner's submission

TPL-G (APP) has revised the estimate on account of revision in closing equity for FY 2008-09 and revised capitalization for FY 2009-10. The equity addition for the year is considered at a normative proportion of 30% of the capital addition during the year. The return on equity computed as 14% on the average balance of equity for TPL-G (APP) is tabulated below:

Table 188: Return on Equity estimated by petitioner

(Rs. crores)

Return on Equity computation	MYT order	Estimated
Opening equity	324.15	309.16
Equity addition during the year	40.98	40.98
Equity at end of the year	365.13	350.15
Average equity	344.64	329.65
Return on Equity @ 14%	**48.25**	**46.15**

Commission's analysis

The Commission has computed return on equity on a normative basis using the opening equity for FY 2009-10 (equal to closing equity of FY 2008-09 which is already approved) and equity addition for FY 2009-10 (at 30% of approved capitalization).

Table 189: Return on Equity for FY 2009-10 computed by Commission

(Rs. crores)

Particulars	Computed by Commission for FY 2009-10
Opening equity	307.91
Equity addition during the year	40.98
Closing equity	348.89
Return on Equity @ 14%	**45.98**

Since capital expenditure has been considered as uncontrollable the Commission has treated return on equity as uncontrollable. Any variation in return on equity will be considered during the annual performance review for FY 2009-10.

The summary of return on equity for FY 2009-10 is provided in the following table:

Table 190: Approved Return on equity for FY 2009-10

(*Rs. crores)*

Particulars	MYT order	Estimated	Revised Approved for FY 2009-10
Return on equity	48.25	46.15	45.98

4.2.9.7 Income Tax

Petitioner's submission

TPL-G (APP) in its petition has revised the tax computation by considering RoE as the post tax return (PAT) and grossing it up to find the PBT. The amount of Income tax for FY 2009-10 as estimated by the petitioner is indicated in the table below:

Table 191: Income Tax for FY 2009-10 estimated by petitioner

(*Rs. crores)*

Income Tax computation	Estimated
ARR including non-tariff income	903.37
Total expense	833.46
PBT	69.92
Income tax	23.76
PAT	46.15

Commission's analysis

The Commission is of the view that the income tax should be computed on the return on equity and not after grossing up. The Commission is therefore of the opinion that the computation as submitted by the petitioner is not permissible under the GERC Terms & Conditions of Tariff.

Based on the above observation the Commission has computed the amount of tax by applying the tax rate of 33.99% on the approved return on equity.

Table 192: Income Tax computed by Commission

(*Rs. crores*)

Income Tax computation	Revised Approved for FY 2009-10
Return on equity	45.98
Tax (@ 33.99%)	15.63

The summary of income tax for FY 2009-10 is provided in the following table:

Table 193: Income tax approved by Commission

(*Rs. crores*)

Particulars	MYT order	Estimated	Revised Approved for FY 2009-10
Income tax	16.40	23.76	15.63

4.2.9.8 Non tariff income

Petitioner's submission

In the MYT order the Commission had maintained the non tariff income at Rs. 1.50 crores throughout the control period. TPL-G (APP), in its petition, has also maintained the non tariff income for FY 2009-10 at the MYT order approved value of Rs. 1.50 crores.

Commission's analysis

The Commission has projected the non tariff income for FY 2009-10 based on approved non tariff income in FY 2008-09 (Rs. 2.23 crores) and growth in approved net generation of FY 2009-10 (3559.91 MUs) over FY 2008-09 (3498.82 MUs). Thus the Commission has arrived at a figure of Rs. 2.27 crores as the projected non tariff income for FY 2009-10.

Table 194: Approved Non tariff income for FY 2009-10

(Rs. crores)

Particulars	MYT order	Estimated	Revised Approved for FY 2009-10
Non tariff income	1.50	1.50	2.27

4.2.10 Summary of ARR of TPL-G (APP) for FY 2009-10

Table 195: Summary of ARR of TPL-G (APP) for FY 2009-10

(Rs. crores)

Particulars	MYT Order	Estimated	Revised Approved for FY 2009-10
Variable Costs			
Station C	102.35	-	98.37
Station D	141.75	-	143.35
Station E	105.47	-	106.66
Station F	138.87	-	140.44
Station Vatva	146.47	-	146.47
Total Variable Costs	**634.92**	**615.06 ***	**635.30**
Fixed Costs			
Employee Expenses	52.69	56.12	52.69
R&M Expenses	60.12	60.12	60.12
A&G Expenses	23.49	23.49	23.49
Depreciation	33.94	29.24	25.33
Interest on loans	17.96	22.67	12.25
Interest on Working Capital	27.16	26.76	26.82
Return on Equity	48.25	46.15	45.98
Income Tax	16.40	23.76	15.63
Total Fixed Costs	**280.01**	**288.31**	**262.30**
Gross ARR	**914.93**	**903.37**	**897.60**
Non-tariff income	1.50	1.50	2.27

Particulars	MYT Order	Estimated	Revised Approved for FY 2009-10
Net ARR	**913.43**	**901.87**	**895.33**

** Station wise breakup of variable costs has not been provided in the petition*

4.3 Ahmedabad Distribution

4.3.1 Sales

Petitioner's submission

TPL-Ahmedabad has forecasted sales for FY 2009-10 by applying historical CAGR on sales estimated by TPL-Ahmedabad for 2008-09. The category-wise sales as estimated are shown below:

Table 196: Sales estimated by TPL-Ahmedabad for FY 2009-10

(MUs)

Categories	MYT order	Estimated
Residential General Purpose	1547.00	1516.75
Commercial / Industrial General Purpose	837.00	861.62
Low Tension Power	285.00	265.10
Low Tension Maximum Demand	899.00	766.74
High Tension Maximum Demand	1546.00	1225.80
HT Pumping	99.00	74.55
Others	127.00	59.45
DoE	0.00	0.00
Total	**5340.00**	**4770.00**

TPL-Ahmedabad has on an overall basis projected reduction in sales due to perceived economic slowdown. The reasons for difference in sales across various categories as explained by TPL-Ahmedabad are provided below:

Residential General Purpose

Sales have been projected lower due to expected migration of residents away from the city because of economic slowdown. TPL-Ahmedabad has projected sales by applying the 8 year CAGR computed on the basis of the historical data, on the sales for the year FY 2008-09.

Commercial General Purpose & Industrial General Purpose

TPL-Ahmedabad submitted that this category primarily include mid size commercial complexes, shops and offices and the impact of recession would not be significant in this category. TPL-Ahmedabad has projected sales by applying the 8 year CAGR computed on the basis of the historical data, on the sales for FY 2008-09.

Low Tension Power

The YoY growth for the years FY 2004-05 and FY 2005-06 was negative because of the shift of consumers from LTP tariff category to LTMD tariff category. The final sales forecast of 265 MUs for FY 2009-10, was arrived at by applying the 3-years CAGR on the historical sales of FY 2005-06.

Low Tension Maximum Demand

The industries such as power loom, chemical, ice factories plastic and commercial complexes have been affected by economic slowdown and many have closed or scaled down in FY 2008-09. The sales for FY 2009-10, have been projected based on the 3-years CAGR, worked out on the historical sales data and the feedback from the end use survey.

High Tension Maximum Demand

The 3-years CAGR for this category is around 11.46% whereas the estimated growth in FY 2008-09 over FY 2007-08 is only 2.45%. The sales in this category had shown a restricted growth in FY 2008-09 because of increase in captive consumption and economic slowdown. The 3-years CAGR has been worked out on the refined historical sales data to enhance the accuracy of the forecast. Further, TPL-D has also taken into consideration the current economic situation based on the feedback from the end use survey.

HT Pumping

The main reason for reduction in growth in this category is the availability of Narmada/ Raska water to the city of Ahmedabad which has increased the level of ground water & thus the power required for pumping this water to the societies has reduced. The sales forecast for FY 2009-10, has been arrived at based on end use survey giving due consideration to above mentioned factors.

Others

The main reason for reduction in the sales in this category is due to regrouping of sales pertaining to local authority in respective categories. The sales in this category are mainly contributed by agriculture, temporary, streetlights and general lighting purpose categories. TPL-Ahmedabad has projected the sales for FY 2009-10 based on the 8 year CAGR after taking into the effect the above said regrouping.

Commission's analysis

The Commission directed TPL-Ahmedabad to submit actual sales achieved for FY 2009-10. TPL-Ahmedabad through its letter dated 6th October 2009, submitted actual sales data for the first 5 months of FY 2009-10. The Commission compared this with the actual sales for corresponding months of FY 2008-09:

Table 197: Comparison of 5 months actual sales (Apr - Aug) of FY 2008-09 and FY 2009-10

(MUs)

Months	2008-09 5 months Actual	2009-10 5 months Actual	Difference FY 2009-10 over FY 2008-09
Apr	403.93	418.66	14.73
May	432.07	446.67	14.60
Jun	444.99	469.17	24.18
Jul	429.39	459.27	29.88
Aug	427.58	462.36	34.78
Total	**2137.95**	**2256.13**	**118.17**

The Commission has observed that the sales in FY 2009-10 have actually grown over FY 2008-09. The Commission also analyzed various economic growth forecasts for FY 2009-10. The latest RBI report now forecasts a growth rate of 6.5% for FY 2009-10. The YoY GDP growth rate measured on a quarterly basis also suggests that the economy has shown an upward trend in the first quarter of FY 2009-10.

In view of above, as a conservative estimate, the Commission has employed the average growth rate in sales achieved in the first 5 months of FY 2009-10 over the corresponding months of FY 2008-09 to project sales for remaining months of FY 2009-10. The 5 month growth rate has been applied on actual sales of last 7 months of FY 2008-09 to project sales for the last 7 months of FY 2009-10.

Table 198: Computation of consumer category wise growth rates

Category	Total Sales for Apr to Aug 2008-09 *(MUs)*	Total Sales for Apr to Aug 2009-10 *(MUs)*	Growth rate (%)
RGP	670.32	749.71	11.8
CGP & IGP	344.35	380.75	10.6
LTP-1	23.65	25.16	6.4
LTP-2	84.71	88.01	3.9
LTMD-1	44.76	53.09	18.6
LTMD-2	293.97	315.63	7.4
HTMD	611.16	572.18	-6.4
HT Pumping	39.09	42.60	9.0
LTP (AG)	3.42	3.71	8.6
GLP	3.51	4.06	15.8
TS	0.42	0.22	-47.8
Streetlights	14.81	17.38	17.3
DOE	3.78	3.62	-4.2

Thus the sales for FY 2009-10 finally approved by the Commission are shown below:

Table 199: TPL-Ahmedabad category wise sales approved by Commission for FY 2009-10

(MUs)

Category	MYT order	TPL-Ahmedabad estimate	Revised Approved for FY 2009-10
RGP	1547.00	1516.75	1593.80
CGP & IGP	837.00	861.62	841.89
LTP-1	62.00	59.32	60.94
LTP-2	223.00	205.78	207.57
LTMD-1	106.00	109.29	125.28
LTMD-2	793.00	657.45	716.99
HTMD	1546.00	1225.80	1278.53
HT Pumping	99.00	74.55	95.52
LTP (AG)	9.00	9.01	8.79

Category	MYT order	TPL-Ahmedabad estimate	Revised Approved for FY 2009-10
GLP	11.00	11.19	9.19
TS	1.00	0.75	0.57
Streetlights	106.00	38.50	48.03
DOE	0.00	0.00	8.71
Total	**5340.00**	**4770.00**	**4995.82**

It is to be noted that the sales projected by the Commission for FY 2009-10 is still lower than the MYT order figure. Thus the methodology adopted by the Commission has taken into consideration the reduction in sales due to economic slowdown in FY 2008-09.

4.3.1.1 Number of installations

Petitioner's submission

In order to project the number of installations in the licensee area, TPL-Ahmedabad has contacted the different categories of consumers such as builders, developers and industrialists, to track their future plan. TPL-Ahmedabad has considered the factors like the current market scenario, limited vacant space available in the license area, delay in upcoming projects and industrial recession in the supply areas. The approved and revised estimate for the number of installations for FY 2009-10 is tabulated below.

Table 200: No. of installations estimated by petitioner

Category	MYT order	Revised estimate
Residential General Purpose	1145533	1167011
Commercial General Purpose	319957	316057
Low Tension Power	49315	54318
Low Tension Maximum Demand	11435	12110
High Tension Maximum Demand	752	752
HT-Local Authority	134	127
Others	3730	1262
Total	**1530856**	**1552732**

Commission's analysis

The Commission has taken note of the analysis used by TPL-Ahmedabad to project the number of installations for FY 2009-10. The Commission approves the number of installations as estimated by TPL-Ahmedabad.

The Commission's analysis on number of installations is summarized as shown below:

Table 201: No. of installations approved

Category	MYT order	Revised estimate	Revised Approved for FY 2009-10
Residential General Purpose	1145533	1167011	1167011
Commercial General Purpose	319957	316057	316057
Low Tension Power	49315	54318	54318
Low Tension Maximum Demand	11435	12110	12110
High Tension Maximum Demand	752	752	752
HT-Local Authority	134	127	127
Others	3730	1262	1262
Total	**1530856**	**1552732**	**1552732**

4.3.2 Revenue from sale of power

TPL-Ahmedabad has estimated revenue by applying existing tariff on estimated sales figures. The Commission has recomputed the revenue by applying existing tariff on the now approved sales figures.

Table 202: Sales revenues approved by Commission for FY 2009-10

(*Rs. crores*)

Category	MYT order	TPL-Ahmedabad estimate	Revised Approved for FY 2009-10 at existing tariffs
RGP	488.85	473.52	498.77
CGP & IGP	385.86	395.78	386.73
LTP-1	22.26	21.30	21.84
LTP-2	88.09	81.63	81.50

Category	MYT order	TPL-Ahmedabad estimate	Revised Approved for FY 2009-10 at existing tariffs
LTMD-1	40.6	41.75	47.25
LTMD-2	326.72	270.77	292.63
HTMD	609.12	495.76	513.88
HT Pumping	37.13	27.40	29.02
LTP (AG)	2.86	2.84	2.77
GLP	4.19	4.18	3.52
TS	0.53	0.40	2.77
Streetlights	39.43	13.82	15.30
DOE	0.00	0.00	8.71
Total	**2045.63**	**1829.15**	**1904.69**

4.3.3 Distribution loss

Petitioner's submission

TPL-Ahmedabad has estimated the distribution loss at 10.25% which is same as that approved in the MYT order.

Commission's analysis

The Commission has observed that TPL-Ahmedabad has been able to achieve a loss level of 8.69% in FY 2008-09 and the loss for FY 2009-10 should be lower than the loss level achieved for FY 2008-09. The Commission has used the percentage reduction for FY 2009-10 over FY 2008-09 as approved in the MYT order to estimate distribution loss for FY 2009-10.

Table 203: Distribution loss for TPL-Ahmedabad approved by Commission for FY 2009-10

Particulars	MYT order		Approved	
	2008-09	2009-10	2008-09	2009-10
Distribution loss %	10.43%	10.25%	8.69%	8.54%
Annual reduction %		-1.73%		-1.73%

The summary for distribution loss is shown below:

Table 204: Distribution loss approved by Commission

Particulars	MYT order	Revised estimate	Revised Approved for FY 2009-10
Distribution loss %	10.25%	10.25%	8.54%

4.3.4 Energy Requirement

The Commission has computed the energy requirement based on the revised approved sales figure and distribution loss and revised estimated transmission loss. The transmission loss has been estimated based on the wind energy transmission loss of 2.01% estimated by the Commission during APR of FY 2008-09 and transmission loss of 1.61% for energy from SUGEN.

Table 205: Energy requirement for TPL-Ahmedabad approved by the Commission

(MUs)

Particulars	MYT order	Revised estimate	Revised Approved for FY 2009-10
Energy Sales	5,338.63	4,770.00	4995.82
Distribution loss (%)	10.25%	10.25%	8.54%
Distribution loss	609.7	544.76	466.48
Energy input at distribution level	5,948.34	5,314.76	5462.30
Transmission loss	156	90.28	25.21
Energy requirement	6,104.34	5,406.71	5487.51

4.3.5 Energy Availability

The Commission has noted that the energy sources of TPL-G (APP), TPL-G (SUGEN), GUVNL/other sources and Wind energy are available for TPL-Ahmedabad for FY 2009-10. The availability from TPL-G (APP) has been considered at net generation since complete generation of this TPL-G (APP) is estimated to be consumed by TPL-Ahmedabad. The total availability from SUGEN has been accepted at 3621 MU as estimated by TPL-Ahmedabad and divided among TPL-Ahmedabad and TPL-Surat in the ratio 1:2 in line with the PPAs signed by TPL-G (SUGEN) with Ahmedabad Electric Company (AEC) and Surat Electric Company (SEC). The energy from wind has been computed as 5.24% (the RPO obligation approved in the MYT order) of total energy requirement of Ahmedabad. The remaining requirement is expected to be sourced from GUVNL/other sources.

Using the above analysis, the Commission has calculated the energy availability from various sources as shown below:

Table 206: Energy availability calculations for TPL-Ahmedabad

(MUs)

Sources	Units available
TPL-G (APP)	3560
TPL-G (SUGEN)	1207
GUVNL/other sources	433
Wind energy	288
Total	5488

4.3.6 Power purchase cost

The power purchase rates from various sources approved by Commission in its MYT order and the rates now estimated by TPL-Ahmedabad are shown below:

Table 207: Power purchase rates FY 2009-10 for TPL-Ahmedabad approved and estimated

(*Rs./kWh)*

Sources	MYT order	Revised estimate
TPL-G (APP)	2.57	2.62
TPL-G (SUGEN)	2.98	2.98
GUVNL/other sources	3.10	3.10
Wind energy	3.51	3.37

The Commission has now recomputed the rates as follows. The rate from TPL-G (APP) has been estimated to be Rs. 2.52 per kWh based on the revised approved net ARR and net generation of TPL-G (APP). The rate of power from SUGEN has been considered at Rs. 2.98 per kWh as approved in the MYT order. The SUGEN rate will be reviewed next year based on CERC's tariff order on SUGEN. The rate for GUVNL has been maintained at the value approved in the MYT order (Rs. 3.10 per kWh). The rate for wind has been considered at Rs. 3.37/kWh which was the actual rate in FY 2008-09.

