#### **GUJARAT ELECTRICITY REGULATORY COMMISSION**



# Annual Performance Review for FY 2009-10 & Aggregate Revenue Requirement for FY 2010-11

For

**Paschim Gujarat Vij Company Limited** 

Case No. 995/2010

31<sup>st</sup> March 2010

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## GUJARAT ELECTRICITY REGULATORY COMMISSION (GERC)

#### **AHMEDABAD**

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#### **ABBREVIATIONS**

1	APR	Annual Performance Review
2	ARR	Aggregate Revenue Requirement
3	A&G	Administration and General Expenses
4	BADP	Border Area Development Project
5	CAGR	Compounded Annualized Growth Rate
6	CAPEX	Capital Expenditure
7	CERC	Central Electricity Regulatory Commission
8	Ckt-Km	Circuit Kilometre
9	Control Period	FY 2008-09, FY 2009-10, FY 2010-11
10	DD & DNH	Diu & Daman and Dadara Nagar Haveli
11	DGVCL	Dakshin Gujarat Vij Company Limited
12	FPPPA	Fuel Price and Power Purchase Adjustment
13	FY	Financial Year
14	GEB	Gujarat Electricity Board
15	GERC	Gujarat Electricity Regulatory Commission
16	GETCO	Gujarat Energy Transmission Corporation Limited
17	GFA	Gross Fixed Assets
18	GoG	Government of Gujarat
19	GSECL	Gujarat State Electricity Corporation Limited
20	GUVNL	Gujarat Urja Vikas Nigam Limited
21	H1	First half i.e (April to September) of FY 2009-10
22	H2	Second half i.e (October to March) of FY 2009-10
23	HT	High Tension
24	HVDS	High Voltage Distribution System
25	IPTC	Independent Power Transmission Company
26	R&M	Repairs and Maintenance
27	kWh	Kilo Watt Hour
28	kVAh	Kilo Volt Ampere Hour
29	MGVCL	Madhya Gujarat Vij Company Limited

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30	MU	Million Units
31	MW	Mega Watt
32	MYT	Multi-Year Tariff
33	O&M	Operation & Maintenance
34	PAF	Plant Availability Factor
35	PGVCL	Paschim Gujarat Vij Company Limited
36	PGCIL	Power Grid Corporation of India Limited
37	PLF	Plant Load Factor
38	RE	Revised Estimates
39	RoE	Return on Equity
40	S/S	Sub Station
41	SLDC	State Load Dispatch Centre
42	T&C	GERC (Terms & Conditions of Tariff) Regulation, 2005
43	TPL-A	Torrent Power Limited- Ahmedabad
44	TPL-S	Torrent Power Limited- Surat
45	UGVCL	Uttar Gujarat Vij Company Limited
46	WRPC	Western Region Power Committee
47	WIP	Work in Progress
48	YoY	Year on Year



## BEFORE THE GUJARAT ELECTRICITY REGULATORY COMMISSION AT AHMEDABAD

Case No. 995/2010

Date of the Order: 31st March, 2010

#### **CORAM**

Dr. P. K. Mishra, Chairman Shri Pravinbhai Patel, Member

#### **ORDER**

#### Background and Brief History

#### 1.1. Background

The Paschim Gujarat Vij Company Limited (herein after referred to as PGVCL or Petitioner) has filed a petition under Section 62 of the Electricity Act, 2003, read with the Gujarat Electricity Regulatory Commission (Terms & Conditions of Tariff) Regulations, 2005 (hereinafter referred to as 'Terms & Conditions of Tariff') and the Gujarat Electricity Regulatory Commission (Multi-Year Tariff Framework) Regulations, 2007 (hereinafter referred to as 'MYT Regulations'). The petition was filed on 22<sup>rd</sup> December, 2009, for Annual Performance Review (APR) of FY2009-10 and approval to continue existing tariff for FY 2010-11 for distribution business, under MYT Control Period FY 2008-09 to FY 2010-11. Based on preliminary scrutiny and evaluation the Commission admitted the petition of PGVCL on 4<sup>th</sup> January 2010.

#### 1.2. Paschim Gujarat Vij Company Limited (PGVCL)

The Government of Gujarat (hereinafter referred to as GoG) notified the Gujarat Electricity Industry (Reorganization and Regulation) Act 2003 (hereinafter referred to

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as the "Act"), in May 2003, for the reorganization of the entire power sector in the state of Gujarat. Pursuant to the above, GoG in its letter vide GO/19<sup>th</sup> August, 2003, had directed the Gujarat Electricity Board (hereinafter referred to as GEB) to form four Distribution Companies (Discoms), based on geographical location of the circles. Accordingly, the four distribution companies had been incorporated with the Registrar of Companies on 15<sup>th</sup> September, 2003. One of the distribution companies, PGVCL is engaged in the distribution of electricity in the west zone of Gujarat.

On 15<sup>th</sup> October, 2003, PGVCL obtained its certificate of Commencement of Business. However, the company could not commence its operations during the financial years ended 31<sup>st</sup> March 2004 and 31<sup>st</sup> March, 2005. The Company started commercial function from 1<sup>st</sup> April, 2005.

#### 1.3. Commission's Order for First Control Period

On 31<sup>st</sup> July, 2008, the Petitioner filed its petition under the Multi-Year Tariff framework for FY 2008-09, FY 2009-10 and FY 2010-11, in accordance with the Gujarat Electricity Regulatory Commission (Multi-Year Tariff Framework) Regulations, 2007, notified by the Gujarat Electricity Regulatory Commission (hereinafter referred to as the GERC/Commission). The GERC, exercising the powers vested in it under Sections 61 and 62 of the Electricity Act 2003 and other provisions enabling it, issued the Multi-Year Tariff Order for the Control Period comprising FY 2008-09, FY 2009-10 and FY 2010-11, on 17<sup>th</sup> January, 2009. Before issuing the Order, the Commission took into consideration the submissions made by the Petitioner, the objections raised by various stakeholders, the response of the Petitioner, issues raised during the public hearing and all other relevant material.

#### 1.4. Commission's Order on APR of First year of the control period

The petitioner filed its petition for Annual Performance Review (APR) of FY 2008-09 and for Annual determination of Tariff for FY 2009-10 on 21<sup>st</sup> August 2009. Based on preliminary scrutiny and evaluation the Commission admitted the petition on 4<sup>th</sup> September 2009. The Commission in exercise of the powers vested in it under Sections 61 and 62 of the Electricity Act 2003 and other provisions enabling it in this behalf and after taking into consideration the submissions made by the Petitioner, the objections by various stakeholders, response of the Petitioner, issues raised during the public hearing and all other relevant material, issued the order on APR of FY 2008-09 and tariff determination for FY 2009-10 on 14<sup>th</sup> December 2009.

The above order was issued based on the provisional accounts for FY 2008-09. The Petitioner has now submitted the audited accounts for FY 2008-09. The Commission has taken note of the same. Based on this observation, the approved ARR for FY 2008-09 is enclosed as Annexure 1.3 to this Order.



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#### 1.5. Admission of the current petition and public hearing process

The Commission undertook a preliminary evaluation and analysis of the petition submitted by the Petitioner and admitted the petition for Annual Performance Review (APR) of FY 2009-10 and approval to continue existing tariff for FY 2010-11 for distribution business (Case No 995 of 2010) on 4<sup>th</sup> January 2010.

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

The Public Notice was published in the following newspapers on 7<sup>th</sup> January 2010 inviting objections/suggestions from stakeholders on the ARR petition filed by it.

- 1. Divya Bhaskar (In all editions of the state)
- 2. Indian Express (In all editions of the state)

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

Interested parties/stakeholders were asked to file their objections and suggestions on the petition on or before 8<sup>th</sup> February, 2010. The Commission received objections/suggestions on the petition from sixteen respondents. The Commission thereafter fixed the dates of public hearing on 25<sup>th</sup> to 26<sup>th</sup> February and 3<sup>rd</sup> March, 2010 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.

The issues and concerns raised by various stakeholders during the course of the public hearing, as well as the written submission, have been carefully examined by the Commission. The details of the organizations and individuals who filed their objections/suggestions on the petitions are given in Annexure-1.1. The details of objectors who participated in the public hearing are given in Annexure-1.2.

#### 1.6. Contents of the Order

The order comprises of eight chapters as under:

1. The first chapter provides a background regarding the Petitioner, the petition filed 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, the Petitioner's responses and the Commission's views on the responses.
- 3. The third chapter details the process of Annual Performance Review of FY 2009-10.
- 4. The fourth chapter analyses the Aggregate Revenue Requirement for FY 2010-11.
- 5. The fifth chapter deals with compliance of earlier directives and issue of fresh directives.
- 6. The sixth chapter deals with fuel and power purchase cost adjustment.
- 7. The seventh chapter deals with computation of wheeling charges and cross-subsidy surcharge.
- 8. The eight chapter discuses the tariff philosophy and design approved by the Commission.

#### 1.7. Approach of this Order

In this Order, the Commission has analyzed the petition submitted by the Petitioner with regard to the Annual Performance Review (APR) for FY 2009-10 and the determination of Aggregate Revenue Requirement (ARR) for FY 2010-11. 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 17<sup>th</sup> January, 2009 and subsequently revised the ARR for FY 2009-10 in its Order dated 14<sup>th</sup> December, 2009.

Considering this background the Commission has undertaken an annual performance review for FY 2009-10 based on the information submitted for the first six months of the FY 2009-10 and the analysis of the projections submitted by the petitioner for the remaining six months of the FY 2009-10. In regard to the annual tariff review for FY 2010-11, the Commission has analyzed the projections submitted by the petitioner.

#### 1.8. Approach for APR for FY 2009-10

Regulation 9.1 of the MYT Regulations provides that where the ARR of a generating company or a licensee is covered under a Multi-Year Tariff framework, the licensee shall be subject to Annual Performance Review (APR) during the Control Period.



With regard to the scope of the APR, Regulation 9.3 of the MYT Regulations provides that the scope of the APR shall include a comparison of the performance of the generating company or the licensee, with the approved forecast of aggregate revenue requirement and expected revenue from tariff and charges.