Based on the above analysis the Commission has computed the power purchase cost from various sources as follows:

Table 208: Power purchase cost for TPL-Ahmedabad approved by Commission

Sources	MYT order	Revised Approved for FY 2009-10
TPL-G (APP)		
Quantity in MUs	3560.00	3559.91
Rate in Rs./kWh	2.57	2.52
Cost in Rs. crores	913.43	895.33
TPL-G (SUGEN)		
Quantity in MUs	2088.00	1207.00
Rate in Rs./kWh	2.98	2.98
Cost in Rs. crores	622.22	359.69
GUVNL/Other sources		
Quantity in MUs	138.00	433.05
Rate in Rs./kWh	3.10	3.10
Cost in Rs. crores	42.78	134.25
Wind energy		
Quantity in MUs	320.00	287.55
Rate in Rs./kWh	3.51	3.37
Cost in Rs. crores	112.32	96.90
Total		
Quantity in MUs	**6106.00**	**5487.51**
Rate in Rs./kWh	**2.77**	**2.71**
Cost in Rs. crores	**1690.75**	**1486.17**

4.3.7 Fixed Costs

4.3.7.1 Operations & Maintenance expenses

TPL-Ahmedabad, in its petition for FY 2009-10, has estimated the following O&M expenses:

Table 209: O&M expenses estimated by TPL-Ahmedabad

(*Rs. crores)*

O&M expenses	MYT order	Estimated
Employee Expenses	66.38	74.12
R&M Expenses	77.60	77.60
A&G Expenses	33.65	33.65
O&M Expenses	**177.63**	**185.37**

Employee expense

Petitioner's submission

TPL-Ahmedabad has estimated employee expenses higher than that approved in the MYT order. It has reasoned that as per prevailing market conditions, the inflationary increase applicable for employee wages and salaries is well above that of R&M expenses and A&G expenses. As an organization committed to being at the forefront of efficiency and superior service, TPL-Ahmedabad incurs regular expenditure as per market standards to retain and motivate the best talent. Hence it has applied an 11% growth rate as opposed to the 6% growth rate specified in the MYT trajectory.

Commission's analysis

The Commission treats employee expense as controllable and approves it at the MYT order approved value. Any variation in actual expense will be considered during the performance review process for FY2009-10. The summary of employee expense for FY 2009-10 is provided in the following table:

Table 210: Employee expenses approved by Commission

(*Rs. crores)*

Particulars	MYT order	Estimated	Revised Approved for FY 2009-10
Employee Expenses	66.38	74.12	66.38

Repairs & Maintenance (R&M) expense

Petitioner's submission

TPL-Ahmedabad has estimated R&M expense at the MYT order approved value.

Commission's analysis

The Commission treats repairs & maintenance expense as controllable and approves it at the MYT order approved value. Any variation in actual expense will be considered during the performance review process for FY 2009-10. The summary of repairs & maintenance expense for FY 2009-10 is provided in the following table:

Table 211: R&M expenses approved by Commission

(*Rs. crores)*

Particulars	MYT order	Estimated	Revised Approved for FY 2009-10
R&M Expenses	77.60	77.60	77.60

Administration & General (A&G) expense

Petitioner's submission

TPL-Ahmedabad has stated that A&G expenses include rents, rates and taxes, legal expenses, professional fees, insurance, conveyance expenses, training expenses, printing and stationery etc. It has asked for a 6% annual escalation in line with the MYT order.

Commission's analysis

The Commission treats A&G expense as controllable and approves it at the MYT order approved value. Any variation in actual expense will be considered during the performance review process for FY 2009-10. The summary of A&G expense for FY 2009-10 is provided in the following table:

Table 212: A&G expenses approved by Commission

(*Rs. crores)*

Particulars	MYT order	Estimated	Revised Approved for FY 2009-10
A&G Expenses	33.65	33.65	33.65

4.3.7.2 Capital Expenditure, Capitalization & Sources of Financing

Petitioner's submission

TPL-Ahmedabad submitted that it has reassessed the capital expenditure requirement for FY 2009-10 based on the capital expenditure incurred during the first nine months of FY 2008-09. The estimates are shown in the following table:

Table 213: Capital expenditure approved in the MYT order and estimated by petitioner

(*Rs. crores)*

Particulars	MYT order	Revised estimate
EHV	253.01	253.52
HT Network	93.50	83.41
LT Network	43.98	26.37
Metering	25.87	20.41
Special projects	7.30	7.30
Customer Care & IT Initiatives	24.33	40.45
Total	**447.99**	**431.46**

The reasons for difference in investments as provided by TPL-Ahmedabad are discussed below:

1. Investment in EHV Network

(a) TPL-Ahmedabad has deferred the investment in 400 kV Gota Import Point under the head of bulk supply points keeping in mind the reduction in the demand due to the economic slowdown.

(b) In EHV transmission lines; 132 kV line between Nicol-1 and Airport has been deferred due to economic slowdown, the upgradation of 66 kV transmission line from Sabarmati to Gandhinagar has been carried forward from FY 2008-09 and 132 kV New Pirana to Nicol-2 line has been preponed due to deterioration of conductor.

(c) EHV substation projects of 132 kV at Prahlad Nagar, Dudheshwar and upgradation of Gandhinagar substation have been carried forward from FY 2008-09 with revised cost.

(d) Out of the planned eight 33 kV substations, three have been deferred due to lower load growth, land unavailability and economic slowdown. The projects which have been deferred are 33 kV sub-stations at Civil hospital, Naroda, Shahwadi and Rakhial.

(e) Investment in upgradation of EHV substations and MRS incurred in FY 2008-09 has been deferred to FY 2009-10 and FY 2010-11 due to operational difficulties.

(f) Investment in safety has been revised due to deferment of project for replacing old conductors of 66 kV EHV line and erecting additional tower under existing 66/ 132 kV EHV lines from FY 2008-09 .

(g) Investment in Support infrastructure cost has been revised based on actual expenditure incurred in FY 2008-09 for equipments.

(h) Investment in central control room of Rs. 1140 Lakhs has been included in FY 2009-10 under the head of “Automation”.

Investment in HT Network

(a) Considering effect of lower load growth, the number of schemes proposed in HT Network & Distribution transformer, 11 kV Switchgears & Substations and other costs have been reduced. However, at the same time the capital cost for providing supply to customer has gone up based on the actual expenditure incurred in FY 2008-09. Accordingly, the capital expenditure has been revised.

(b) The cost under the head of safety has increased on account of the cost of replacement of unsafe switchgears, which has been transferred from the head of total switchgear replacements.

Investment in LT Network: The reduction is mainly due to reduction in load growth

Investment in Metering: The reduction is mainly due to reduction in load growth.

Investment in Special Projects: The approved investment in the special projects is Rs. 7.30 crores for FY 2009-10 and the revised estimate has been kept at the same level. Some of the changes in the proposed schemes are as follows:

(a) Projects like Distribution Automation, HVDS, in line breakers have been deferred.
(b) The planned expenditure to procure test benches for MTL for FY 2008-09 has been partly deferred to FY 2009-10.
(c) The planned expenditure under GIS project for FY 2008-09 has been partly deferred to FY 2009-10.
(d) Expenditure for sub-zonal office was earlier provided under LT network in the capital expenditure projection of the MYT order. The same has now been shifted to special project head.

Investment in Customer Care & IT: increased due to the deferred projects of FY 2008-09 which will be taken up in FY 2009-10.

Thus TPL-Ahmedabad has summarized that most of the capital expenditure is being deferred to the future years due to economic slowdown. Nevertheless under some of the expenditure heads, TPL-Ahmedabad is implementing deferred capital expenditure of FY 2008-09.

TPL-Ahmedabad has further proposed a normative debt equity ratio of 70:30 for funding the capital expenditure as per regulations. Break up of sources of fund between debt and equity is presented in the table below.

Table 214: TPL-Ahmedabad estimates for capitalization and sources of financing for FY 2009-10

(*Rs. crores)*

Particulars	Approved *	Estimated
Capital expenditure	447.98	431.46
Capitalisation (net of SLC)	-	401.35
Debt %	-	70%
Debt	-	280.95
Equity	-	120.41

** Capitalization and sources of financing were not approved in the MYT order*

Commission's analysis

The Commission has observed that the estimated capital expenditure is in line with that approved in the MYT order. The Commission has performed a preliminary review of the proposed projects and found them to be appropriate. Hence the Commission approves the capital expenditure as proposed by the petitioner.

With regards to capitalization, the Commission had directed the petitioner to submit details of present status of ongoing projects, proposed capital expenditure and its cost - benefit analysis, timelines which the petitioner has failed to submit. In the absence of the data on project timelines, it is difficult for the Commission to take a view on the capitalization for FY 2009-10. Hence for the time being, the Commission approves the capitalization proposed by the Petitioner. Since the Commission has treated capital expenditure as uncontrollable, any deviation in the actual expenditure and capitalization will be reviewed during APR of FY 2009-10.

The summary of the Commission's analysis is provided in the following table:

Table 215: Capital expenditure and sources of financing now approved by Commission

(*Rs. crores)*

Particulars	MYT order	Estimated	Revised Approved for FY 2009-10
Capital expenditure	447.98	431.45	431.45
Capitalization	-	401.35	401.35
Debt %	-	70%	70%
Debt	-	280.95	280.95
Equity	-	120.41	120.41

4.3.7.3 Interest expenses

Petitioner's submission

In the MYT order, the Commission had approved the interest expenses for the entire distribution business (Ahmedabad & Surat combined) based on the actual opening balance of the loans for FY 2008-09 and apportioned between Ahmedabad and Surat license areas in proportion to approved capital expenditure for the respective year. In its petition for FY 2008-09, TPL-Ahmedabad identified loans for each area and reallocated the interest expenses on the existing loans on the basis of opening balances of the loans for FY 2008-09 for each area. On the basis of this TPL-Ahmedabad has now worked out the interest on existing loans for FY 2009-10 as follows:

Table 216: Interest Expense on existing loans for FY 2009-10 estimated by petitioner

(*Rs. crores)*

Existing loans Ahmedabad	FY 2009-10
APDRP	
Opening balance	35.22
Interest rate	9.00%
Interest expense	3.13
HDFC 2A	
Opening balance	40.38
Interest rate	11.50%
Interest expense	4.20
HDFC 3A	
Opening balance	4.79
Interest rate	11.50%
Interest expense	0.49
SBI	
Opening balance	167.70
Interest rate	11.00%
Interest expense	16.98
Total	
Opening balance	248.09
Interest rate	9.00% to 11.50%
Interest expense	24.80

Further, TPL-Ahmedabad has estimated interest expenses on new loans based on normative parameters considering 70% of capitalization as debt requirement and an interest rate of 12%.

Table 217: Interest Expense on new loans for FY 2009-10 estimated by petitioner

(*Rs. crores)*

New loan sub-heads	Estimated
Capital expenditure during the year	431.45
Capitalization during the year	436.35
Less SLC addition	35
Normative Debt @ 70%	280.95
Opening balance	173.69
Additions	280.95
Closing balance	425.69
Average balance	299.69
Interest expenses @ 12%	35.96

Commission's analysis

The Commission has computed the interest expense for FY 2009-10 as the sum of interest expense on existing loans in FY 2008-09 and interest expense on new loan corresponding to 70% of approved capitalization amount.

The computation of interest expense for existing loans is shown in the following table:

Table 218: Interest Expense on existing loans for FY 2009-10 computed by Commission

(*Rs. crores)*

Loan sub-heads	FY 2008-09	FY 2009-10
APDRP A (Rs. 38.70 crores)		
Opening	36.18	35.21
Repayment	0.97	0.97
Additions	0.00	0.00
Closing	35.21	34.24
Interest rate	9.00%	9.00%
Effective interest rate*	9.02%	9.02%
Interest expense	3.22	3.13
HDFC 2A (Rs. 50 crores)		
Loan opening	48.08	40.38

Loan sub-heads	FY 2008-09	FY 2009-10
Repayment	7.69	7.69
Loan closing	40.38	32.69
Interest rate	11.50%	11.50%
Effective interest rate*	11.49%	11.49%
Interest expense	5.08	4.20
HDFC 3A (Rs. 100 crores)		
Loan opening	100.00	100.00
Addition	0.00	0.00
Repayment@	0.00	16.67
Loan closing	100.00	83.33
Interest rate	11.00%	11.00%
Effective interest rate*	11.43%	11.43%
Interest expense	11.43	10.48
SBI (Rs. 350 crores)		
Loan opening	175.00	193.30
Addition	35.89	0.00
Repayment#	17.59	35.18
Loan closing	193.30	158.12
Interest rate	11.00%	11.00%
Effective interest rate*	12.16%	12.16%
Interest expense	22.39	21.36
LIC (Rs. 100 crores)		
Loan opening	52.14	50.84
Addition	0.00	0.00
Repayment$	1.30	5.20
Loan closing	50.84	45.64
Interest rate	11.00%	11.00%
Interest expense	6.27	5.87
Total interest on loans	**48.39**	**45.04**

** Computed by dividing actual interest paid by average of opening and closing loan balance for FY 2008-09. It has been used to compute interest expense for FY 2009-10*

@ The repayment amount is calculated considering the repayment tenure of 6 years (exclusive of moratorium period) verified from the loan sanction letter

 # Repayment of FY 2008-09 is only for two quarters. This figure has been multiplied by two to compute repayment for FY 2009-10 which is for four quarters. These facts have been verified from the loan sanction letter

$ The repayment of LIC loan has to be made in 4 quarterly instalments with each company paying the following amounts as quarterly instalment: TPL-G (APP) – Rs. 1.20 crores, TPL-Ahmedabad – Rs. 1.30 crores and TPL-Surat – Rs. 2.50 crores. The repayment of LIC loan started in last quarter of FY 2008-09. The repayment shown in for FY 2009-10 is for all 4 quarters.

Further, the Commission has computed interest expense on new loans by assuming loan amount as 70% of approved capitalization, interest rate of 12% and repayment tenure of 7 years inclusive of 1 year moratorium. The interest rate and repayment tenure adopted by the Commission are in line with the loan terms available to the petitioner currently from various lending institutions.

Table 219: Interest expense for FY 2009-10 on new loan computed by Commission

(*Rs. crores)*

Particulars	Amount
Opening balance	0.00
Loan addition	280.95
Repayment	0.00
Closing balance	280.95
Average balance	140.47
Interest rate	12.00%
Interest expense	**16.86**

Thus the Commission approves a total interest expense of Rs. 61.90 crores for FY 2009-10.

The summary of interest expense for FY 2009-10 is provided in the following table:

Table 220: Interest expense approved by Commission

(*Rs. crores)*

Particulars	MYT order	Estimated	Revised Approved for FY 2009-10
Interest expense	112.31	60.76	61.90

4.3.7.4 Depreciation

Petitioner's submission

In its petition, TPL-Ahmedabad has estimated depreciation using CERC rates, based on the revised GFA and capitalization for FY 2009-10. The depreciation has been calculated using straight line method.

Table 221: Depreciation for FY 2009-10 estimated by TPL-Ahmedabad

(*Rs. crores)*

Particular	MYT order	Estimated
Depreciation	82.75	75.55

Commission's analysis

The Commission computed the opening and closing GFA for FY 2009-10 based on the closing GFA of FY 2008-09 and capitalization for FY 2009-10.

Table 222: Opening and closing GFA for FY2009-10

(*Rs. crores)*

Gross Block as on 31.03.2009	Addition to Gross Block during 2009-10	Gross Block as on 31.03.2010
2054.49	401.35	2455.84

The petitioner has computed the depreciation for FY 2009-10 using CERC depreciation rates on different categories of assets like plant & machinery, buildings, cables, etc as permitted by GERC Terms & Conditions of Tariff Regulations, 2005. The Commission computed the actual depreciation expense for FY 2009-10 by employing the weighted average depreciation rate of 3.31% used by the petitioner. Thus the Commission has estimated the actual depreciation expense to be Rs. 74.71 crores.

Since capital expenditure has been considered as uncontrollable the Commission has treated depreciation as uncontrollable. Any variation in depreciation will be considered during the annual performance review for FY 2009-10. The final summary for depreciation expenses is presented below:

Table 223: Depreciation approved by Commission

(*Rs. crores)*

Particulars	MYT order	Estimated	Revised Approved for FY 2009-10
Depreciation	82.75	75.55	74.71

4.3.7.5 Interest on Working Capital

Petitioner's submission

In its petition, TPL-Ahmedabad has revised the estimate for interest on working capital and recomputed the same based on normative parameters:

Table 224: Interest on Working Capital estimated by petitioner

(*Rs. crores)*

Working capital components	MYT order	Estimated
O&M Expenses for 1 month	14.8	15.45
1% of GFA for maintenance spares	12.26	24.99
Receivables equivalent to 2 months	216.34	342.15
Normative Working Capital	243.34	382.58
Interest on Working Capital	**24.66**	**39.21**

Commission's analysis

The Commission is of the view that although on an overall basis, the interest on working capital is a controllable expense; some of its components are derived from uncontrollable factors. Hence the Commission has recomputed the interest on working capital on a normative basis using the revised approved values for FY 2009-10.