Accordingly, the Commission has now undertaken a review of the performance for the FY 2009-10 based on the submission of the petitioner. The petitioner has also submitted computation of gains and losses for the FY 2009-10. However, the Commission has not undertaken computation of gains/losses for the FY 2009-10. The computation of gains and losses for the FY 2009-10 shall be undertaken based on the audited accounts of the petitioner

#### 1.9. Approach for ARR for FY 2010-11

For FY 2010-11 which is the third (last) year of the Control Period, the Petitioner has approached the Commission for revision of the Aggregate Revenue Requirement (ARR) and approval to continue existing tariff for FY 2010-11. The Commission has now reviewed the submission of the petitioner. The Commission has observed that revised components of the ARR for FY 2010-11 are different compared to ARR approved under the MYT Order dated 17<sup>th</sup> January 2009.

The variance in the details given in the submission is primarily on account of the variance in the actual performance for the FY 2008-09 and the first six months of FY 2009-10. In the light of this background, the Commission has reviewed and revised the various components of ARR where considered fit. While considering the revision of the ARR the Commission has been primarily guided by the following principles:

- Controllable parameters have been considered at the level approved under the MYT Order unless the Commission considers there are suitable reasons for revision of the same.
- Uncontrollable parameters have been revised based on the actual performance observed for the FY 2008-09 and the first six months of the FY 2009-10.



## 2. Brief outline of objections raised, response from Petitioner and Commission's Views

#### 2.1. Background

In response to the public notice inviting objections/suggestions from stakeholders on the petition filed by the Petitioner and other licensees for Annual Performance Review (APR) of FY 2009-10 and approval to continue existing tariff for FY 2010-11 for distribution business under MYT Control Period FY2008-09 to FY2010-11, sixteen consumers/consumer organizations filed their objections/suggestions in writing. Fourteen stakeholders participated in the public hearings held from 25<sup>th</sup> to 26<sup>th</sup> February and 3<sup>rd</sup> March, 2010, jointly for GETCO, GSECL and the four government distribution utilities (DGVCL, MGVCL, PGVCL, UGVCL). These also included objectors who had not filed any objections. The objections raised before the Commission, the Petitioner's response for the same and the Commission's view are presented below:

#### 2.2. Revenue gap for FY 2009-10

#### **Objections**

Some stakeholders have highlighted the high gap of Rs. 14935 lakhs shown by the Petitioner and asked the Commission to reject the same on the grounds of inefficiencies of the petitioner. They have specifically highlighted increases in distribution loss and power purchase cost and reduction in sales as the prime reasons for the huge revenue gap, which ought to be rejected.

#### PGVCL's response

While arriving at the gap for FY2009-10 with a revised estimation of the expenditure and revenue, the appropriate effect of gain/loss due to controllable and uncontrollable factors has been gauged and stated. Further, the Petitioner has not proposed any tariff increase for the year 2010-11.



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

The Commission has taken note of the objections and the response of the petitioner.

#### 2.3. Increase in Distribution Loss in FY 2009-10

#### **Objections**

Several objections have been raised with respect to increase in distribution loss

#### PGVCL's response

The Company has taken various steps as mentioned below for reduction of distribution loss. The Company has been making all-out efforts to reduce distribution losses and ensure that the loss reduction trajectory, as approved by the Commission, is followed.

#### **Technical loss reduction activities**

- Replacement of deteriorated conductor with optimum size.
- Bifurcation of feeders
- Proper maintenance, i.e., removal of joints/crossings and rejumpering, etc.
- Installations of APFC panels
- Installation of an Amorphous Transformer
- Lowering of LT/HT ratio through HVDS

#### **Commercial loss reduction activities**

- Replacement of all conventional three-phase meters by static meters
- Replacement of single-phase meters by high quality/static meters
- Enhanced vigilance activity
- Creation of Checking Squad up to Divisional Level
- Separate checking squads for High-Tension consumers
- Review of consumers with zero consumption, locked bills, and less consumption
- Frequent reading of heavy consumption/seasonal consumers
- Providing Automatic Meter Reading Facility to HT consumers and highly valued (seasonal/ high consumption) LT consumers
- Providing MMB and sealing of single-phase consumers



- Maximizing the release of new connections, particularly in rural areas for reducing losses of JGY feeders
- Providing insulated/coated/Arial bunch conductor in theft-prone areas

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

The Commission has taken note of the objection. It must be mentioned here that although the Petitioner has proposed a higher distribution loss for FY 2009-10 based on the increase in distribution loss during H1 of FY 2009-10, however the Commission has only estimated the energy requirement based on the projected distribution losses and it will undertake the true-up based on the MYT approved distribution losses during the next APR process.

#### 2.4. Filing of single petition by all the Distribution licensees

#### **Objections**

Some stakeholders have objected that as GUVNL purchases power on behalf of all the distribution licensees, they must file only one petition.

#### PGVCL's response

All four distribution companies are unbundled entities of the erstwhile Gujarat Electricity Board and licensees for distribution of power within their service area. As per the provisions and GERC (Terms and Conditions of Tariff) Regulations 2005, each distribution licensee is required to file a separate petition for the approval of ARR and determination of tariff with the Commission. A distribution licensee is filing the tariff petition since it has commenced commercial operations with effect from 1<sup>st</sup> April'05.

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

As per the GERC (Terms and Conditions of Tariff) Regulations 2005, each distribution licensee is required to file a separate petition.



#### 2.5. Procurement of Sub-standard material

#### **Objections**

Some stakeholders have objected that the Petitioner purchases sub-standard equipment and material which do not qualify under the accepted quality parameters.

#### PGVCL's response

The Petitioner has replied that it purchases material with ISI mark or material which conformed to related IS and other quality standards. Before accepting the material, sample testing is carried out at the Supplier's workshop as well as at a Government-approved laboratory like ERDA on a random basis.

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

The Commission has taken note of the objections and the response of the petitioner.

#### 2.6. Fixed Charges from HTP- IV and LTP- IV

#### **Objections**

Some stakeholders have requested for reduction in the fixed charges applicable to these categories.

#### PGVCL's response

The Petitioner has replied that the fixed charges of HTP-IV and LTP-IV are as per the respective tariff category. The fixed charges are levied from the consumer to recover the fixed cost which the company will incur, irrespective of consumption and the time of consumption taken by the consumer. Fixed charges mainly cover fixed cost components like cost of infrastructure, employee cost, R&M cost, and A&G cost. Therefore, any kind of discrimination among the tariff categories would lead the Company to pass on the burden to the other tariff categories. Thus, it is not appropriate to have different fixed charges for consumers of the same class category.

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

The Commission has taken note of the objection and the response of the petitioner.



#### 2.7. Interest on Security Deposit

#### **Objections**

Some stakeholders have raised objections that the Petitioner should also accept Fixed Deposits and National Saving Certificates as security deposit in lieu of cash from consumers. Further, it has been suggested that the rate of interest on deposits should be raised to twelve percent from the existing six percent. It is also suggested that the Petitioner shall issue equity shares against the security deposit to the consumers.

#### PGVCL's response

The Petitioner has submitted that interest on security deposit is given to the consumer as per the regulation notified by the Commission. The Commission takes into consideration all relevant factors prevailing at the time of deciding such matters. It is further submitted that the Commission in its Notification No.8 of 2005, Clause No. 4.11, has prescribed norms for Security Deposit from consumers.

As regards the suggestion of the respondent to accept Security Deposit in the form of Bank Guarantee/NSC instead of cash, this will result in a greater requirement of Working Capital since the cash collected towards Security Deposit is utilized by the Company in funding its working capital requirement. The Company has to incur expenditure in advance for the revenue realization from consumers takes place after a gap of two-three months, depending on the category of consumers. In case of consumers covered under monthly billing, the consumer starts consuming power from the very first day of the month and the revenue is realized after the billing at the end of the month and thereafter the grace period for payment of bill. Similarly, in the case of consumers covered under bi-monthly billing, the revenue realization takes place almost after three months.

Moreover, the Company has a huge number of HT/LT consumers in their distribution area. In case all HT/LT consumers are allowed to submit Bank Guarantees/NSCs in lieu of cash, it will be difficult for the company to track, preserve and maintain the record of receipts of Bank Guarantees/NSCs.

This will result in a substantial increase in administrative work (requirement of additional manpower, stationery, communication, correspondence with consumers, etc.) for the Company, to maintain its records of Bank Guarantees/NSCs; carefully preserve the Bank Guarantees/NSCs up to their validity periods; monitor the expiry of Bank Guarantees/NSCs of each consumer; and thereafter ensure the renewal of the

same before its expiry. Any increase in expenditure on account of such a change shall ultimately pass through the tariff and will lead to an increase in the tariff.

In view of the above, it will not be appropriate to accept the suggestion of the respondents regarding accepting Bank Guarantees/NSCs instead of cash towards Security Deposit, in the overall interest of both the consumers as well as the Company.

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

The Commission is of the opinion that it may not be practical for the Petitioner to accept Fixed Deposits and National Saving Certificates as security deposit from all the consumers in lieu of cash. The rate of interest of a security deposit is as defined in the regulations. The consumer is not entitled to equity shares in lieu of security deposit because the money deposited with the Petitioner is towards security of the services and not towards equity investments.

#### 2.8. Long Pending list of Agriculture Connections

#### **Objections**

Some stakeholders raised the problem that consumers have to wait for a very long period to get an agriculture connection. It was highlighted that some applications were pending since FY1992-93 and have not received connections till date.

#### PGVCL's response

The Petitioner has responded that agriculture connections are released as per the directions of the state government.

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

The Commission has taken a serious note of this objection. It directs the Petitioner to submit the year-wise status of pending applications. The Petition shall also submit a report containing plan and strategy to clear its huge back-log of pending agriculture connections.

#### 2.9. Power factor rebate and penalty

#### **Objections**

Some stakeholders have requested that power factor adjustment charges shall be applicable only on energy charge and not on demand charges.



During the course of the hearing, the Petitioner responded that they agree to the suggestion made by the stakeholders.

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

Based on the submission made by the stakeholders and the response of the Petitioner, the Commission has accepted the suggestion and accordingly revised the tariff schedule.