Table 225: Interest on Working Capital computed by Commission for FY 2009-10 on a normative basis

(*Rs. crores)*

Particulars	MYT order	Computed by Commission on a normative basis using revised approved values
O&M Expenses for 1 month	14.80	14.80

Particulars	MYT order	Computed by Commission on a normative basis using revised approved values
1% of GFA for maintenance spares	12.26	20.54
Receivables equivalent to 2 months	216.34	166.28*
Normative Working Capital	243.34	201.63
Interest on Working Capital	**24.66**	**20.67**

** Receivables of TPL-G (APP) have been subtracted*

The Commission accordingly approves the interest on working capital based on the above computation. Any variation in actual interest on working capital will be considered during the annual performance review for FY 2009-10. The summary of interest on working capital for FY 2009-10 is provided in the following table:

Table 226: Interest on working capital approved by Commission

(*Rs. crores)*

Particulars	MYT order	Estimated	Revised Approved for FY 2009-10
Interest on working capital	24.66	39.22	20.67

4.3.7.6 Interest on Security Deposit

Petitioner's submission

The Commission, in its MYT order, had approved the interest on security deposit for TPL-D as a whole, as 6% on the average balance of security deposit for the year. The expenses had been apportioned to Ahmedabad and Surat license areas based on the interest charges. TPL-Ahmedabad, in its petition, revised the estimate based on the opening balances and addition identified to each licensee area.

Table 227: Interest on Security Deposit estimated by petitioner

(*Rs. crores)*

Particulars	MYT order	Estimated
Interest on Security Deposit	9.72	7.82

Commission's analysis

The Commission has taken note of the methodology used by the petitioner to project interest on security deposit for FY 2009-10. The Commission treats interest on security deposit as controllable and hence has approved it at the value estimated by the petitioner.

The summary of interest on security deposit for FY 2009-10 is provided in the following table:

Table 228: Interest on interest on security deposit approved by Commission

(*Rs. crores)*

Particulars	MYT order	Estimated	Revised Approved for FY 2009-10
Interest on security deposit	9.72	7.82	7.82

4.3.7.7 Return on Equity

Petitioner's submission

TPL-Ahmedabad has revised the estimate on account of revision in closing equity for FY FY 2008-09 and revised capitalization for FY 2009-10. The equity addition for the year is considered at a normative proportion of 30% of the capital addition during the year. The return on equity computed as 14% on the average balance of equity for TPL-Ahmedabad is tabulated below:

Table 229: Return on Equity estimated by petitioner

(*Rs. crores)*

Return on Equity computation	MYT order	Estimated
Opening equity	864.18	846.05
Equity addition during the year	139.51	120.41
Equity at end of the year	1,003.69	966.45
Average equity	933.94	906.25
Return on Equity @ 14%	**130.55**	**126.88**

Commission's analysis

The Commission has computed return on equity on a normative basis using the opening equity for FY 2009-10 (equal to closing equity of FY 2008-09 which is already approved) and equity addition for FY 2009-10 (at 30% of approved capitalization).

Table 230: Return on Equity for FY 2009-10 as calculated by Commission

(*Rs. crores)*

Particulars	Computed by Commission for FY 2009-10
Opening equity	850.08
Equity addition during the year	120.41
Closing equity	970.49
Return on Equity @ 14%	**127.44**

Since capital expenditure has been considered as uncontrollable the Commission has treated return on equity as uncontrollable. Any variation in return on equity will be considered during the annual performance review for FY 2009-10.

The summary of return on equity for FY 2009-10 is provided in the following table:

Table 231: Return on equity approved by Commission

(*Rs. crores)*

Particulars	MYT order	Estimated	Revised Approved for FY 2009-10
Return on equity	130.55	126.88	127.44

4.3.7.8 Income Tax

Petitioner's submission

TPL-Ahmedabad in its petition revised the tax calculation by considering RoE as the post tax return (PAT) and grossing it up to find the PBT:

Table 232: Income Tax for FY 2009-10 estimated by petitioner

(*Rs. crores)*

Income Tax computation	Estimated
ARR including non-tariff income	2,105.72
Total expense	1,913.51
PBT	192.21
Income tax	65.33
PAT	126.88

Commission's analysis

The Commission is of the view that the income tax should be computed on the return on equity and not after grossing up. The Commission is therefore of the opinion that the computation as submitted by the petitioner is not permissible under the GERC Terms & Conditions of Tariff.

Based on the above observation the Commission has computed the amount of tax by applying the tax rate of 33.99% on the approved return on equity.

Table 233: Computation of Income Tax by Commission

(*Rs. crores)*

Income Tax computation	Revised Approved for FY 2009-10
Return on equity	127.44
Tax (@ 33.99%)	43.32

Based on the above computation the Commission now approves income tax for FY 2009-10 as provided in the table below:

Table 234: Income tax approved by Commission

(*Rs. crores)*

Particulars	MYT order	Estimated	Revised Approved for FY 2009-10
Income tax	44.37	65.33	43.32

4.3.7.9 Provision for bad and doubtful debts

Petitioner's submission

TPL-Ahmedabad, in its petition, has estimated provision for bad debts at MYT order approved value i.e. Rs. 2.05 crores.

Commission's analysis

The Commission has treated provision for bad debts as controllable. Hence the Commission approves the MYT order approved value for FY 2009-10. Any variation in provision for bad debts will be considered during the annual performance review for FY 2009-10. The summary of provision for bad debts for FY 2009-10 is provided in the following table:

Table 235: Provision for bad debts approved by Commission

(*Rs. crores)*

Particulars	MYT order	Estimated	Revised Approved for FY 2009-10
Provision for bad debts	2.05	2.05	2.05

4.3.7.10 Contingency Reserves

Petitioner's submission

TPL-Ahmedabad has kept the contingency reserve unchanged with respect to MYT order approved value, i.e. Rs. 0.6 crores.

Commission's analysis

The Commission treats contingency reserve as controllable and approves it at MYT order approved value. Any variation in contingency reserve will be considered during the annual performance review for FY 2009-10. The summary of contingency reserve for FY 2009-10 is provided in the following table:

Table 236: Contingency reserve approved by Commission

(*Rs. crores)*

Particulars	MYT order	Estimated	Revised Approved for FY 2009-10
Contingency reserve	0.60	0.60	0.60

The petitioner will have to invest the approved contingency reserve amount in securities authorized under the Indian Trusts Act, 1882 within a period of six months of the close of FY 2009-10. Towards this, the petitioner will be required to submit proofs of investments during the APR of FY 2009-10. The Commission will allow only that amount during the APR exercise which is supported by investment proofs.

4.3.7.11 Non tariff income

Petitioner's submission

TPL-Ahmedabad, in its petition had projected non tariff income for 2009-10 at Rs. 52.84 based on the revised non tariff income for FY 2008-09 as against the MYT order approved value of Rs. 80.44 crores.

Commission's analysis

The Commission has projected the non tariff income for FY 2009-10 based on approved non tariff income in FY 2008-09 (Rs. 54.08 crores) and growth in approved sales of FY 2009-10 (4995.82 MUs) over FY 2008-09 (4737.35 MUs). Thus the Commission has arrived at a figure of Rs. 57.03 crores as the projected non tariff income for FY 2009-10.

Table 237: Non tariff income approved by Commission

(*Rs. crores)*

Particulars	MYT order	Estimated	Revised Approved for FY 2009-10
Non tariff income	80.44	52.84	57.03

4.3.8 Summary of ARR of TPL-Ahmedabad for FY 2009-10

Table 238: Summary of TPL-Ahmedabad ARR for FY 2009-10

(*Rs. crores)*

Particulars	MYT Order	Estimated	Revised Approved for FY 2009-10
Power Purchase Costs			
TPL-G (APP)	913.43	582.43	895.33
SUGEN	622.22	696.22	359.69
GUVNL	42.78	245.93	134.25
Wind Energy	112.32	18.21	96.90
Total Power Purchase Costs	**1690.75**	**1542.80**	**1486.17**
Fixed Costs			
Employee expenses	66.38	74.12	66.38
R&M expenses	77.60	77.60	77.60
A&G expenses	33.65	33.65	33.65
Depreciation	82.75	75.55	74.71
Interest on loans	112.31	60.76	61.90
Interest on security deposit	9.72	7.82	7.82
Interest on working capital	24.66	39.22	20.87
Return on equity	130.55	126.88	127.44
Provision for bad debts	2.05	2.05	2.05
Contingency reserve	0.60	0.60	0.60
Income tax	44.37	65.33	43.32
Total Fixed Costs	**584.64**	**563.57**	**516.33**
Gross ARR	**2275.39**	**2106.37**	**2002.50**
Non-tariff income	80.44	52.84	57.03
Net ARR	**2194.95**	**2053.53**	**1945.47**

4.4 Surat Distribution

4.4.1 Sales

Petitioner's submission

TPL-Surat has forecasted sales for FY 2009-10 by applying historical CAGR on sales estimated for FY 2008-09. The category-wise sales as estimated are shown below:

Table 239: Sales estimated by TPL-Surat for FY 2009-10

(MUs)

Categories	MYT order	Estimated
Residential	597	549.05
Commercial	477	443.22
LTP	1812	1448.86
LTMD	249	109.18
HT	248	193.37
Others	28	27.03
DoE	0	0
Total	**3411**	**2770.71**

TPL-Surat has on an overall basis projected reduction in sales due to perceived economic slowdown. The reasons for difference in sales across various categories as explained by TPL-Surat are provided below:

Residential

The residential category in Surat mainly consists of huge number of immigrants employed by various diamond and textile industries. The trend in consumption in this category is mainly contributed by the employment opportunity in the city. With the current economic slowdown these immigrants are moving out of the city and the sale is likely to be reduced. TPL-Ahmedabad has assumed a growth rate which is equal to the historical 3-years CAGR.

Commercial

TPL-Surat submitted that about 50% of the consumption relates to the load from electrical appliances like lights, fans etc. of the industrial LTP services and the remaining 50% comes from the pure commercial category consisting of shops, showrooms, offices etc.

Due to the slowdown in the real estate segment and limited availability of land, growth in this category has further reduced. TPL-Surat has projected sales by applying the recent growth observed, during 3rd quarter of FY 2008-09 over previous year i.e. 3.63 %, as annual growth rate to project the sales for FY 2009-10.

Low Tension Power

The consumption in this category is mainly contributed by textile and diamond industry which has suffered a drastic slowdown due to the current economic conditions. TPL-Surat has carried out an end use survey to capture the realistic growth rates for making the forecasts for FY 2009-10 instead of using the historical trend methods.

Low Tension Maximum Demand

The consumption in this category is mainly contributed by diamond industries and they have suffered a drastic slowdown due to the current economic conditions. Some of the prominent diamond and textile industries have even scaled down their operations by more than 50%. TPL-Surat has carried out an end use survey to capture the realistic growth rates for making the forecasts for FY 2009-10 instead of using the historical trend methods.

High Tension Maximum Demand

The consumption in this category is mainly attributed to the textile and diamond Industries in the Surat license area. However due to the high valuation of land and stringent pollution norms issued by the Government, these industries are moving out of the city. The recession has also hit the consumption in this category as the diamond industries are scaling down their operation in a large way. TPL-Surat has carried out an end use survey to capture the realistic growth rates for making the forecasts for FY 2009-10 instead of using the historical trend methods.

Others

This category includes GLP, Agriculture and Temporary. TPL-Surat has relied on the end use survey and number of application received in FY 2008-09 for the projections for FY 2009-10.

Commission's analysis

The Commission asked TPL-Surat to submit actual sales achieved for FY 2009-10. TPL-Surat through its letter dated 6th October 2009, submitted actual sales data for the first 5 months of FY 2009-10. The Commission compared this with the actual sales for corresponding months of FY 2008-09:

Table 240: Comparison of 5 months actual sales (Apr - Aug) of FY 2008-09 and FY 2009-10

(MUs)

Months	2008-09 5 months Actual	2009-10 5 months Actual	Difference FY 2009-10 over FY 2008-09
Apr	262.79	260.31	-2.48
May	260.93	255.15	-5.78
Jun	261.80	248.67	-13.13
Jul	258.75	265.80	7.05
Aug	269.00	271.79	2.79
Total	**1,313.27**	**1,301.72**	**-11.56**

Thus it is observed that the sales in FY 2009-10 are almost same as that in FY 2008-09. The Commission also analyzed various economic growth forecasts for FY 2009-10. The latest RBI report now forecasts a growth rate of 6.5% for FY 2009-10. The YoY GDP growth rate measured on a quarterly basis also suggests that the economy has indicated an upward trend in the first quarter of FY 2009-10.

In view of above, as a conservative estimate, the Commission has employed the average growth rate in sales achieved in the first 5 months of FY 2009-10 over the corresponding months of FY 2008-09 to project sales for remaining months of FY 2009-10. The 5 month growth rate has been applied on actual sales of last 7 months of FY 2008-09 to project sales for the last 7 months of FY 2009-10.

Table 241: Computation of consumer category wise growth rates

Category	Total Sales for Apr to Aug 2008-09 *(MUs)*	Total Sales for Apr to Aug 2009-10 *(MUs)*	Growth rate (%)
Residential	254.94	257.91	1.2
Commercial	195.50	201.21	2.9

Category	Total Sales for Apr to Aug 2008-09 *(MUs)*	Total Sales for Apr to Aug 2009-10 *(MUs)*	Growth rate (%)
LTP	669.38	662.98	-1.0
LTMD	84.77	68.73	-18.9
HTMD-I	78.38	79.38	1.3
HTMD-II	17.25	18.44	6.9
AGP	0.24	0.31	30.4
General	9.10	9.13	0.3
TS	1.69	1.40	-17.3
DOE	2.04	2.23	9.1

Thus the sales for FY 2009-10 finally approved by the Commission are shown below:

Table 242: TPL-Surat category wise sales approved by Commission for FY 2009-10

(MUs)

Category	MYT order	TPL-Surat estimate	Revised Approved for FY 2009-10
Residential	597.00	549.05	544.04
Commercial	477.00	443.22	436.27
LTP	1812.00	1448.86	1515.99
LTMD	249.00	109.18	133.33
HTMD-I	211.00	158.53	182.81
HTMD-II	37.00	34.84	42.49
AGP	0.00	0.57	0.86
General	24.00	22.57	21.42
TS	4.00	3.89	3.11
DOE	0.00	0.00	4.87
Total	**3411.00**	**2770.71**	**2885.18**

It is to be noted that the sales projected by the Commission for FY 2009-10 is still lower than the MYT order figure. Thus the methodology adopted by the Commission has taken into consideration the reduction in sales due to economic slowdown in FY 2008-09.

4.4.1.1 Number of installations

Petitioner's submission

In order to project the number of installations in the licensee area, TPL-Surat has contacted the different categories of consumers such as builders, developers and industrialists, to track their future plan. TPL-Surat has considered the factors like the current market scenario, limited vacant space available in the license area, delay in upcoming projects and industrial recession in the supply areas. The approved and revised estimate for the number of installations for FY 2009-10 is tabulated below.

Table 243: No. of installations estimated by petitioner

Category	MYT order	Revised estimate
Residential	393879	383514
Commercial	164476	164626
LTP	61214	58796
LTMD	1232	1080
HTMD	184	179
Others	2448	2647
Total	**623433**	**610,842**

Commission's analysis

The Commission has taken note of the analysis used by TPL-Surat to project the number of installations for FY 2009-10. The Commission approves the number of installations as estimated by TPL-Surat.

The Commission's analysis on number of installations is summarized as shown below:

Table 244:No. of installations approved by Commission

Category	MYT order	Revised estimate	Revised Approved for FY 2009-10
Residential	393879	383514	383514
Commercial	164476	164626	164626
LTP	61214	58796	58796
LTMD	1232	1080	1080

Category	MYT order	Revised estimate	Revised Approved for FY 2009-10
HTMD	184	179	179
Others	2448	2647	2647
Total	**623433**	**610,842**	**610,842**

4.4.2 Revenue from sale of power

TPL-Surat has estimated revenue by applying existing tariff on estimated sales figures. The Commission has computed the revenue by applying existing tariff on the now approved sales figures.

Table 245: Sales revenues approved by Commission for FY 2009-10

(*Rs. crores)*

Category	MYT order	TPL-Surat estimate	Revised Approved for FY 2009-10 at existing tariffs
Residential	189.85	175.99	174.21
Commercial	206.54	198.13	194.95
LTP	659.57	534.31	558.34
LTMD	100.35	47.11	56.40
HTMD-I	87.14	65.15	75.24
HTMD-II	15.69	15.95	18.62
AGP	0.00	0.04	0.05
General	7.61	7.15	6.79
TS	1.88	1.83	1.46
DOE	0.00	0.00	4.87
Total	**1271.27**	**1045.67**	**1090.94**

4.4.3 Distribution loss

Petitioner's submission

TPL-Surat has estimated the distribution loss at 6.00% which is same as that approved in the MYT order.

Commission's analysis

The Commission has observed that TPL-Surat has been able to achieve a loss level of 5.51% in FY 2008-09. Since the Commission had approved the same loss level for the entire control period in the MYT order, the Commission now approves the loss of 5.51% for FY 2009-10.

Table 246: Distribution loss for TPL-Surat approved by Commission for 2009-10

Particulars	MYT order		Approved	
	2008-09	2009-10	2008-09	2009-10
Distribution loss %	6.00%	6.00%	5.51%	5.51%

The summary for distribution loss is shown below:

Table 247: Distribution loss approved by Commission

Particulars	MYT order	Revised estimate	Revised Approved for FY 2009-10
Distribution loss %	6.00%	6.00%	5.51%

4.4.4 Energy Requirement

The Commission has computed the energy requirement based on the revised approved sales figure and distribution loss and revised estimated transmission loss. The transmission loss has been estimated based on the wind energy transmission loss of 1.99% estimated by the Commission during APR of FY 2008-09 and transmission loss of 1.61% for energy from SUGEN.