### 2.10. Quantum and quality of supply to Agriculture and Supply Hours to Agriculture

#### **Objections**

Some stakeholders have requested that the Commission allocate a certain percentage of the total energy for agriculture consumption and direct the Petitioner to compulsorily supply the allocated energy to agriculture consumers.

#### PGVCL's response

The Petitioner has responded that currently, minimum eight hours of power supply is provided to the agriculture sector as per the power supply policy related to the agriculture sector. Further, during cropping seasons when requirement of water for irrigation is high, more than eight hours of power is supplied to the agriculture sector by purchasing power from various sources. It's only in the case of an abnormal power shortage situation that supply to the agriculture sector is reduced from eight hours. The shortage is compensated for in the subsequent period as and when the power position improves; thus they don't see a need to compulsorily allocate a percentage of the total energy to agriculture consumers.

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

The Commission has taken note of the objections and the response of the petitioner. The Commission agrees to the views of the Petitioner and it does not feel the need to allocate a fixed percentage of the total energy generated, exclusively for agriculture consumption.

#### 2.11. Minimum ceiling in LTP- III to be reduced from 20 kW to 15 kW

#### **Objections**

Some stakeholders have requested to reduce the minimum ceiling in the LTP-III category from 20 kW to 15 kW.



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The Petitioner has responded that they agree to the suggestions made by the stakeholders, but the Commission should ensure that the said change shall be revenue-neutral.

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

Based on the submission made by stakeholders and positive response of the Petitioner, the Commission has accepted the suggestion and accordingly revised the tariff schedule.

#### 2.12. **LFD-I** (Rural)

#### **Objections**

Some stakeholders have highlighted that in the LFD-I (Rural) category, if a part of the residential premises is used for non-residential (commercial) purposes by the consumers located in a rural area with a population up to ten thousand as per Census-2001, the entire consumption is charged under that tariff. It is submitted to revise the population limit from the existing ten thousand to fifteen thousand.

#### PGVCL's response

The Petitioner has responded that they agree to the suggestion made by the stakeholders, but the Commission shall ensure the said change shall be revenue-neutral.

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

LFD-I (Rural) tariff is applicable to services for residential premises located in areas within the Gram Panchayat and as defined in the Gujarat Panchayats Act. Based on the submission made by the stakeholders and the positive response of the Petitioner, the Commission has accepted the suggestion and accordingly revised the tariff schedule.

#### 2.13. Clarification with respect to LTP-V category

A group of consumers who lift surface water from canal/dam/rivers and getting eight hours of supply made a representation before the Commission. It was presented that the Petitioner has informed them that they will be migrated to the LTP-V category. The consumer group objected that as the LTP-V category is applicable to consumers who receive twenty-four hours of electricity supply, they do not qualify for migration.



The Petitioner has responded that only those agriculture consumers who receive twenty-four hours of supply will be migrated to the LTP-V category.

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

The LTP-V category was introduced by the Commission in its last order dated 14 December, 2009. It is clarified that it is applicable to (agriculture) consumers receiving twenty-four hours of supply.

#### 2.14. Responses to be communicated in Gujarati language

#### **Objections**

It was brought to the attention of the Commission that responses to the objections were provided in English language. It was highlighted that the Petitioner shall provide the responses in Gujarati language especially if the objections are raised in Gujarati.

#### PGVCL's response

The Petitioner has accepted the submission and has agreed to reply in Gujarati to all queries which are raised in Gujarati language.

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

The Commission has taken note of the objections and the response of the petitioner. The Petitioner is directed to ensure that all the objections which are raised in Gujarati are replied in Gujarati.

#### 2.15. Non-Compliance of Directives by Distribution licensees

#### **Objections**

In the course of the hearing, several stakeholders raised their objections that the distribution licensees were not complying with the directives issued to them in the tariff orders, especially with respect to metering.

#### PGVCL's response

The Petitioner has responded that it is making all efforts to comply with the directives issued by the Commission and will continue to do so in future.



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

The Commission has taken a note of the objections raised by the stakeholders. The Commission has directed all the distribution licensees to submit the latest update of the compliance report. Further, it also directs the Petitioner to henceforth submit a quarterly compliance report. Any negligence in the form of a delay in the submission of a quarterly compliance report will be viewed as a violation of the Commission's directives.

#### 2.16. FPPPA mechanism

#### **Objections**

Some stakeholders have objected to the FPPPA mechanism and have suggested that it should be discontinued. It was highlighted that FPPPA charges should be split up and shown separately as FPPPA charges on account of fuel price increase and FPPPA charges on account of increase in cost of power purchase. Further, stakeholders have pointed out that the Petitioner buys costly power from the market and does not utilize cheaper power generated by GSECL stations.

#### PGVLC's response

The Petitioner has submitted that detailed calculation (along with split-up) of FPPPA charges, as mentioned by the consumers, is displayed on their web site. Further, it has mentioned that as per the directives of the Commission, the Merit Order is being followed and scheduling of power is done observing the Merit Order sequence whereby power from the cheapest sources is scheduled first and so on. Further, the power is scheduled only if that power fits the Merit Order sequence; otherwise, it remains unscheduled. It is pertinent to mention that by adhering to the Merit Order Protocol, power is being scheduled from the cheapest sources first and so on to reduce the overall cost of power purchase.

The Commission may kindly appreciate that demand and availability of power is a dynamic situation which undergoes changes on a day-to-day and hour to hour basis. Power is scheduled in day ahead for next day, based on projected demand and supply of that day. On a particular day, demand may come down because of various reasons like rains, holidays, temperature variation, and festivals. Availability also undergoes change every day based on forced shutdown of plants, early completion of maintenance of power plants, wind power availability based on wind velocity, etc.



Therefore, scheduling of power cannot remain constant. Everyday, scheduling of power from a particular source is decided based on cost or saving.

The bulk purchase of power is undertaken from various sources and bulk sale of power made to distribution companies/licensees. The estimated demand each day is met through the scheduling of generation of available power in accordance with the Merit Order Protocol, except to meet the technical requirement of Power Plant, Must Run Power Stations, gas based Power Stations having take or pay liability under gas supply agreement and compulsory running of some power plants in certain areas to maintain appropriate voltage in that area (where there are no other power plants), till the estimated demand is met. Thus, the power with the lower variable cost gets scheduled first and so on in that order.

Further, to cater the requirement, power is purchased from all available sources like own generation, share from Central Sector-generating stations and procurement of power from independent private producers, captive power plants, and short-term power traders.

The Gujarat Electricity Regulatory Commission, vide its Tariff Order dated 25th June 2004, has given a direction to observe the Merit Order Process for dispatching power from different power stations and managing schedules thereof. Hence, the Merit Order List is the basis for real time monitoring and for issuing requisition of power. The activities of requisition of power, dispatch instructions to power plants, backing down and picking up of generation and power procurement transactions are carried out by the State Load Despatch Centre in accordance with the Merit Order principle. Further, the day ahead, power scheduled from each generating station is monitored and regulated on real-time basis by SLDC by way of back down/pick-up on real-time basis to meet the variations in demand. Therefore, it is not the case that costlier power is purchased and generation from the cheaper sources is not utilised.

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

The Commission has taken note of the objections and the response of the petitioner.

#### 2.17. Recovery of Reconnection charges without physical disconnection

#### **Objections**

Some stakeholders have raised the objection that the Petitioner is collecting reconnection charges without any physical disconnection.



The Petitioner has denied the clams and replied that it collects reconnection charges only in the case of physical disconnection.

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

The Commission has taken note of the objections and the response of the petitioner. It reiterates that the Petitioner shall ensure that it shall collect reconnection charges only in the case of physical disconnection.

#### 2.18. Agriculture connections in dark zone

#### **Objections**

Some stakeholders have raised the objection that the Petitioner shall start releasing agriculture connection in the dark zone.

#### PGVCL's response

The Petitioner has submitted that the Government of Gujarat has given them instructions not to release any new agriculture connections in the dark zone till further notice; hence, they are not releasing any new connections in the dark zone.

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

The Commission has taken note of the objections and the response of the petitioner.

## 2.19. Separate Tariff for Brick Manufacturers instead of present agreement with Agriculture consumers

#### **Objections**

Some stakeholders have demanded that there should be a separate category for brick manufacturers instead of the current agreement with agricultural consumers.

#### PGVCL's response

The Petitioner has submitted that supply to brick manufactures by an agriculture consumer is an optional facility and an agriculture consumer can opt for it if he desires. It is not a compulsory requirement.

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

The Commission has taken note of the objections and the response of the petitioner.



#### 2.20. Ad-valorem structure of Electricity Duty

#### **Objections**

Several representations were made to the Commission, related to the levy of Electricity Duty in the state on tariff payable by consumers including the FPPA. It was pointed out that any increase in the power bills due to an increase in FPPPA puts an additional burden on the consumer due to the compounding effect of the *advalorem* structure of Electricity Duty. It was suggested that the duty shall be charged only on energy charges and on a per unit basis.

#### **PGVCL's response**

The Petitioner has submitted that the Electricity Duty is as per the current regulations.

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

It is a fact that the imposition of the Electricity Duty is the prerogative of the Government. However, in view of the public concerns on the issue, the Commission requested Chief Electrical Inspector, Government of Gujarat to represent the State Government in the public hearing. In response to the issues, it was submitted that the above recommendations could only be included in the budget exercise of next year as recommendations for the current budget have already been made.

The Commission feels that the system of *ad-valorem* duty compounds the impact of any tariff increase further. Due to the current *ad-valorem* structure of Electricity Duty, its impact on the tariff payable by consumers in the state of Gujarat is on the higher side when compared to other states. In effect, even though the Commission may not allow any increase in the retail tariff, any increase in FPPPA charges is compounded by the *ad-valorem* nature of the Electricity Duty. With an increase in tariff, the impact will be much more.

The Commission is of the view that the duty structure needs to be rationalised. The Commission hopes that the Government will, as it was indicated during the public hearing, review the current structure and rationalize it so that the rate of duty becomes reasonable, stable and predictable.



#### 2.21. Meter rent to be recovered only up to the cost of meter

#### **Objections**

Some stakeholders have raised the objection that the Petitioner shall recover meter rent only up to the cost of meter. Once the cost is recovered, they shall stop collecting the meter rent from consumers.