Table 248: Energy requirement FY 2009-10 for TPL-Surat computed by the Commission

(MUs)

Particulars	MYT order	Revised estimate	Revised Approved for FY 2009-10
Energy Sales	3,410.90	2,770.71	2885.18
Distribution loss (%)	6.00%	6.00%	5.51%
Distribution loss	217.72	176.85	168.24
Energy input at distribution level	3,628.62	2,947.57	3053.43
Transmission loss	60	25.48	42.29
Energy requirement	3,688.62	2,974.73	3095.72

4.4.5 Energy Availability

The Commission has noted that the energy sources of TPL-G (SUGEN), GUVNL/other sources and Wind energy are available for TPL-Ahmedabad and TPL-Surat. The total availability from SUGEN has been accepted at 3621 MU as estimated by TPL-Ahmedabad and divided among TPL-Ahmedabad and TPL-Surat in the ratio 1:2 in line with the PPAs signed by TPL-G (SUGEN) with Ahmedabad Electric Company (AEC) and Surat Electric Company (SEC). The energy from wind has been computed as 5.56% (the RPO obligation approved in the MYT order) of total energy requirement of Surat respectively. The remaining requirement is expected to be sourced from GUVNL/other sources.

Using the above analysis, the Commission has calculated the energy availability from various sources as shown below:

Table 249: Energy availability calculations for TPL-Surat

(MUs)

Sources	Units available
TPL-G (SUGEN)	2414
GUVNL/other sources	510
Wind energy	172
Total	3096

4.4.6 Power purchase cost

The power purchase rates from various sources approved by Commission in its MYT order and the rates now estimated by TPL-Surat are shown below:

Table 250: Power purchase rates estimated by petitioner

(*Rs./kWh)*

Sources	MYT order	Revised estimate
TPL-G (APP)	-	2.62
TPL-G (SUGEN)	2.98	2.98
GUVNL/other sources	3.10	3.10
Wind energy	3.51	3.37

The Commission has recomputed the rates as follows. The rate of power from SUGEN has been maintained at Rs. 2.98 per kWh which was approved in the MYT order. This rate will be reviewed next year based on CERC's tariff order on SUGEN. The rate for GUVNL has been maintained at the value approved in the MYT order (Rs. 3.10 per kWh). The rate for wind has been considered at Rs. 3.37/kWh which was the actual rate for FY 2008-09.

Based on the above analysis the Commission has computed the power purchase cost from various sources as indicated in the table below:

Table 251: Power purchase cost for TPL-Surat approved by Commission

Sources	MYT order	Revised Approved for FY 2009-10
TPL-G (SUGEN)		
Quantity in MUs	3484.00	2414.00
Rate in Rs./kWh	2.98	2.98
Cost in Rs. crores	1038.23	719.37
GUVNL/Other sources		
Quantity in MUs	0.00	509.60
Rate in Rs./kWh	3.10	3.10
Cost in Rs. crores	0.00	157.97
Wind energy		
Quantity in MUs	205.00	172.12
Rate in Rs./kWh	3.51	3.37
Cost in Rs. crores	71.96	58.01
Total		
Quantity in MUs	**3689.00**	**3095.72**
Rate in Rs./kWh	**3.01**	**3.02**
Cost in Rs. crores	**1110.19**	**935.35**

4.4.7 Fixed Costs

4.4.7.1 Operations & Maintenance expenses

TPL-Surat, in its petition for FY 2009-10, has estimated the following O&M expenses:

Table 252: O&M expenses estimated by TPL-Surat for FY 2009-10

(*Rs. crores)*

O&M expenses	MYT order	Estimated
Employee Expenses	35.7	36.86
R&M Expenses	28.1	28.10
A&G Expenses	26.12	26.12
O&M Expenses	**89.92**	**91.09**

Employee expense

Petitioner's submission

TPL-Surat has estimated employee expenses higher than that approved in the MYT order. It has reasoned that as per prevailing market conditions, the inflationary increase applicable for employee wages and salaries is well above that of R&M expenses and A&G expenses. As an organization committed to being at the forefront of efficiency and superior service, TPL-Surat incurs regular expenditure as per market standards to retain and motivate the best talent. Hence it has applied an 11% growth rate as opposed to the 6% growth rate specified in the MYT trajectory.

Commission's analysis

The Commission treats employee expense as controllable and approves it at the MYT order approved value. Any variation in actual expense will be considered during the annual performance review for FY 2009-10. The summary of employee expense for FY 2009-10 is provided in the following table:

Table 253: Employee expenses approved by Commission

(*Rs. crores)*

Particulars	MYT order	Estimated	Revised Approved for FY 2009-10
Employee Expenses	35.70	36.86	35.70

Repairs & Maintenance (R&M) expense

Petitioner's submission

TPL-Surat has estimated R&M expense at the MYT order approved value.

Commission's analysis

The Commission treats repairs & maintenance expense as controllable and approves it at the MYT order approved value. Any variation in actual expense will be considered during the annual performance review for FY 2009-10. The summary of repairs & maintenance expense for FY 2009-10 is provided in the following table:

Table 254: R&M expenses approved by Commission

(*Rs. crores)*

Particulars	MYT order	Estimated	Revised Approved for FY 2009-10
R&M Expenses	28.10	28.10	28.10

Administration & General (A&G) expense

Petitioner's submission

TPL-Surat has stated that A&G expenses include rents, rates and taxes, legal expenses, professional fees, insurance, conveyance expenses, training expenses, printing and stationery etc. It has asked for a 6% annual escalation in line with the MYT order.

Commission's analysis

The Commission treats A&G expense as controllable and approves it at the MYT order approved value. Any variation in actual expense will be considered during the performance review process for FY 2009-10. The summary of A&G expense for FY 2009-10 is provided in the following table:

Table 255: A&G expenses approved by Commission

(*Rs. crores)*

Particulars	MYT order	Estimated	Revised Approved for FY 2009-10
A&G Expenses	26.12	26.12	26.12

4.4.7.2 Capital Expenditure, Capitalization & Sources of Financing

Petitioner's submission

TPL-Surat submitted that it has reassessed the capital expenditure requirement for FY 2009-10 based on the capital expenditure incurred during the first nine months of FY 2008-09. The estimates are shown in the following table:

Table 256: Capital expenditure estimated by petitioner

(*Rs. crores)*

Particulars	MYT order	Revised estimate
EHV	14.58	13.34
HT Network	43.30	26.79
LT Network	17.21	12.27
Metering	19.97	15.03
Customer Care & IT Initiatives	6.19	18.18
220 kV line	0.00	61.54
Total	**101.25**	**147.15**

The main reasons for difference in investments as provided by TPL-Surat are discussed below:

1. Investment in EHV Network

(a) TPL-Surat has deferred its plan to commission an additional power transformer due to the reduction in demand. Thus, the investment related to the same i.e. commissioning of additional Power transformer, new 11kV VCB panels, capacitor banks and civil cost for trench has been accordingly revised in the capital expenditure for FY 2009-10.

(b) TPL-Surat has deferred the shifting of power transformer from FY 2008-09 to FY 2009-10. The cost has been revised based on current market rates.

(c) The cost for testing and measuring equipment has been revised as per the current market rates for FY 2009-10.

(d) The additional expenditure for components like auto changeover switch and relays and upgradation of existing transducers has been included in the revised estimate for "Automation".

(e) The purchase of forecasting software deferred from FY 2008-09 to FY 2009-10 and their cost has been revised in line with latest feedback from the market.

(f) TPL-Surat has recently been experiencing frequent tripping in its switchyards due to metallic yarn falling on the live parts. It has affected system reliability considerably. In order to maintain reliability of the system, it has proposed to provide system to cover switch yard with nets.

Investment in HT Network

(a) Considering effect of lower load growth, the capital expenditure proposed in HT network strengthening & development, distribution transformer, 11 kV switchgears, substations & other has been revised at lower cost based on re-assessment.

(b) The capital expenditure for automation has been revised based on the latest feedback from the market. Further, the expenditure that was planned in FY 2009-10 has been largely shifted to FY 2010-11.

(c) The capital expenditure for LT panel and audit meters has been revised due to higher per unit cost for FY 2009-10.

Investment in LT Network: Reduction in investment is mainly due to reduction in load growth

Investment in Metering: Reduction in investment is mainly due to reduction in meter quantity.

Investment in Customer Care & IT:

(a) Information Technology – The purchase of SAP server, part of SAP integration & licensing cost for FY 2008-09 has been deferred to FY 2009-10 and FY 2010-11. This is as per the revised schedule of the implementation. There is slight reduction in the prices of hardware compared to the MYT.

(b) Geographical Information System - GIS project deferred from FY 2008-09 is to be carried out in FY 2009-10. Further, an additional cost on account of Quality Assurance /Quality Control, Hardware, Additional customization in software, Integration with various systems etc is proposed to be incurred in FY 2009-10.

(c) Customer Care – The main expenditure under this head are customer interaction centre and civil cost.

(d) Customer interaction Centre (CIC) – The balance work related to CIC at A-station and the complete setting up of CIC at B-station which has been deferred from FY 2008-09 is to be carried out in FY 2009-10.

(e) (Civil - In order to meet required administrative ease and customer satisfaction, some changes will be carried out in existing structure at A-station. This activity was originally planned in FY 2008-09 but will be taken up in FY 2009-10 and FY 2010-11.

(f) Security System – TPL-Surat proposes to install security system for better administrative purposes in all the receiving stations in FY 2009-10.

Investment in 220 kV network: The investment in laying 220 kV network from SUGEN to Surat license area which was deferred from FY 2008-09 to FY 2009-10.

In summary, although most of the capital expenditure heads have shown reduced capital expenditure, the overall capital expenditure has primarily increased due to 220 kV network line work between SUGEN and Surat license area.

TPL-Surat has further proposed a normative debt equity ratio of 70:30 for funding the capital expenditure as per regulations. Break up of sources of fund between debt and equity is presented in the table below.

Table 257: Capitalization and sources of financing estimated by petitioner

(*Rs. crores)*

Particulars	Approved *	Estimated
Capital expenditure	101.25	147.15
Capitalisation (net of SLC)	-	201.62
Debt %	-	70%
Debt	-	141.13
Equity	-	60.49

** Capitalization and sources of financing were not approved in the MYT order*

Commission's analysis

The Commission has observed that if the investment in 220 kV network for SUGEN is excluded, the estimated capital expenditure is in line with that approved in the MYT order. The Commission has performed a preliminary review of the proposed projects and found them to be appropriate. Hence the Commission approves the capital expenditure as proposed by the petitioner.

With regards to capitalization, the Commission had directed the petitioner to submit details of present status of ongoing projects, proposed capital expenditure and its cost - benefit analysis, timelines which the petitioner has failed to submit. In the absence of the data on project timelines, it is difficult for the Commission to take a view on the capitalization for FY 2009-10. Hence for the time being, the Commission approves the capitalization proposed by the Petitioner. Since the Commission has treated capital expenditure as uncontrollable, any deviation in the actual expenditure and capitalization will be reviewed during APR of FY 2009-10.

The summary of the Commission's analysis is provided in the following table:

Table 258: Capital expenditure and sources of financing approved by Commission

(*Rs. crores)*

Particulars	MYT order	Estimated	Revised Approved for FY 2009-10
Capital expenditure	101.25	147.15	147.15
Capitalization	-	201.62	201.62
Debt %	-	70%	70%
Debt	-	141.13	141.13
Equity	-	60.49	60.49

4.4.7.3 Interest expenses

Petitioner's submission

In the MYT order, the Commission had approved the interest expenses for the entire distribution business (Ahmedabad & Surat combined) based on the actual opening balance of the loans for FY 2008-09 and apportioned between Ahmedabad and Surat license areas in proportion to approved capital expenditure for the respective year. In its petition for FY 2008-09, TPL-Surat identified loans for each area and reallocated the interest expenses on the existing loans on the basis of opening balances of the loans for FY 2008-09 for each area. On the basis of this TPL-Surat has now worked out the interest on existing loans for FY 2009-10 as follows:

Table 259: Interest Expense on existing loans for FY 2009-10 estimated by petitioner

(*Rs. crores)*

Existing loans Ahmedabad	FY 2009-10
APDRP	
Opening balance	24.40
Interest rate	9%
Interest expense	2.17
IDFC-I	
Opening balance	49.99
Interest rate	8.00%
Interest expense	3.43
HDFC-II	
Opening balance	40.39

Existing loans Ahmedabad	FY 2009-10
Interest rate	11.50%
Interest expense	4.20
LIC	
Opening balance	97.50
Interest rate	12.00%
Interest expense	10.23
IDFC II	
Opening balance	195.45
Interest rate	12.00%
Interest expense	20.67
Total	
Opening balance	407.73
Interest rate	8.00% to 12.00%
Interest expense	40.70

Further, TPL-Surat has estimated interest expenses on new loans based on normative parameters considering 70% of capitalization as debt requirement and an interest rate of 12%.

Table 260: Interest Expense on new loans for FY 2009-10 estimated by petitioner

(*Rs. crores)*

New loan sub-heads	Estimated
Capital expenditure during the year	207.78
Capitalization during the year	211.45
Less SLC addition	9.83
Normative Debt @ 70%	141.13
Opening balance	79.52
Additions	141.13
Closing balance	207.40
Average balance	143.46
Interest expenses @ 12%	17.22

Commission's analysis

The Commission has computed the interest expense for FY 2009-10 as the sum of interest expense on existing loans in FY 2008-09 and interest expense on new loan corresponding to 70% of approved capitalization amount.

The computation of interest expense for existing loans is shown in the following table:

Table 261: Interest Expense on existing loans for FY 2009-10 computed by Commission

(*Rs. crores)*

Loan sub-heads	FY 2008-09	FY 2009-10
APDRP Surat (Rs. 26.81 crores)		
Opening	25.07	24.40
Repayment	0.67	0.67
Additions	0	0
Closing	24.40	23.73
Interest rate	9.00%	9.00%
Effective interest rate*	9.00%	9.00%
Interest expense	2.23	2.17
HDFC 2 Surat (Rs. 50 crores)		
Loan opening	48.08	40.39
Additions	0	0
Repayment	7.69	7.69
Loan closing	40.39	32.70
Interest rate	11.50%	11.50%
Effective interest rate*	7.55%	7.55%
Interest exp	3.34	2.76
LIC – (Rs. 100 crores)		
Loan opening	100	97.50
Repayment[$]	2.5	10
Loan closing	97.5	87.50
Interest rate	11.00%	11.00%
Effective interest rate*	11.12%	11.12%
Interest exp	10.98	10.29
IDFC-1 Surat (Rs. 100 crores)		
Loan opening	64.28	49.99

Loan sub-heads	FY 2008-09	FY 2009-10
Repayment	14.29	14.29
Loan closing	49.99	35.70
Interest rate	8.23%	8.23%
Effective interest rate*	8.05%	8.05%
Interest exp	4.60	3.45
IDFC-2 Surat (Rs. 250 crores)		
Loan opening	200	250
Additions	50	0
Repayment#	0	25
Loan closing	250	225
Interest rate	11.00%	11.00%
Effective interest rate*	10.73%	10.73%
Interest exp	24.15	25.49
IDBI Surat (Rs. 200 crores)		
Loan opening	0	20.96
Additions	20.96	0.00
Repayment@	0	3.49
Loan closing	20.96	17.47
Interest rate	11.25%	11.25%
Effective interest rate*	13.36%	13.36%
Interest exp	1.40	2.57
Total interest on loans	**46.70**	**46.72**

** Computed by dividing actual interest paid by average of opening and closing loan balance for FY 2008-09. It has been used to compute interest expense for FY 2009-10*

$ The repayment of LIC loan has to be made in 4 quarterly instalments with each company paying the following amounts as quarterly instalment: TPL-G (APP) – Rs. 1.20 crores, TPL-Ahmedabad – Rs. 1.30 crores and TPL-Surat – Rs. 2.50 crores. The repayment of LIC loan started in last quarter of FY 2008-09. The repayment shown in for FY 2009-10 is for all 4 quarters.

 # Repayment each year is 10% of the loan amount. This fact has been verified from the loan sanction letter

@ The repayment amount is calculated considering the repayment tenure of 6 years (exclusive of moratorium period) verified from the loan sanction letter

Further, the Commission has computed interest expense on new loans by assuming loan amount as 70% of approved capitalization, interest rate of 12% and repayment tenure of 7 years inclusive of 1 year moratorium. The interest rate and repayment tenure adopted by the Commission are in line with the loan terms available to the petitioner currently from various lending institutions.

Table 262: Interest expense for FY 2009-10 on new loan computed by Commission

(*Rs. crores)*

Particulars	Amount
Opening balance	0.00
Loan addition	141.13
Repayment	0.00
Closing balance	141.13
Average balance	70.57
Interest rate	12.00%
Interest expense	**8.47**

Thus the Commission approves a total interest expense of Rs. 55.19 crores for FY 2009-10.

The summary of interest expense for FY 2009-10 is provided in the following table:

Table 263: Interest expense approved by Commission

(*Rs. crores)*

Particulars	MYT order	Estimated	Revised Approved for FY 2009-10
Interest expense	25.38	57.92	55.19

4.4.7.4 Depreciation

Petitioner's submission

In its petition, TPL-Surat has estimated depreciation using CERC rates, based on the revised GFA and capitalization for FY 2009-10. The depreciation has been calculated using straight line method.

Table 264: Depreciation for FY 2009-10 estimated by TPL-Surat

(*Rs. crores)*

Particular	MYT order	Estimated
Depreciation	43.42	39.78

Commission's analysis

The Commission computed the opening and closing GFA for FY 2009-10 based on the closing GFA of FY 2008-09 and capitalization for FY 2009-10.

Table 265: Opening and closing GFA for FY2009-10

(*Rs. crores)*

Gross Block as on 31.03.2009	Addition to Gross Block during 2009-10	Gross Block as on 31.03.2010
1141.54	201.62	1343.16

The petitioner has computed the depreciation for FY 2009-10 using CERC depreciation rates on different categories of assets like plant & machinery, buildings, cables, etc as permitted by GERC Terms & Conditions of Tariff Regulations, 2005. The Commission computed the actual depreciation expense for FY 2009-10 by employing the weighted average depreciation rate of 3.13% used by the petitioner. Thus the Commission has estimated the actual depreciation expense to be Rs. 38.91 crores.