#### PGVCL's response

The Petitioner has submitted that the meter rent is collected not only towards the cost of meters but also towards the maintenance of meters. The rent charges are as per the approved tariff schedule.

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

The Commission has taken note of the objections and the response of the petitioner.

#### 2.22. Similar tariff for Urban and Rural Residential Consumers

#### **Objections**

Some stakeholders have highlighted that rural residential consumers in Gujarat receive twenty-four hours of power supply like urban consumers. Further, factors like energy theft, scattered load and distribution losses are higher in the case of rural consumers. Therefore, tariffs to be charged to rural consumers should be higher or at least equal to the urban consumers.

#### PGVCL's response

The Petitioner has responded that although both urban and rural residential consumers are supplied twenty-four hours of power, there is a difference in the quality of services and Standard of Performance. Therefore, both categories of consumers cannot be considered to be similar. Hence, there is a scheme of differential tariffs.

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

The Commission has taken note of the objections and the response of the petitioner.



#### 2.23. Increase in O&M expenses and Bad and doubtful debts

#### **Objections**

Some stakeholders have highlighted the huge increase in O&M expenses in FY 2009-10 as against the approved values, especially employee expenses and A&G expenses which have increased by more than 30%. The stakeholders have also suggested that the Petitioner should be directed to claim the bad and doubtful debts from defaulters rather than from honest consumers.

#### PGVCL's response

The Petitioner has responded stating that the increase in O&M expenses has been explained in the petition and appropriate treatment has been given while calculating the revenue gap. On the matter of bad and doubtful debts, it is submitted that in any business, there are always some dues which are unrecoverable. Certain provision has to be made for writing off of such dues.

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

The Commission has treated the O&M expenses as controllable (except the Sixth Pay Commission component) and maintained them at the MYT order-approved value for FY 2009-10. The Commission is of the view that the petitioner should undertake adequate measures to reduce the O&M expenses, since these are controllable in nature.

#### 2.24. Increase in the ARR of FY 2010-11

#### **Objections**

Some stakeholders have highlighted the increase in ARR for FY 2010-11.

#### PGVCL's response

Increase in Annual Revenue Requirement for FY 2010-11 is mainly because of increase in Power Purchase Cost, Employee Cost and carry forward revenue gap of FY 2009-10. All other expense parameters are within the range approved by the Commission. Further, the Company has not proposed any tariff increase for the year 2010-11 as the Company would be able to absorb the gap by improving performance parameters and distribution functionalities.



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

It must be noted that the said ARR is proposed by the Petitioner and is not the final ARR. The Commission in its APR process assesses the assumptions made by the Petitioner while estimating the expenses, and accordingly approves what it considers reasonable.

#### 2.25. Voltage Regulation and Bifurcation of Feeders and input letter

#### **Objections:**

An objection was raised with respect to length of 11 kv feeders. It was pointed out that length of 11 kv feeders is in some cases as long as ninty four kms which leads to high line losses. It was further mentioned that petitioner has made long-term plans to establish new EHV sub-stations and bifurcation of the feedes, but has not been able to achieve its target. It was suggested that the feeders must be bifurcated immediately.

#### PGVCL's response:

The Petitioner has replied that it appreciates the concern expressed and it endeavors for reliable power supply to consumers. During the FY 2008-09, thirty five new 66 KV Substations and two hundred and thirty feeders were commissioned. Further, in FY 2009-10 (up to September 2009) twenty five sub-stations and one hundred and thirty six feeders are already commissioned.

#### Commission's analysis:

The Commission has noted the submission of the Petitioner. The Commission directs the petitioner to accelerate the process of bifurcation of feeders and establishment of EHV sub-stations.

#### 2.26. Distribution loss of JGY feeders

#### **Objections:**

The stakeholders have highlighted the high loss of above 60% in JGY feeders. Considering the significant share of consumption of JGY (around 28% of total sales) it is essential that the petitioner should reduce the loss of JGY feeders.

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JGY Category loss has large contribution to overall loss of the Petitioner and, therefore, reduction in JGY Losses is the prime task of the Petitioner. It has taken up this task in a phased manner, whereby, high loss feeders have been assigned to various officers for close monitoring. Due to enhanced vigilance activity and intensive efforts JGY category losses have reduced by more than 5% during the year FY 2008-09 and about 2.5% during the current year upto September 2009.

Distribution Loss of JGY Category for the years FY 2007-08 and FY 2008-09 and FY H1 of 2009-10 are as under.

Unit sent out No. Year Unit sold out [MUs] % Loss [MUs] FY 2007-08 1 3248.89 1099.90 65.84 FY 2008-09 3333.16 1334.69 59.70 3 H1 FY 2009-10 759 1775 57.26

Table 1: Distribution loss in JGY

Following activities have been undertaken for reduction of losses of selected JGY feeders upto September 2009.