Since capital expenditure has been considered as uncontrollable the Commission has treated depreciation as uncontrollable. Any variation in depreciation will be considered during the annual performance review for FY 2009-10. The final summary for depreciation expenses is presented below:

Table 266: Depreciation approved by Commission

(*Rs. crores)*

Particulars	MYT order	Estimated	Revised Approved for FY 2009-10
Depreciation	43.42	39.78	38.91

4.4.7.5 Interest on Working Capital

Petitioner's submission

In its petition, TPL-Surat has revised the estimate for interest on working capital and recomputed the same based on normative parameters:

Table 267: Interest on Working Capital for FY 2009-10 estimated by petitioner

(*Rs. crores)*

Working capital components	MYT order	Estimated
O&M Expenses for 1 month	7.49	7.59
1% of GFA for maintenance spares	3.87	13.76
Receivables equivalent to 2 months	231.96	193.27
Normative Working Capital	243.32	214.62
Interest on Working Capital	**24.94**	**22.00**

Commission's analysis

The Commission is of the view that although on an overall basis, the interest on working capital is a controllable expense; some of its components are derived from uncontrollable factors. Hence the Commission has recomputed the interest on working capital on a normative basis using the revised approved values for FY 2009-10.

Table 268: Interest on Working Capital computed by Commission for FY 2009-10 on a normative basis

(*Rs. crores)*

Particulars	MYT order	Computed by Commission on a normative basis using revised approved values
O&M Expenses for 1 month	7.49	7.49
1% of GFA for maintenance spares	3.87	11.42
Receivables equivalent to 2 months	231.96	181.59
Normative Working Capital	243.32	200.50
Interest on Working Capital	**24.94**	**20.55**

The Commission accordingly approves the interest on working capital based on the above computation. Any variation in actual interest on working capital will be considered during the annual performance review for FY 2009-10. The summary of interest on working capital for FY 2009-10 is provided in the following table:

Table 269: Interest on working capital approved by Commission

(*Rs. crores)*

Particulars	MYT order	Estimated	Revised Approved for FY 2009-10
Interest on working capital	24.94	22.00	20.55

4.4.7.6 Interest on Security Deposit

Petitioner's submission

The Commission, in its MYT order, had approved the interest on security deposit for TPL-D as a whole, as 6% on the average balance of security deposit for the year. The expenses had been apportioned to Ahmedabad and Surat license areas based on the interest charges. TPL-Surat, in its petition, revised the estimate based on the opening balances and addition identified to each licensee area.

Table 270: Interest on Security Deposit for FY 2009-10 estimated by petitioner

(*Rs. crores)*

Particulars	MYT order	Estimated
Interest on Security Deposit	6.47	8.22

Commission's analysis

The Commission has taken note of the methodology used by the petitioner to project interest on security deposit for FY 2009-10. The Commission treats interest on security deposit as controllable and hence has approved it at the value estimated by the petitioner.

The summary of interest on security deposit for FY 2009-10 is provided in the following table:

Table 271: Interest on interest on security deposit approved by Commission

(*Rs. crores)*

Particulars	MYT order	Estimated	Revised Approved for FY 2009-10
Interest on security deposit	6.47	8.22	8.22

4.4.7.7 Return on Equity

Petitioner's submission

TPL-Surat has revised the estimate on account of revision in closing equity for FY 2008-09 and revised capitalization for FY 2009-10. The equity addition for the year is considered at a normative proportion of 30% of the capital addition during the year. The return on equity computed as 14% on the average balance of equity for TPL-Surat is tabulated below:

Table 272: Return on Equity for FY 2009-10 estimated by petitioner

(*Rs. crores)*

Return on Equity computation	MYT order	Estimated
Opening equity	528.78	481.44
Equity addition during the year	101.22	60.49
Equity at end of the year	630.00	541.93
Average equity	579.39	511.69
Return on Equity @ 14%	**75.86**	**71.64**

Commission's analysis

The Commission has computed return on equity on a normative basis using the opening equity for FY 2009-10 (equal to closing equity of FY 2008-09 which is already approved) and equity addition for FY 2009-10 (at 30% of approved capitalization).

Table 273: Return on Equity for FY 2009-10 calculated by Commission

(*Rs. crores)*

Particulars	Computed by Commission for FY 2009-10
Opening equity	477.88
Equity addition during the year	60.49
Closing equity	538.37
Return on Equity @ 14%	**71.14**

Since capital expenditure has been considered as uncontrollable the Commission has treated return on equity as uncontrollable. Any variation in return on equity will be considered during the annual performance review for FY 2009-10.

The summary of return on equity for FY 2009-10 is provided in the following table:

Table 274: Return on equity approved by Commission

(*Rs. crores)*

Particulars	MYT order	Estimated	Revised Approved for FY 2009-10
Return on equity	75.86	71.64	71.14

4.4.7.8 Income Tax

Petitioner's submission

TPL-Surat in its petition revised the tax calculation by considering RoE as the post tax return (PAT) and grossing it up to find the PBT:

Table 275: Income Tax for FY 2009-10 estimated by petitioner

(*Rs. crores)*

Income Tax computation	Estimated
ARR including non-tariff income	1,177.55
Total expense	1,069.0.3
PBT	108.52

Income Tax computation	Estimated
Income tax	36.89
PAT	71.64

Commission's analysis

The Commission is of the view that the income tax should be computed on the return on equity and not after grossing up. The Commission is therefore of the opinion that the computation as submitted by the petitioner is not permissible under the GERC Terms & Conditions of Tariff.

Based on the above observation the Commission has computed the amount of tax by applying the tax rate of 33.99% on the approved return on equity.

Table 276: Computation of Income Tax for FY 2009-10 for TPL-G (APP)

(*Rs. crores)*

Income Tax computation	Revised Approved for FY 2009-10
Return on equity	71.14
Tax (@ 33.99%)	24.18

Based on the above computation the Commission now approves income tax for FY 2009-10 as provided in the table below:

Table 277: Income tax approved by Commission

(*Rs. crores)*

Particulars	MYT order	Estimated	Revised Approved for FY 2009-10
Income tax	25.78	36.89	24.18

4.4.7.9 Provision for bad and doubtful debts

Petitioner's submission

TPL-Surat, in its petition, has estimated provision for bad debts at Rs. 1.16 crores.

Commission's analysis

The Commission has treated provision for bad debts as controllable. Hence the Commission approves the MYT order approved value for FY 2009-10. Any variation in provision for bad debts will be considered during the annual performance review for FY 2009-10. The summary of provision for bad debts for FY 2009-10 is provided in the following table:

Table 278: Provision for bad debts approved by Commission

(*Rs. crores)*

Particulars	MYT order	Estimated	Revised Approved for FY 2009-10
Provision for bad debts	1.27	1.16	1.27

4.4.7.10 Contingency Reserves

Petitioner's submission

TPL-Surat has kept the contingency reserve unchanged with respect to MYT order approved value, i.e. Rs. 0.4 crores.

Commission's analysis

The Commission treats contingency reserve as controllable and approves it at MYT order approved values. Any variation in contingency reserve will be considered during the annual performance review for FY 2009-10. The summary of contingency reserve for FY 2009-10 is provided in the following table:

Table 279: Contingency reserve approved by Commission

(*Rs. crores)*

Particulars	MYT order	Estimated	Revised Approved for FY 2009-10
Contingency reserve	0.40	0.40	0.40

The petitioner will have to invest the approved contingency reserve amount in securities authorized under the Indian Trusts Act, 1882 within a period of six months of the close of FY 2009-10. Towards this, the petitioner will be required to submit proofs of investments during the APR of FY 2009-10. The Commission will allow only that amount during the APR exercise which is supported by investment proofs.

4.4.7.11 Non tariff income

Petitioner's submission

TPL-Surat, in its petition had projected non tariff income for FY 2009-10 at Rs. 17.94 crores based on the revised non tariff income for FY 2008-09 as against the MYT order approved value of Rs. 28.20 crores.

Commission's analysis

The Commission has projected the non tariff income for FY 2009-10 based on approved non tariff income in FY 2008-09 (Rs. 22.62 crores) and growth in approved sales of FY 2009-10 (2885.18 MUs) over FY 2008-09 (2907.18 MUs). Thus the Commission has arrived at a figure of Rs. 22.45 crores as the projected non tariff income for FY 2009-10.

Table 280: Non tariff income approved by Commission

(*Rs. crores)*

Particulars	MYT order	Estimated	Revised Approved for FY 2009-10
Non tariff income	28.20	17.94	22.45

4.4.8 Summary of ARR of TPL-Surat for FY 2009-10

Table 281: Summary of TPL-Surat ARR for FY 2009-10

(*Rs. crores)*

Particulars	MYT Order	Estimated	Revised Approved for FY 2009-10
Power Purchase Costs			
TPL-G (APP)	0.00	320.45	0.00
SUGEN	1038.23	356.00	719.37
GUVNL	0.00	135.31	157.97
Wind Energy	71.96	10.02	58.01
Total Power Purchase Costs	**1110.19**	**821.78**	**935.35**
Fixed Costs			
Employee expenses	35.70	36.86	35.70
R&M expenses	28.10	28.10	28.10
A&G expenses	26.12	26.12	26.12
Depreciation	43.42	39.78	38.91
Interest on loans	25.38	57.92	55.19
Interest on security deposit	6.47	8.22	8.22
Interest on working capital	24.94	22.00	20.57
Return on equity	75.86	71.64	71.14
Provision for bad debts	1.27	1.16	1.27
Contingency reserve	0.40	0.40	0.40
Income tax	25.78	36.89	24.18
Total Fixed Costs	**293.45**	**329.08**	**309.80**
Gross ARR	**1403.63**	**1150.86**	**1245.15**
Non-tariff income	28.20	17.94	22.45
Net ARR	**1375.43**	**1132.92**	**1222.70**

5 Compliance of Existing Directives and Issue of Fresh Directives

5.1 Compliance of Existing Directives

The Commission in its multi-year tariff order dated 17th January 2009, for the control period FY 2008-09 to FY 2010-11 had issued various directives to TPL.

TPL submitted a compliance report on the directives issued vide its letter dated 29th June 2009.

Commission's comments on the status of compliance of the directives and further directives are given below.

Directive 1: Quality of Service

TPL should give wide publicity to the "customer charter", after its approval by the Commission.

Compliance

TPL has stated that it has complied with the directives and submitted the Customer Charter for the approval vide its letter dated 30th November 2007.

Commission's comments

TPL has still not submitted any proof of the wide publicity of "consumer charter". Hence the compliance as stated by TPL is incomplete. TPL shall give wide publicity of the "customer charter" in various forms of appropriate mass media and submit the proofs of the same within 3 months of the date of issue of this order.

Directive 2: Consumer friendly attitude

TPL to conduct a study on the consumer satisfaction level in terms of quality of supply and service and submit the findings to the Commission by 30th September 2009.

Compliance

TPL has stated that it has complied with the directives and has formally organized training programs for its representatives who interact with the consumers to enhance its customer relationship and is in the process of identifying an Independent Agency for carrying out the consumer satisfaction survey.

Commission's comments

TPL has not been able to meet the timelines stated in the directive since the survey has not started yet. Hence compliance of the directive is deficient. TPL shall update the Commission on status of the survey within 15 days of the date of issue of this order

Directive 3: Meters

TPL to submit a report on the number of consumers who opted to have their own meters and also the defective/non functioning meters replaced during the period 01/04/2007 to 30/09/2008

Compliance

No consumer opted for installing their own meter and 72766 defective/non-functioning meters were replaced between the period 01/04/2007 to 30/09/2008

Commission's comments

The compliance is noted.

Directive 4: Capital expenditure

TPL should submit to the Commission, the details of any capital expenditure above Rs. 5 crores with cost benefit analysis, before taking up the work and after completion for scrutiny of the Commission

Compliance

TPL has stated that it has made a detailed presentation on the capital expenditure proposed in the MYT petition explaining the rationale, needs and the philosophy being adopted by the Company for incurring such capital expenditure. TPL, therefore, has complied with the Commission's direction.

Commission's comments

The Commission notes that the presentation made for the capital expenditure for MYT petition was inadequate as it covered only a theoretical description of benefits but not a quantitative cost benefit analysis of many of the schemes. Hence the compliance as reported by TPL is deficient.

In view of the general criticism by various stakeholders of over investment by TPL which only adds to asset value without corresponding benefit to the consumer, TPL shall undertake cost benefit analysis for all capital expenditure above Rs. 5 crores and submit the details to the Commission. Further the Commission states that for the next control period, only the schemes approved in-principle by the Commission based on cost benefit analysis submitted by TPL, would be admitted in the MYT petition and considered for approval for that control period.

Directive 5: Cost of Supply

TPL to submit a report on the study conducted to arrive at the cost of supply for each consumer group.

Compliance

TPL has stated that it has complied with the directives and submitted the cost of supply calculations in its APR and Tariff Proposal petition.

Commission's comments

Cost of supply for each consumer group is required to arrive at realistic cross subsidy levels and steps to reduce the cross subsidy. The Commission has noted that TPL has computed and submitted the cost of supply only upto the HT and LT voltage level and not for each consumer group. The Commission directs TPL to submit the cost of supply for each consumer group in the APR petition for FY 2009-10.

Directive 6: Business Plan

TPL to prepare and submit the Business Plan for the next five years (i.e. FY 2008-09 to FY 2013-14)

Compliance

MYT petition filed by TPL on 8th May, 2008 included the projected cost and revenue of the next three years of the first control period i.e. FY 2008-09 to FY 2010-11. Business plan for the next three years will be submitted as part of the petition for the second control period.

Commission's comments

The Commission has noted that TPL has only submitted a short term business plan (3 years) rather than a long term business plan (5 years). The Commission directs TPL to submit the business plan for five years i.e. FY 2011-12 to FY 2015-16 while filing the petition for the next control period.

Directive 7: Procurement procedures

TPL to submit a copy of the procurement procedures followed.

Compliance

TPL stated that it procures major materials competitively and in accordance with the Corporate Governance norms. Before finalizing any purchase, proper due diligence of the supplier is carried out in order to ascertain their manufacturing & financial capability and price competitiveness.

Procurement process consists of following components:

- Purchase requisition
- Request for quotation
- Technical evaluation of Quotation
- Commercial Evaluation of bids
- Purchase order

TPL has submitted the power procurement procedure in detail vide its letter dated 29th June, 2009.

Commission's comments

The compliance is noted.

Directive 8: SUGEN project

TPL to furnish status of the project

Compliance

SUGEN Project is in commissioning stage and started generating power during trial runs. The Company has also made substantial progress for evacuation of power.

Commission's comments

The compliance is noted.

Directive 9: Working out of Heat Rates

TPL to work out heat rates based on GCV of coal

Compliance

TPL stated that it submits the data on NCV basis since the approved parameters are on the NCV basis for the like comparison. TPL will also submit the data on GCV basis in compliance to the Commission's directive.

Commission's comments

The Commission has not received the heat rates computed on GCV basis from TPL. The Commission directs TPL to file the next petition by computing SHRs on GCV basis. TPL should also use findings of the CEA report which are summarized below for estimating the SHRs:

Table 282: SHRs recommended by CEA on GCV basis

(kCal / kWh)

Stations	FY 2008-09	FY 2009-10	FY 2010-11
Station C	-	3240	3240
Station D	-	2515	2515
Station E	-	2790	2790
Station F	-	2790	2790
Vatva	-	2200	2200

Directive 10: Separate Accounts

TPL to maintain & submit to the Commission, separate accounts for its regulated business

Compliance

TPL, being the Company registered under the Companies Act, 1956, follows and maintains the accounts as per the Accounting Standards specified by the Institute of Chartered Accountants of India and same will be submitted.

Commission's comments

The Commission notes that Clause 5.2 of MYT Regulation provides that the Generating Company or Licensee shall file ***'separate'*** accounting statements[2] with the petition for ARR or the annual review of performance. In the case of TPL there are two distribution licensees (Ahmedabad and Surat) and one generating company. However, TPL has failed to submit duly audited separate accounting statements for each of the businesses.

The Commission drew reference to the High Court Order dated 11th September 2006 whereby the amalgamation of the various businesses of TPL was approved. More specifically, the Commission drew reference to paragraph 29 of the High Court Order where the Honourable Court expressed its opinion that the provisions of the Electricity Act, 2003 and the Electricity Regulatory Commission Act, 1998 would take care of different situations with regard to Transmission, Distribution, and Supply of the Electricity by the transferee company. The Commission also drew reference to its Order on petition No. 881/2006. The Commission noted the submission made under clause 9 of its Order on petition No. 881/2006 which is produced below:

"…..merging of licenses is different from merging of companies. The two licenses are required to be transferred to the new company but will remain independent. There would be no change in the conditions of license or the areas of license…"

As indicated above even after the approval of the Scheme of Amalgamation, the governing conditions of license shall continue to remain applicable. Therefore, the requirement for separate information for each category i.e. the generating company and the two distribution licensees cannot be diluted as this is one of the mandatory requirements under the provisions of MYT Regulations, 2007. In the absence of segregated information for each of the businesses, the Commission has shown concern in regard to the principles considered for allocation of cost to respective businesses under a common legal entity.

The Commission, therefore, views TPL's compliance as incomplete. It has issued a fresh directive to TPL on this matter.

[2] Accounting Statement has been defined under Clause 2.1(a) of the MYT Regulations so as to consist of Balance Sheet, Profit & Loss account and the Cash Flow Statement

Directive 11: Pilferage of Energy

The Commission had appreciated the steps taken by TPL to reduce distribution losses and directed the Company to take effective steps to arrest the leakage of energy & reduce level of losses further.

Compliance

TPL continuously endeavours to bring down the loss levels. The estimated distribution loss level is about 9.10% and5.91%, respectively, for Ahmedabad & Surat for FY 2008-09. TPL already operates at efficiency frontier and therefore, it is likely that loss will vary in the band and may not be possible to maintain at the same level.

Commission's comments

The Commission directs TPL to take effective steps towards reduction of pilferage of energy. The Commission feels that this may help reduce losses even further than achieved by TPL at present.

Directive 12: Shifting of Open Access and WEG consumers to 66 kV

TPL to furnish the details of amounts collected from the consumers of Open Access / WEG captive who have been shifted to 66 kV

Compliance

TPL has neither shifted nor recovered any amount from any Open Access/ WEG captive consumers.

Commission's comments

The compliance is noted.

Directive 13: Voltage Fluctuations, Installation of Capacitors & Reactive Compensation

TPL to take corrective actions for addressing the issue of Voltage Fluctuations.

Compliance

TPL has identified the major parameters affecting the voltage level of the customer along with the corrective actions being taken as listed below.

- Increase in Grid voltage level: Other than the adjustment of tap of Power Transformer, it is beyond the control of TPL
- Sudden loss of bulk load due to fault in any part of the network or by switching off bulk load by customers: TPL adjusts the tap of Power transformer to bring the voltage within limit
- Overcompensation by capacitors installed by TPL at 11 kV and LT panel. TPL monitors the parameters of capacitor banks. It has begun to adjust the amount of compensation by installing fixed and switching type capacitor compensation to suit the required profile at the Distribution Substations to rule out overcompensation.
- Overcompensation by capacitors installed by customers: The Company, as a part of demand side management activity and consumer awareness programs, advises consumers regarding proper compensation. The Company ensures installation of correct reactive compensation in line with relevant regulations. When inappropriate compensation is detected or when the installed compensation is found non operational, the Company advises consumers for required rectification.

Commission's comments

TPL should monitor voltage level regularly for peak as well as off peak hours and keep the voltage level in accordance with the Electricity Supply Code. The Commission has taken note of the capacitor compensations done by TPL in order to maintain voltage levels within normal operating limits. However, the Commission feels that consumer awareness in this regard is critical and TPL should undertake more initiatives in this area. TPL should guide consumers about appropriate quantum of capacitance required per kW of load to maintain 0.9 power-factor for their load pattern taking into account the latest requirement of distribution network. TPL should also revise circular in this regard for requirement of capacitors per kW of load from time to time.

<u>Directive 14: Delay in the release of new connections</u>

TPL to conduct a study so as to understand to what extent the existing system could be loaded in order to avoid delay in releasing new connections.

Compliance

TPL endeavours to provide prompt, reliable and quality power supply to all its customers. The Company plans and maintains its network in order to achieve the said objective. It regularly monitors the loadings on the various segments of its network to keep the voltage and current profile within the permissible limits and to maintain adequate margin to enable load transfers in case of outages. For new connections the load is released from the nearest Distribution Transformer in case sufficient margin is available or the applicant is not at a far distance from the existing transformer, in other cases it establishes a new Distribution Sub-station. It pays reasonable compensation to its consumers for providing space for new substation.

Commission's comments

While processing applications for new connections, TPL should follow the Electricity Supply Code Regulations, 2005 and the Standards of Performance of Distribution Licensees, 2005. The process followed by TPL while releasing new connections is noted.

Directive 15: Indefinite continuation of temporary connections

TPL to report the reasons for temporary services being continued for long periods.

Compliance

At Surat, temporary connections are being provided to new upcoming projects which usually take two to three years to complete. On completion of the construction activity of such projects, the temporary connections are discontinued and the project gets electrified by permanent service connections. At present in Surat, total temporary connections are 513 as of February 2009 and all the premises have been verified.

Commission's comments

The compliance is noted. TPL should regularly monitor status of temporary connections and ensure that none of the connections are continued beyond the required period.

5.2 Fresh Directives

Directive 1: Separate Books of Accounts

TPL should maintain separate books of accounts from FY 2010-11 onwards in regard to the following:

1. Generating Business
2. Ahmedabad Distribution license
3. Surat Distribution license

Further, the books of accounts of each of these businesses should be audited annually and the audited accounts should form part of the annual submissions i.e. Aggregate Revenue Requirement and Annual Performance Review.

Directive 2: Awareness about Meter Testing

TPL should carry out awareness programs amongst its consumers about meter testing and the third party agencies authorized to perform the same.

6 Tariff Philosophy and Design

6.1 Petitioner's submission

TPL has proposed a uniform tariff structure for FY 2009-10 in both the license areas. It has been proposed to adopt Tariff Structure of Ahmedabad area with some changes and apply the same structure to both the Ahmedabad and Surat areas.

6.1.1 Retail Tariff Design as proposed by TPL

The salient features of the proposed tariff structure for FY 2009-10 for Ahmedabad and Surat License areas as proposed by TPL are as follows:

Lighting & Motive power tariff

The categories under LT (e.g., RGP, CGP, LTP I&II, LTMD I&II and Others) are on the lines of lighting and motive use i.e. different lighting tariff and motive tariff for respective lighting and motive consumption by the same consumer. This is in line with the prevailing practice in both the license areas. In line with the current practice in Ahmedabad and Surat license areas, the lighting loads are classified under Residential General Purpose (RGP) and Commercial General Purpose (CGP/ IGP).

In case of the motive power services, TPL has proposed to replicate the existing tariff categories in Ahmedabad license area to Surat license area. The current tariff category for motive power in Ahmedabad license area is mainly segregated into Residential Pumping (LTP-I and LTMD-I) and other than residential pumping (LTP-II and LTMD –II). Further, TPL has stated that demand based categorization helps in regulating excess drawal over and above the contracted capacity, which in turn brings in discipline in the power usage. Thus, it is worthwhile to cover larger number of consumers under this categorization in stages. Accordingly, TPL has proposed to adopt the existing cut off of 15 BHP in Ahmedabad supply area for both the areas. The existing and proposed tariff category for motive power in Surat license area is tabulated below:

Table 283: Existing and proposed tariff categories for TPL-Surat

Existing Motive Power Category	Proposed Motive Power Category
LTP (Load up to 50 BHP) LTMD – (Optional for load upto 50 BHP)	LTP-I (Residential Pumping Load up to 15 BHP) LTP-II (Other than Residential Pumping Load up to 15 BHP)
LTMD (Load above 50 BHP)	LTMD-I (Residential Pumping & Load above 15 BHP) LTMD-II (Other than Residential Pumping & Load above 15 BHP)

HT Categories

Ahmedabad license area has two HT categories i.e. HTMD and HT Pumping Stations. “HTMD” tariff is applicable to consumers (other than pumping stations run by local authorities) contracting for maximum demand of 100 KW and above. “HT Pumping stations” tariff is applicable for supply to water and sewage pumping stations run by local authorities and contracting for maximum demand of 100 KW and above. Surat license area has three HT categories i.e. HTMD-1, HTMD-2 and NTCT. “HTMD-1” tariff is applicable for supply to industrial, water works, pumping and similar activities and contracting for maximum demand of 100 KVA and above. “HTMD-2” tariff is applicable for supply to Hospitals, Hotels, cinema, bank offices, railways, etc. and purposes not covered under tariff “HTMD-1” and contracting for maximum demand of 100 KVA and above. “NTCT” tariff is applicable for use of electricity exclusively during night hours. TPL has proposed to restructure the HT category for both Ahmedabad and Surat license area into three categories i.e. HTMD-I (Industrial), HTMD-II (Commercial) and HTMD-III (Pumping by local Authority). The NTCT category in Surat license area is proposed to be removed as no consumer has opted for it till date.

Other categories

For LT supply to local authorities, respective tariff category (LTMD, street lighting, etc.) has been proposed to be applied.

Separate Street lighting tariff category does not exist in TPL-Surat tariff structure and street lighting consumption is covered under GLP tariff. Thus, the existing GLP tariff at TPL- Surat is proposed to be segregated into GLP and street lighting.

Agriculture and Temporary tariffs are proposed to be continued in both the areas.

Summary of Tariff Categorization

Based on the above discussed modifications to the existing tariff categories, the tariff categories proposed by TPL for both the areas for the control period is shown below:

Table 284: Major Tariff categories proposed under Uniform Tariff structure

LT Categories	HT Categories
Residential General Purpose (RGP)	High Tension Maximum Demand – I (Industrial)
Commercial General Purpose (CGP) / Industrial General Purpose (IGP)	High Tension Maximum Demand – II (Commercial)
Low Tension Power – I	High Tension Maximum Demand – III (Pumping, Local authority)
Low Tension Power – II	
Low Tension Maximum Demand – I	
Low Tension Maximum Demand – II	
Others (GLP, Agriculture, Streetlight, temporary etc.)	

6.1.2 Philosophy for other tariff components as proposed by TPL

TPL has proposed the following changes in other tariff components in order to improve the system utilization and optimize the network usage.

Time of Use (TOU) charges

TOU charges are currently applicable for all the consumers of HTMD categories in Ahmedabad license area and for HT consumers with >500 KVA contract demand at Surat license area. TPL has proposed TOU charges for all HT consumers in Ahmedabad license area and in Surat license area including consumers having contract demand upto 500 KVA. TPL has submitted that introduction of TOU charges to larger number of consumers will lead shifting of some peak hour demand to non peak hour and thereby help in flattening load curve and chopping off peak demand.

Load factor incentive

TPL has proposed to adopt load factor incentive for all HT categories in Ahmedabad and Surat license area. This will provide price signals to flatten the load curve and thereby improve the system utilization. Currently the load factor incentive is available for HTMD category in Ahmedabad license area.

Power Factor (PF) adjustment charges & rebate

TPL has proposed to adopt power factor adjustment charges and rebate for all HT categories and LTMD category in Ahmedabad and Surat license area. This would help in maintaining the discipline in the system. Currently power factor adjustment charge is applicable for drop in power factor below 90% and rebate is applicable for power factor in excess of 90% in case of Ahmedabad area for HT and LTMD categories. For Surat area however the minimum power factor for eligibility of rebate is 95%.

Prompt payment discount

Currently, TPL-Ahmedabad provides for prompt payment discount in Ahmedabad license area whereas TPL-Surat does not provide any such discount in Surat area. TPL has submitted that the discount offered is not commensurate to the benefit accrued on account of early payment. Further, the discount being a pass through has to be recovered through tariffs. Therefore TPL has proposed to do away with prompt payment discount for Ahmedabad area.

6.2 Commission's Analysis

The Commission has approved the ARR and revenue for FY 2009-10 in respect of TPL-Ahmedabad and TPL-Surat in the earlier sections. The Commission has now computed the approved gap / surplus for FY 2009-10.

6.2.1 Gap / Surplus of TPL-Ahmedabad for FY 2009-10

Table 285: Gap / Surplus of TPL-Ahmedabad approved for FY 2009-10

(*Rs. crores)*

Particulars	MYT Order	Estimated by TPL-Ahmedabad	Revised Approved for FY 2009-10
Net ARR	2194.95	2052.88	1945.47
Revenue	2045.63	1829.15	1904.69
(Gap) / Surplus (FY 2009-10)	**(149.32)**	**(223.73)**	**(40.77)**

6.2.2 Gap / Surplus of TPL-Surat for FY 2009-10

Table 286: Gap / Surplus of TPL-Surat approved for FY 2009-10

(*Rs. crores)*

Particulars	MYT Order	Estimated by TPL-Surat	Revised Approved for FY 2009-10
Net ARR	1375.43	1159.61	1222.70
Revenue	1271.27	1045.67	1090.94
(Gap) / Surplus (FY 2009-10)	**(104.16)**	**(113.94)**	**(131.77)**

The Commission is of the view that the gap for both TPL-Ahmedabad and TPL-Surat shown above could further reduce on account of the following reasons:

(a) **Adoption of CEA recommendations:** As indicated in the MYT Order for TPL-G (APP), the operating parameters are provisional and shall be finalized based on the recommendations of the CEA. The CEA has now submitted its report and the Commission has analyzed the impact for FY 2009-10. The Commission has found that if the CEA recommendations in regard to operating parameters are applied to TPL-G (APP) for FY 2009-10, its aggregate variable cost of generation would decrease by Rs. 47.13 crores. The Commission is further analyzing the CEA report and shall firm up its view on the same after a detailed study.

(b) **The tariff for SUGEN** has been provisionally considered at Rs. 3.10 for FY 2008-09 and Rs. 2.98 for FY 2009-10 pending the finalization of its tariff by CERC. If CERC approves a tariff of Rs. 2.98 as estimated by the petitioners for FY 2009-10, the gap for FY 2008-09 would reduce. If CERC approves a tariff lower than Rs. 2.98, the final gap for FY 2008-09 and FY 2009-10 shall reduce further.

The Commission also observes that a major part of the second year (FY 2009-10) of the control period has elapsed and the date for submission of petition for FY 2010-11 is due on 15th December 2009.

Therefore, the Commission is of the opinion that in view of the reasons discussed above, the Commission shall address the estimated gap/surplus in its order when it considers the tariff determination for FY 2010-11. Hence, the Commission directs the petitioner to charge the Retail Supply Tariff, Wheeling Charges and Cross Subsidy Surcharge at the existing rates and file its petition for determination of tariff for the FY 2010-11 for its generation as well as distribution business within the stipulated time.

COMMISSION'S ORDER

The Commission approves the Annual Performance Review for FY 2008-09 for TPL-G (APP), TPL-Ahmedabad and TPL-Surat as shown below:

Table 287: APR of TPL-G (APP) for FY 2008-09 as approved by Commission

(*Rs. crores)*

Particulars	Considered for APR of FY 2008-09 (TPL-G (APP))
Variable Costs	
Station C	111.02
Station D	182.38
Station E	185.76
Station F	186.23
Station Vatva	223.56
Total Variable Costs	**888.94**
Fixed Costs	
Employee Expenses	49.70
R&M Expenses	43.27
A&G Expenses	22.16
Depreciation	25.77
Interest on loans	7.44
Interest on Working Capital	26.63
Return on Equity	41.67
Income Tax	11.39
Total Fixed Costs	**228.03**
Gross ARR	**1116.98**
Non-tariff income	2.23
Net ARR	**1114.75**

Table 288: APR of TPL-Ahmedabad and TPL-Surat for FY 2008-09 as approved by Commission

(*Rs. crores*)

Particulars	Considered for APR of FY 2008-09	
	TPL-Ahmedabad	TPL-Surat
Power Purchase Costs		
TPL-G (APP)	1109.96	0.00
SUGEN	0.00	64.11
GUVNL	560.79	1072.38
Wind Energy	6.27	4.48
Total Power Purchase Costs	**1677.02**	**1140.97**
Fixed Costs		
Employee expenses	62.62	33.68
R&M expenses	73.20	26.51
A&G expenses	31.75	24.65
Depreciation	61.48	32.97
Interest on loans	48.39	46.70
Interest on security deposit	8.11	7.79
Interest on working capital	24.79	24.52
Return on equity	113.52	64.77
Provision for bad debts	1.88	1.22
Contingency reserve	0.60	0.40
Income tax	15.29	2.38
Incentive to be paid to TPL-G (APP)	5.01	0.00
Total Fixed Costs	**446.63**	**265.59**
Gross ARR	**2123.66**	**1406.55**
Non-tariff income	54.08	22.62
Net ARR	**2069.58**	**1383.93**
Revenue	**2145.19**	**1330.48**
Initial (Gap) / Surplus	75.61	(53.45)
Rebates / (Charges) on tariff	45.25	27.99
Resultant (Gap) / Surplus (FY 2008-09)	**120.87**	**(25.46)**

The Commission approves the Aggregate Revenue Requirement for FY 2009-10 for TPL-G (APP), TPL-Ahmedabad and TPL-Surat as shown below:

Table 289: ARR of TPL-G (APP) for FY 2009-10 as approved by Commission

(*Rs. crores)*

Particulars	Revised Approved ARR of FY 2009-10 (TPL-G (APP))
Variable Costs	
Station C	98.37
Station D	143.35
Station E	106.66
Station F	140.44
Station Vatva	146.47
Total Variable Costs	**635.30**
Fixed Costs	
Employee Expenses	52.69
R&M Expenses	60.12
A&G Expenses	23.49
Depreciation	25.33
Interest on loans	12.25
Interest on Working Capital	26.82
Return on Equity	45.98
Income Tax	15.63
Total Fixed Costs	**262.30**
Gross ARR	**897.60**
Non-tariff income	2.27
Net ARR	**895.33**

Table 290: ARR of TPL-Ahmedabad and TPL-Surat for FY 2009-10 as approved by Commission

(*Rs. crores*)

Particulars	Revised Approved ARR of FY 2009-10	
	TPL-Ahmedabad	TPL-Surat
Power Purchase Costs		
TPL-G (APP)	895.33	0.00
SUGEN	359.69	719.37
GUVNL	134.25	157.97
Wind Energy	96.90	58.01
Total Power Purchase Costs	**1486.17**	**935.35**
Fixed Costs		
Employee expenses	66.38	35.70
R&M expenses	77.60	28.10
A&G expenses	33.65	26.12
Depreciation	74.71	38.91
Interest on loans	61.90	55.19
Interest on security deposit	7.82	8.22
Interest on working capital	20.87	20.57
Return on equity	127.44	71.14
Provision for bad debts	2.05	1.27
Contingency reserve	0.60	0.40
Income tax	43.32	24.18
Total Fixed Costs	**516.33**	**309.80**
Gross ARR	**2002.50**	**1245.15**
Non-tariff income	57.03	22.45
Net ARR	**1945.47**	**1222.70**
Revenue	**1904.69**	**1090.94**
Resultant (Gap) / Surplus (FY 2009-10)	**(40.77)**	**(131.77)**

The Retail Supply Tariffs, Wheeling Charges and Cross Subsidy Surcharge for FY 2009-10 as approved by the Commission are provided in Annexures 7.2, 7.3 and 7.4.

The order shall come into force with immediate effect.

Sd/-	Sd/-
DR. P K MISHRA **Chairman**	**SHRI PRAVINBHAI PATEL** **Member**

Place: Ahmedabad

Date: 9th December, 2009

7 Annexure

7.1 Computation of Variable Cost of Generation

7.1.1 Coal based stations

Table 291: Computation of Variable Cost of Generation for coal based stations for FY 2008-09

Particulars	Coal Based stations (FY 2008-09)			
	Station C	Station D	Station E	Station F
Share of coal - Indigenous (%)	100.00%	60.92%	60.92%	60.92%
Share of coal - Imported (%)	0.00%	39.08%	39.08%	39.08%
Effective CV of coal (kCal/kg)	4999.00	4913.81	4913.81	4913.81
Overall Heat (Giga Cal)	1761111	2340143	2385081	2391706
Heat from Oil (Giga Cal)	6516	12607	12321	12173
Heat from Coal (Giga Cal)	1754596	2327536	2372760	2379533
Actual oil consumption (kg)	683698	1322888	1292848	1277339
Actual Coal Consumption (MT)	350989	473673	482876	484255
Indigenous coal (MT)	355973	292659	298345	299197
Imported coal (MT)	0	185111	188708	189247
Indigenous coal cost (Rs. lakhs)	10899	8960	9134	9160
Imported coal cost (Rs. lakhs)	0	8884	9057	9083
Total coal cost (Rs. lakhs)	10899	17845	18192	18243
Total oil cost (Rs. lakhs)	203	393	384	379
Total fuel cost (Rs. lakhs)	11102	18238	18576	18623
Per unit cost of Gross generation (Rs/kWh)	2.35	2.00	2.08	2.11
Per unit cost of Net generation (Rs/kWh)	2.60	2.19	2.28	2.32

Table 292: Computation of Variable Cost of Generation for coal based stations for FY 2009-10

Particulars	Coal Based stations (FY 2009-10)			
	Station C	Station D	Station E	Station F
Share of coal - Indigenous (%)	100.00%	64.00%	64.00%	64.00%
Share of coal - Imported (%)	0.00%	36.00%	36.00%	36.00%
Effective CV of coal (kCal/kg)	5236.00	5125.48	5125.48	5125.48
Overall Heat (Giga Cal)	1824925	2517561	1874195	2468099
Heat from Oil (Giga Cal)	6984	13899	9921	12873
Heat from Coal (Giga Cal)	1817941	2503663	1864273	2455226
Actual oil consumption (kg)	715173	1423183	1015919	1318137
Actual Coal Consumption (MT)	347200	488474	363727	479024
Indigenous coal (MT)	352130	317062	236090	310928
Imported coal (MT)	0	175851	130942	172448
Indigenous coal cost (Rs. lakhs)	9708	8741	6509	8572
Imported coal cost (Rs. lakhs)	0	5337	3974	5234
Total coal cost (Rs. lakhs)	9708	14078	10483	13806
Total oil cost (Rs. lakhs)	129	257	183	238
Total fuel cost (Rs. lakhs)	9837	14335	10666	14044
Per unit cost of Gross generation (Rs/kWh)	1.99	1.46	1.52	1.54
Per unit cost of Net generation (Rs/kWh)	2.20	1.60	1.67	1.69

Note: Per unit variable cost is worked out on the base fuel price as considered in the MYT order.

Gas based station (Vatva)

Table 293: Computation of Variable Cost of Generation for Vatva

Particulars	Vatva	
	FY 2008-09	FY 2009-10
Heat from Gas (Giga Cal)	1240836	1502704
Actual Gas Consumption (Mn SCM)	149	181
Total Gas cost (Rs. lakhs)	22356	14647
Per unit cost of Gross generation (Rs/kWh)	3.51	1.90
Per unit cost of Net generation (Rs/kWh)	3.60	1.96

Note: Per unit variable cost for FY 2009-10 is worked out on the base fuel price as considered in the MYT order.

7.2 Wheeling Charges for FY 2009-10

Table 294: Wheeling Charges for FY 2009-10

(Ps/kWh)

Particulars	Ahmedabad-Gandhinagar License area of TPL-Ahmedabad	Surat License area of TPL-Surat
Wheeling charges at 11 kV Voltage level	20.67	15.91
Wheeling charges at LT Voltage level	69.04	41.63

7.3 Cross-subsidy surcharge for FY 2009-10

Table 295: Cross subsidy surcharge for FY 2009-10

(Ps/kWh)

Particulars	Ahmedabad-Gandhinagar License area of TPL-Ahmedabad	Surat License area of TPL-Surat
Cross subsidy surcharge for open access consumers at 11 kV	52.00	73.65

7.4 Tariff Schedule

TARIFF SCHEDULE FOR FY 2009-10

(A) Tariff Schedule for Ahmedabad-Gandhinagar License area of Torrent Power Limited - Ahmedabad

TARIFF FOR SUPPLY OF ELECTRICITY

GENERAL CONDITIONS

1. This tariff schedule is applicable to all the consumers of TPL-Ahmedabad in Ahmedabad-Gandhinagar area.
2. All these tariffs for power supply are applicable to only one point of supply.
3. The meter charges shall be applicable as prescribed under GERC's (licensee's power to recover expenditure incurred in providing supply and other miscellaneous charges) Regulation.
4. Interest on Delayed Payment shall be applicable as prescribed under GERC's (licensee's power to recover expenditure incurred in providing supply and other miscellaneous charges) Regulation.
5. The energy supplied under these tariffs can be utilized only within the compact area of the premises not intervened by any area/road belonging to any person or authority other than the consumer.
6. Except in cases where the supply is used for purposes for which the TPL-Ahmedabad has permitted lower tariff, the power supplied to any consumer shall be utilized only for the purpose for which supply is taken and as provided for in the tariff.
7. The charges specified in the tariff are on monthly basis, TPL-Ahmedabad shall adjust the rates according to billing period applicable to consumer.
8. The various provisions of the GERC's (licensee's power to recover expenditure incurred in providing supply and other miscellaneous charges) Regulation will continue to apply.
9. Conversion of Ratings of electrical appliances and equipments from kilowatt to B.H.P. or vice versa will be done, when necessary, at the rate of 0.746 kilowatt equal to 1 B.H.P.
10. The billing of fixed charges based on contracted load or maximum demand shall be done in multiples of 0.5 (one half) Horse Power or kilo watt (HP or kW) as the case may be. The fraction of less than 0.5 shall be rounded to next 0.5. The billing of energy charges will be done on complete one kilo-watt-hour (kWh).

11. The Connected Load for the purpose of billing will be taken as the maximum load connected during the billing period.
12. Contract Demand shall mean the maximum kW for the supply of which the TPL-Ahmedabad undertakes to provide facilities to the consumer from time to time.
13. Maximum Demand in a month means the highest value of average kW as the case may be, delivered at the point of supply of the consumer during any consecutive 30 minutes in the said month.
14. Payment of penal charges for usage in excess of contract demand/load for any billing period does not entitle the consumer to draw in excess of contract demand/load as a matter of right.
15. The Fixed charges, minimum charges, demand charges, meter rent and the slabs of consumption of energy for energy charges mentioned shall not be subject to any adjustment on account of existence of any broken period within billing period arising from consumer supply being connected or disconnected any time within the duration of billing period for any reason.
16. Prompt payment discount on the total bill excluding all types of levies, duties or taxes levied by the Government or any other competent authorities and meter rent but including fixed charges, energy charges and minimum charge shall be allowed at the 3% rate for tariff category 'Rate: RGP' and at 2% rate for all other tariff category except tariff category 'Rate :TS', provided that the bill is paid – (i) within 14 days of the date thereof for LT consumers and (ii) within 10 days of the date thereof for HT consumers, provided that no previous account is outstanding as on the date of the bill.
17. The fuel cost and power purchase adjustment charges shall be applicable in accordance with the formula approved by the Gujarat Electricity Regulatory Commission from time to time.
18. Statutory Levies: These tariffs are exclusive of Electricity Duty, Tax on Sales of Electricity, Taxes and other Charges levied/may be levied or such other taxes as may be levied by the Government or other Competent Authorities on bulk/retail supplies from time to time.

PART- I

SUPPLY DELIVERED AT LOW OR MEDIUM VOLTAGE
(230 VOLTS- SINGLE PHASE, 400 VOLTS- THREE PHASE, 50 HERTZ)

1. RATE: RGP

Applicable to lights, fans and domestic appliances for heating, cooling, cleaning and refrigeration purposes in residential premises

Domestic Water-Pump exceeding 3 BHP rating will not be allowed under this tariff category.

1.1. FIXED CHARGE

(a)	Single Phase Supply	Rs. 5 per month per installation
(b)	Three Phase Supply	Rs. 15 per month per installation

1.2. ENERGY CHARGE

(i)	First 50 units consumed per month	270 Paise per Unit
(ii)	For the next 150 units consumed per month	310 Paise per Unit
(iii)	Remaining units consumed per month	395 Paise per Unit

2. RATE: GLP

Applicable to lights, fans and appliances for heating, cooling, cleaning and refrigeration purposes in premises "other than residential" like premises used for charitable purposes like: public hospitals, dispensaries, educational and research institutions and hostels attached to such institutions, youth hostels run by Government, religious premises exclusively used for worship or community prayers, electric crematorium etc. Such premises should be in the use of 'Public Trust" as defined under section 2(13) of the Bombay Public Trust Act, 1950.

2.1. FIXED CHARGE

(a)	Single Phase Supply	Rs. 10 per month per installation
(b)	Three Phase Supply	Rs. 30 per month per installation

2.2. ENERGY CHARGE

(i)	First 200 units consumed per month	320 Paise per Unit

(ii)	Remaining units consumed per month	390 Paise per Unit

3. RATE: IGP

Applicable to lights, fans and appliances for heating, cooking, cleaning and refrigeration purposes in industrial premises including office premises attached to factories provided that the rating of individual appliance does not exceed 2 KWs.

3.1. FIXED CHARGE

(a)	Single Phase Supply	Rs. 30 per month per installation
(b)	Three Phase Supply	Rs. 75 per month per installation

3.2. ENERGY CHARGE

(i)	First 50 units consumed per month	360 Paise per Unit
(ii)	For the next 150 units consumed per month	395 Paise per Unit
(iii)	Remaining units consumed per month	490 Paise per Unit

4. RATE: CGP

Applicable to lights, fans and appliances for heating, cooking, cleaning and refrigeration purposes in premises other than residential, those covered by the rate GLP and rate IGP, provided that the rating of individual appliance does not exceed 2 KWs.

4.1. FIXED CHARGE

(a)	Single Phase Supply	Rs. 30 per month per installation
(b)	Three Phase Supply	Rs. 75 per month per installation

4.2. ENERGY CHARGE

(i)	First 50 units consumed per month	360 Paise per Unit
(ii)	For the next 150 units consumed per month	395 Paise per Unit
(iii)	Remaining units consumed per month	490 Paise per Unit

5. RATE: CN

Applicable to supply for all purpose in cinema and theaters.

5.1. FIXED CHARGE

Fixed Charge	Rs. 75 per month per installation

5.2. ENERGY CHARGE

A flat rate	410 Paise per Unit

6. RATE: LTP-1

Applicable to motive power installations upto and including 15 B.H.P. of connected load used for residential purposes and pumping stations run by local authorities.

6.1. FIXED CHARGE

Fixed Charge per BHP of Connected Load	Rs.17 per BHP per Month

6.2. ENERGY CHARGE

A flat rate of	342 Paise per Unit

7. RATE: LTP-2

Applicable to motive power installations upto and including 15 B.H.P. of connected load excluding installations for agricultural purposes and those covered under LTP-1 category.

7.1. FIXED CHARGE

(a)	For installations having Connected Load upto and including 5 BHP	Rs. 20 per BHP per Month
(b)	For installations having Connected Load more than 5 BHP and upto 15 BHP	Rs. 25 per BHP per Month

7.2. ENERGY CHARGE

A flat rate of	350 Paise per Unit

8. RATE: LTP (AG)

Applicable to motive power installations for agricultural purposes

8.1. ENERGY CHARGE

A flat rate of	318 Paise per Unit

8.2. MINIMUM CHARGE

Minimum Charge per BHP of Connected Load	Rs.10 per BHP per Month

9. RATE: LTMD-1

Applicable to motive power installations above 15 B.H.P. of connected load used for residential purpose and pumping stations run by local authorities.

9.1. FIXED CHARGE

A. For Billing Demand upto and including Contract Demand

(a)	First 50 kW of Billing Demand per month	Rs. 70 per kW
(b)	Next 30 kW of Billing Demand per month	Rs. 90 per kW
(c)	Rest of Billing Demand per month	Rs.120 per kW

B. For Billing Demand in excess of the Contract Demand

Fixed Charge per kW of Billing Demand per month	Rs. 325 Per kW

NOTE: The Billing Demand will be taken as under:

i. The Maximum Demand recorded during the month OR

ii. 85% of the Contract Demand OR

iii. 6 KW

Whichever is the highest.

9.2. ENERGY CHARGE

i)	For Billing Demand upto and including 50 KW	350 Paise per unit
ii)	For Billing Demand above 50 KW	365 Paise per unit

9.3. POWER FACTOR ADJUSTMENT CHARGE

A. Where the average Power Factor during the Billing period exceeds 90%

For each 1% improvement in the Power Factor from 90% to 95%	Rebate of 0.15 Paise per Unit
For each 1% improvement in the Power Factor above 95%	Rebate of 0.27 Paise per Unit

B. Where the average Power Factor during the Billing period is below 90%

For each 1% decrease in the Power Factor below 90%	Penalty of 3.00 Paise per Unit

10. RATE: LTMD-2

Applicable to motive power installations above 15 B.H.P. of connected load excluding installations for agricultural and those covered under LTMD-1 category.

10.1. FIXED CHARGE

A. For Billing Demand upto and including Contract Demand

(a)	First 50 kW of Billing Demand per month	Rs. 80 per kW
(b)	Next 30 kW of Billing Demand per month	Rs. 110 per kW
(c)	Rest of Billing Demand per month	Rs. 150 per kW

B. For Billing Demand in excess of the Contract Demand

Fixed Charge per kW of Billing Demand per month	Rs. 350 Per kW

NOTE: The Billing Demand will be taken as under:

i. The Maximum Demand recorded during the month OR
ii. 85% of the Contract Demand OR
iii. 6 KW

Whichever is the highest.

10.2. ENERGY CHARGE

i)	For Billing Demand upto and including 50 KW	365 Paise per unit
ii)	For Billing Demand above 50 KW	385 Paise per unit

10.3. POWER FACTOR ADJUSTMENT CHARGE

A. Where the average Power Factor during the Billing period exceeds 90%

For each 1% improvement in the Power Factor from 90% to 95%	Rebate of 0.15 Paise per Unit
For each 1% improvement in the Power Factor above 95%	Rebate of 0.27 Paise per Unit

B. Where the average Power Factor during the Billing period is below 90%

For each 1% decrease in the Power Factor below 90%	Penalty of 3.00 Paise per Unit

11. RATE: STREET LIGHTS

Applicable to lighting systems for illumination of public roads.

11.1 ENERGY CHARGE

A flat rate of	325 Paise per Unit

12. RATE: TS

Applicable to installations for temporary requirement of electricity supply.

12.1. FIXED CHARGE

Fixed Charge per Installation	Rs.14 per kW per Day

12.2. ENERGY CHARGE

A flat rate of	390 Paise per Unit

PART- II

SUPPLY DELIVERED AT HIGH VOLTAGE
(11000 VOLTS- THREE PHASE, 50 HERTZ)

13. RATE: HTMD

Applicable for supply of energy to High Tension consumers contracting for maximum demand of 100 kW and above. (Other than pumping stations run by local authorities)

13.1. FIXED CHARGE

A. For Billing Demand upto and including Contract Demand

Fixed Charge per kW of Billing Demand per Month	Rs. 140 per kW

B. For Billing Demand in excess of the Contract Demand

Fixed Charge per kW of Billing Demand per month	Rs. 275 per kW

NOTE: The Billing Demand will be taken as under:

i. The Maximum Demand recorded during the month OR
ii. 85% of the Contract Demand OR
iii. 100 KW

Whichever is the highest.

13.2. ENERGY CHARGE

i)	First 400 units consumed per kW of Billing Demand per Month	339 Paise per unit
ii)	Remaining Units consumed per Month	331 Paise per unit

13.3. TIME OF USE (TOU) CHARGE

<table>
<tr><td colspan="2">For the Consumption during specified hours as mentioned here below:
(i) For April to October period- 1200 Hrs. to 1700 Hrs. & 1830 Hrs. to 2130 Hrs.
(ii) For November to March period- 0800 Hrs. to 1200 Hrs. & 1800 Hrs. to 2200 Hrs.</td></tr>
<tr><td>(a) For Billing Demand upto 300 kW</td><td>50 Paise per Unit</td></tr>
<tr><td>(b) For Billing Demand Above 300 kW</td><td>70 Paise per Unit</td></tr>
</table>

13.4. POWER FACTOR ADJUSTMENT CHARGE

A. Where the average Power Factor during the Billing period exceeds 90%

For each 1% improvement in the Power Factor from 90% to 95%	Rebate of 0.15 Paise per Unit
For each 1% improvement in the Power Factor above 95%	Rebate of 0.27 Paise per Unit

B. Where the average Power Factor during the Billing period is below 90%

For each 1% decrease in the Power Factor below 90%	Penalty of 3.00 Paise per Unit

14. <u>RATE: HT PUMPING STATIONS</u>

Applicable for supply of energy to Water and Sewage Pumping Stations run by local authorities and contracting for maximum demand of 100 kW and above.

14.1. FIXED CHARGE

A. For Billing Demand upto and including Contract Demand

Fixed Charge per kW of Billing Demand per Month	Rs. 140 per kW

B. For Billing Demand in excess of the Contract Demand

Fixed Charge per kW of Billing Demand per month	Rs. 275 Per kW

NOTE: The Billing Demand will be taken as under:

i. The Maximum Demand recorded during the month OR
ii. 85% of the Contract Demand OR
iii. 100 KW

Whichever is the highest.

14.2. ENERGY CHARGE

A flat rate of	310 Paise per unit

14.3. TIME OF USE (TOU) CHARGE

For the Consumption during specified hours as mentioned here below- (i) For April to October period- 1200 Hrs. to 1700 Hrs. & 1830 Hrs. to 2130 Hrs. (ii) For November to March period- 0800 Hrs. to 1200 Hrs. & 1800 Hrs. to 2200 Hrs.	50 Paise per unit

14.4. POWER FACTOR ADJUSTMENT CHARGE

A. Where the average Power Factor during the Billing period exceeds 90%

For each 1% improvement in the Power Factor from 90% to 95%	Rebate of 0.15 Paise per Unit
For each 1% improvement in the Power Factor above 95%	Rebate of 0.27 Paise per Unit

B. Where the average Power Factor during the Billing period is below 90%

For each 1% decrease in the Power Factor below 90%	Penalty of 3.00 Paise per Unit

(B) Tariff Schedule for Surat License Area of Torrent Power Limited - Surat

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

GENERAL CONDITIONS

1) This tariff schedule is applicable to all the consumers of TPL-Surat in Surat Area.
2) All these tariffs for power supply are applicable to only one point of supply.
3) The meter charges shall be applicable as prescribed under GERC's (licensee's power to recover expenditure incurred in providing supply and other miscellaneous charges) Regulation.
4) The energy supplied under these tariffs can be utilized only within the compact area of the premises not intervened by any area/road belonging to any person or authority other than the consumer.
5) Except in cases where the supply is used for purposes for which the Company has permitted lower tariff, the power supplied to any consumer shall be utilized only for the purpose for which supply is taken and as provided for in the tariff.
6) The charges specified in the tariff are on monthly basis; the Company may decide the period of billing and adjust the rates accordingly.
7) The billing of fixed charges based on contracted load or maximum demand shall be done in multiples of 0.5 (one half) Horse Power, kilo -Watt, kilo- Volt -Ampere (HP, kW, KVA), as the case may be. The fraction of less than 0.5 shall be rounded to next 0.5. The billing of energy charges will be done on complete 1.0 (one) kilo-watt-hour (kWh) or kilo-volt-ampere-hour (kVAh) or kilo-volt-ampere-reactive hour (kVArh), as the case may be.
8) Maximum Demand in a month means the highest value of average KVA or kW as the case may be, delivered at the point of supply of the consumer during any consecutive 30 minutes in the said month.
9) The Company may install KWh and kVArh meter for ascertaining power factor, reactive units and KWh units.
10) Payment of penal charges for usage in excess of contract demand/load for any billing period does not entitle the consumer to draw in excess of contract demand/load as a matter of right.
11) ToU charges wherever applicable unless other wise notified shall be levied for the energy consumption during the period between 07.00 hours and 11.00 hours; and between 18.00 hours and 22.00 hours, termed as PEAK HOURS. Night hours concession wherever applicable will be given for the energy consumption

during the period between 22.00 hours and 06.00 hours next day, termed as 'OFF PEAK HOURS'.

12) The fuel cost and power purchase adjustment charges shall be applicable in accordance with the formula approved by the Gujarat Electricity Regulatory Commission from time to time.

13) Delay Payment Charges
    a. No delay payment charges will be levied if the bill is paid on or before due date indicated in the bill.
    b. Delay payment charges, if the bill is paid after due date, will be levied at the rate of 0.5% per week or part thereof on the outstanding bill from the date of billing till the date of payment.

14) Statutory Levies:

These tariffs are exclusive of Electricity Duty, Tax on Sales of Electricity, Taxes and other Charges levied/may be levied or such other taxes as may be levied by the Government or other Competent Authorities on bulk/retail supplies from time to time.

PART-I

RATE SCHEDULE - LOW /MEDIUM TENSION
230/400 Volts

1. Rate: Residential

This tariff shall be applicable to the services for the lights, fans, heating and small electrical appliances such as refrigerators, cookers, heaters, water pump and small motors having individual capacity not exceeding 2 BHP attached to domestic appliances in residential premises.

a) **Single phase supply (aggregate load up to 6 KW)**
b) **Three phase supply (aggregate load including motor load exceeding 6 KW)**

1.1 FIXED CHARGES: -

A	Single Phase Supply	Rs. 5.00 per installation per month
B	Three Phase Supply	Rs.15.00 per installation per month

PLUS

1.2 ENERGY CHARGES: -

i	First 50 units during the month	270 Paise/unit
ii	Next 50 units during the month	290 Paise/unit
iii	Next 100 units during the month	335 Paise/unit
iv	Next 50 units during the month	365 Paise/unit
v	Next 50 units during the month	395 Paise/unit
vi	Above 300 units during the month	425 Paise/unit

2. Rate: Commercial

This tariff shall be applicable to services for lights, fans, heating and electrical appliances such as refrigerators, cookers, heaters, HVAC and small motors having individual capacity not exceeding 2 BHP attached to the appliances in Commercial Premises which are not covered in Residential and General.

a. Single phase supply (aggregate load up to 6 KW)

b. Three phase supply (aggregate load including motor load exceeding 6 KW)

2.1 FIXED CHARGES:

A	Single Phase Supply	Rs. 45.00 per installation per month
B	Three Phase Supply	Rs. 75.00 per installation per month

PLUS

2.2 ENERGY CHARGES:

i	First 50 units during the month	330 Paise/unit
ii	Next 50 units during the month	370 Paise/unit
iii	Next 50 units during the month	410 Paise/unit
iv	Next 350 units during the month	450 Paise/unit
v	Next 500 units during the month	475 Paise/unit
vi	Above 1000 units during the month	490 Paise/unit

3. Rate: General

This tariff will be applicable for use of energy for lights, fans, heating, general load and motive power in premises: -

i. Crematoriums and Government and Municipal Hospitals.
ii. Charitable Institutions like hospital, dispensary, educational and Research Institute and Hostel attached to such Institution, religious premises exclusively used for worship or community prayers, registered with Charity Commissioner and specifically exempted from levy of general tax under section 2 (13) of Bombay Trust Act, 1950 read with section 9 of The Income Tax Act, 1961.
iii. Public streets Lights, gardens and conveniences.
iv. Water works and sewerage pumping services operated by Municipal Corporations.

Note: Halls or gardens or any portion of the above premises let out for consideration or used for commercial activities at any time shall be charged at Commercial tariff.

a. **Single phase supply (aggregate load up to 6 KW)**

b. **Three phase supply (aggregate load including motor load exceeding 6 KW)**

3.1 FIXED CHARGES:

A	Fixed Charges	Rs.20.00 per installation per month

PLUS

3.2 ENERGY CHARGES:

i	Energy Charges	315 Paise/unit

4. Rate: LTP

This tariff is applicable for aggregate contracted motive power load not exceeding 50 BHP.

4.1 FIXED CHARGES:

A	First 10 BHP	Rs.20/- Per BHP per month
B	Next 10 BHP	Rs.30/- Per BHP per month
C	Above 20 BHP	Rs.35/- Per BHP per month

4.2 ENERGY CHARGES:

i	Up to 10 BHP	330 Paise/unit
ii	10.1 – 15 BHP	350 Paise/unit
iii	Above 15 BHP	375 Paise/unit

4.3 MINIMUM BILL per installation per month (excluding meter charges):

(a)	For the Contracted load	Rs 100/- per BHP per month

Note:

a. The minimum charges specified above should be payable only if fixed charges and Energy Charges fall short by minimum billed amount.
b. The consumers having aggregate contracted load above 20 KVA can opt for Rate LTMD. The option to switch over from Rate LTP to Rate LTMD and vice versa can be exercised twice in a calendar year by giving one-month notice in writing.

5. Rate: LTMD

This tariff shall be optionally available to consumers using electricity for motive power services with contracted load up to 50 HP and having minimum contract demand of 20 KVA and compulsory for contracted load above 50 HP to 125 HP

i. The option can be exercised to switchover from LTMD to LTP and vice versa twice in a calendar year by giving not less than 30 days notice in writing for connected load up to 50HP.
ii. For the optional LTMD tariff consumers has to provide metering system in the event when proper metering is not provided by the Company.

5.1 DEMAND CHARGES:

A	Up to 50 KVA of billing demand.	Rs. 50/- per KVA/month
B	Above 50 KVA & up to 60 KVA billing demand	Rs. 60/- per KVA/month
C	Above 60 KVA of billing demand	Rs.70/- per KVA/month
D	In excess of contract demand	Rs. 180/- per KVA/month

Note: BILLING DEMAND: - Billing demand during the month shall be the highest of the following:

i) Maximum demand recorded during the month.
ii) 85 % of the contract demand.
iii) 20 KVA

PLUS

5.2. ENERGY CHARGES:

i	Energy charges	385 Paise/unit

PLUS

5.3 REACTIVE ENERGY CHARGES (KVARH units):

For installation having contracted load of 50 HP and above

(a)	For all the reactive units drawn during the month	10 Paise/kVArh

6. Rate: TS- Temporary Supplies:

6.1 ENERGY CHARGES:

i	Energy Charges	470 Paise/ unit

7. Rate: AGP

This tariff is applicable to motive power services used for irrigation purpose.

The rates for following group are as under

7.1 FIXED CHARGES:

A	Fixed Charges	Rs. 10.00 per BHP per month

PLUS

7.2 ENERGY CHARGES:

i	Energy Charges	50 Paise/unit

Note:

1. The agricultural consumers shall be permitted to utilize one bulb up to 40 watts in the Pump House without recovering any charges. Any further extension or addition of load will amount to unauthorized extension.
2. No machinery other than pump for irrigation will be permitted under this tariff.

PART-II

RATE SCHEDULE FOR SERVICE AT HIGH TENSION

8 Rate: HTMD -1

<u>This tariff shall be applicable for supply of energy at 3.3KV and above for industrial purpose, water works, pumping and similar activities and contracting for demand of 100 KVA or more.</u>

8.1. DEMAND CHARGES:

8.1.1 For billing demand up to contract demand

A	First 500 KVA of billing demand	Rs. 80/- per KVA per month
B	Next 500 KVA of billing demand	Rs. 110/- per KVA per month
C	Above 1000 KVA of billing demand	Rs 125/- per KVA per month

8.1.2 For billing demand in excess of contract demand

a)	For Billing demand in excess over Contract demand	b)	Rs. 335/- per KVA per month

Note: BILLING DEMAND: Billing demand shall be the highest of the following: -

a. Actual maximum demand established during the month
b. 85 per cent of the Contract Demand, and
c. 100 KVA

PLUS

8.2. ENERGY CHARGES:

i	Up to 1000 KVA	380 Paise/unit

ii	Above 1000 KVA	390 Paise/unit

PLUS

8.3. TIME OF USE CHARGES:

(These charges shall be levied from a consumer having Contract Demand or actual demand of 500 KVA and above)

For energy consumption during the two peak periods, viz 0700 Hrs to 1100 Hrs and 1800 Hrs to 2200 Hrs	70 paise per unit

PLUS

8.4 POWER FACTOR:

Power Factor Adjustment Charges: -

1. The power factor adjustment charges shall be levied at the rate of 1% on the total amount of electricity bills for the month under the head "Demand Charges" and "Energy Charges " for every 1% drop or part thereof in the average power factor during the month below 90% up to 85 %.
2. In addition to the above clause, for every 1% drop or part thereof in average power factor during the month below 85% at the rate of 2% on the total amount of electricity bill for that month under the head "Demand Charges" and "Energy Charges ", will be charged.

Power Factor Adjustment Rebate: -

If the average power factor of the consumer's installation in any month is 95%, the consumer will be entitled to a rebate at the rate of 1% in excess of 95% power factor on the total amount of electricity bill for that month under the head "Demand Charges" and "Energy Charges ", for every 1% rise or part thereof in the average power factor during the month above 95%.

8.5 LIGHTING AND NON-INDUSTRIAL LOADS:

The consumption of lights and fans and other non-industrial loads of the factory building as also the consumption of crèche, laboratory, stores, timekeeper's Office, yards, watch and ward, first aid centers, and dispensaries during a month registered at the main meter on HT side shall be charged at the energy charges specified above.

8.6 **NIGHT TIME CONCESSION: -** The energy consumed during night hours between 22.00 hours and 06.00 hours next day (recorded by the tariff meter operated through time switch or built in feature of time segments, if incorporated) as is in excess of one third of total energy consumed during the month, shall be eligible for concession of 50 Paise per KWH. The meter and time switch shall be procured and installed by consumer at his cost, if required by the Company. The Company, if provided by consumer, will seal the metering equipment.

8.7 REBATE FOR SUPPLY AT EHV:

Sr. No.	**On Energy Charges:**	**Rebate @**
(a)	If supply is availed at 33/66 KV	0.5 %
(b)	If supply is availed at 132 KV and above	1.0 %

9 Rate HTMD - 2

This tariff shall be applicable for supply of energy to consumers at 3.3 KV and above for contracting the demand of 100 KVA and above and requiring power for:

a) Hospitals, Hotels, Military Installations, Studios, Aerodrome, Cinema, Auditorium,
b) Bank Offices, Educational Institutions, Film Production, Railways and such other establishments where load is of non-industrial nature.
c) Purposes not covered under the tariff HTMD-1.

9.1. DEMAND CHARGES:

9.1.1 For billing demand up to contract demand

A	First 500 KVA of billing demand	Rs 100/-per KVA
B	Above 500 KVA	Rs 130/- per KVA

9.1.2 For billing demand in excess over contract demand

For billing demand in excess over contract demand	Rs.360/- per KVA

Note: BILLING DEMAND: Billing demand shall be the highest of the following: -

a. Actual maximum demand established during the month

b. 85 per cent of the Contract Demand, and

c. 100 KVA

PLUS

9.2. ENERGY CHARGES:

i	Up to 500 KVA	395 Paise/unit
ii	Above 500 KVA	400 Paise/unit

PLUS

9.3. TIME OF USE CHARGE:

(These charges shall be levied from a consumer having contract demand or actual demand of 500 KVA and above)

For energy consumption during the two peak periods, viz, 0700 Hrs to 1100 Hrs and 1800 Hrs to 2200 Hrs.	70 paise per unit

PLUS

9.4 POWER FACTOR:

9.4.1 Power Factor Adjustment Charges: -

a) The power factor adjustment charges shall be levied at the rate of 1% on the total amount of electricity bills for the month under the head "Demand Charges" and "Energy Charges " for every 1% drop or part thereof in the average power factor during the month below 90% up to 85 %.

b) In addition to the above clause, for every 1% drop or part thereof in average power factor during the month below 85% at the rate of 2% on the total amount of electricity bill for that month under the head "Demand Charges" and "Energy Charges ", will be charged.

9.4.2 Power Factor Adjustment Rebate: -

If the average power factor of the consumer's installation in any month is 95%, the consumer will be entitled to a rebate at the rate of 1% in excess of 95% power factor on the total amount of electricity bill for that month under the head "Demand Charges" and "Energy Charges ", for every 1% rise or part thereof in the average power factor during the month above 95%.

9.5 REBATE FOR SUPPLY AT EHV:

Sr. No.	**On Energy Charges:**	**Rebate @**
(a)	If supply is availed at 33/66 KV	0.5 %
(b)	If supply is availed at 132 KV and above	1.0 %

10 Rate- NTCT (NIGHT TIME CONCESSIONAL TARIFF)

This is nighttime concessional tariff for consumers for regular power supply who opt to use electricity **EXCLUSIVELY** during night hours between 22.00 hours and 06.00 hours next day. The consumer shall provide the switching arrangement as shall be acceptable to the Company to regulate supply hours.

a) Fixed Charges: 30 % of the fixed/demand charge
(Under the relevant tariff)

PLUS

b) Energy Charge: 310 Paise per KWH

7.5 List of Organizations and Individuals who filed objections / suggestions

1	Yogesh C. Jariwala
2	Balkrushna C. Dharia
3	Kantilal U. Dakoria
4	Rajeshkumar J. Purohit
5	Maheshkumar B. Desai
6	Ganeshchandra D. Katare
7	Kadirkhan A. Vahabkhan
8	Bipinchandra I. Gonawala
9	Jitendra S. Danecha
10	Kantilal C. Pastagia
11	Maheshkumar S. Choksi
12	Rameshbhai N. Avaiya
13	Vipulbhai V. Avaiya
14	Jagdishbhai K. Avaiya
15	Amarsinh Chavda
16	Kirit J. Mekwan
17	Consumer Education & Research Society
18	Additional Chief Engineer
19	Utility User's Welfare Association
20	Mohmad Iqbal Gulam Husain Faram
21	Rupeshkumar B. Modi
22	Laxmanbhai D. Patel
23	Ashok D. Jariwala
24	Mahadeo I. Desai
25	Sunil B. Oza
26	Satishkumar L. Patel
27	Jayeshkumar S. Ghadiyali
28	Umeshbhai D. Tailor
29	Surat Diamond Association
30	Mahendrabhai Patel

7.6 List of participants in Public Hearing

1. Consumer Education & Research Society
2. Rajeshkumar J. Purohit
3. Utility User's Welfare Association
4. Maheshkumar B. Desai
5. Kantilal C. Pastagia
6. Mahadeo I. Desai
7. Ganeshchandra D. Katare
8. Additional Chief Engineer, Surat Municipal Corporation
9. Surat Diamond Association
10. Kantilal U. Dakoria
11. Jitendra S. Danecha
12. Jayeshkumar S. Ghadiyali
13. Amarsinh Chavda
14. Kirit J. Mekwan
15. Sunil B. Oza