Table 2: Activities undertaken for reduction of losses

Sr.	Measures Undertaken		Phase - 1			Total
No.	No. of Feeders		176	213	190	579
	No. of Villages		1571	1614	985	4170
1	Removal of 11kv crossing		2333	2707	3009	12504
2	No of T/C for which meter provided		4682	4813	1795	6835
3	Replacement of old / defective	1ph	114428	121600	73240	309268
4	meters	3ph	2644	2096	1027	5767
5	MMB provided	1ph	104131	115508	64619	284258
6		3ph	1866	1737	844	4447
7	Sealing done	1ph	142196	148847	84906	375949
8	Sealing done	3ph	2709	2223.15	1109	6041
9	Coated conductor to be provided in LT line		3438.18	4673	3878	11989
10	1 ph 2 w / 3 w LT line to be provided where no 3ph connection exists		350.35	453	854	1657
11	De-augmentation of village transformer		990	714	304	2008
12	No. of drives carried out		1961	1614	1903	5478
13	No. of connections released		49848	33539	19389	102776

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

The Commission has taken note of the various activities carried out by the Petitioner to curb JGY losses. However, the Commission is concerned that the loss level is still very high at almost 60%. The Commission directs the Petitioner to target an annual reduction of at least 10% in the loss level.

#### 2.27. Amendment to Guidelines/Regulations related to consumer services

The Commission has observed that several objections were raised before it, which were not directly related to the tariff but related to the grievances of individuals/group of consumers. It was felt that such grievances called for amendment to Guidelines/Regulations related to consumer services.

In the interest of consumers, the Commission *suo moto* directs its office (staff members) to initiate the process of amendment to Guidelines/Regulations related to consumer services.



#### 3. Annual Performance Review for FY 2009-10

The Petitioner, in its petition for Annual Performance Review for FY 2009-10 and tariff determination for FY 2010-11, has estimated expenditure and revenue for FY 2009-10 based on actual expenditure and revenue incurred during H1 of FY 2009-10. The Petitioner has provided a comparison of estimated revenue and expenditure (based on the H1 actual) against each head, with the revenue and expenditure approved by the Commission in its MYT Order, along with the reasons for deviations. In this section, the Commission has analysed the components of the estimated revenue and expenses for FY 2009-10.

#### 3.1. Sales

The Petitioner has submitted category-wise actual sales in H1 and total estimated sales for FY 2009-10 in the APR petition. The revised estimated sales for FY 2009-10 are approx 235 MUs lower than the sales approved by the Commission in its Order dated 14 December, 2009. The revised estimated sales for the complete FY 2009-10 (except agricultural category) are not very different from the approved sale. Hence the Commission approves the estimated sales (sale in the agricultural category is considered as approved in last order). The revised approved sale for FY 2009-10 are shown in Table 3 below.

Table 3: Revised Approved Sale for FY 2009-10

(MU)

Consumer Category	Approved as per Order dt. 14th Dec 2009	Revised Estimates submitted by PGVCL for FY 2009-10	FY 2009- 10 (H1 - Actual)	FY 2009- 10 (H2 - Projected)	Revised Approved for FY 2009-10
LT Consumers					
Residential	2238	2238	1145	1093	2238
Commercial	837	837	424	413	837
Industrial LT	1254	1162	593	569	1162
Public Water Works	286	286	150	136	286
Agriculture	4424	4541	1919	2505	4424
Street Light	70	70	34	36	70
Temporary Supply at LT	0	0	0	0	0
LT Total	9109	9135	4265	4753	9018

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Consumer Category	Approved as per Order dt. 14th Dec 2009	Revised Estimates submitted by PGVCL for FY 2009-10	FY 2009- 10 (H1 - Actual)	FY 2009- 10 (H2 - Projected)	Revised Approved for FY 2009-10
HT Consumers					
Industrial HT	3975	3715	1820	1895	3715
Railway Traction	0	0	0	0	0
HT Total	3975	3715	1820	1895	3715
TOTAL	13084	12850	6085	6648	12733

## 3.2. Distribution Losses and Energy Input Requirement

#### Petitioner's submission

The Petitioner has submitted that it would be able to achieve distribution losses of 29% in FY 2009-10 as against 28% approved by the Commission

The Petitioner has submitted that the revised estimate for distribution loss is 31.50% as against the approved level of 28.00% in the MYT Order. The actual distribution losses for H1 of FY 2009-10 are 35.20%.

The Petitioner has submitted that decline in sale in Industrial HT category and increased hours of supply to the agriculture category (which has resulted in more offtake, with no corresponding increase in the sales figure on account of this consumption being largely unmetered) are two major reasons for higher distribution loss in H1.

#### Commission's view

It must be noted that distribution loss is a controllable parameter. Increase or decrease in sale within the categories is unavoidable and is bound to happen. As a distribution licensee the Petitioner must strive to keep its distribution losses within the trajectory approved by the Commission on the onset of the MYT period.

The Commission has estimated the energy requirement based on the projected distribution losses. However it is clarified that this shall not be considered as approval of the higher distribution loss. The Commission will undertake the true-up (based on the MYT approved distribution losses of 28%) during the next APR process.



Table 4: Distribution Losses considered by Commission for FY 2009-10

(%)

Particulars	Approved as per Order dt. 14th Dec 2009	H1 Actual FY 2009-10	Revised Estimates submitted by PGVCL for FY 2009-10	Considered for calculating Energy requirement
<b>Distribution Losses</b>	28%	35.20%	31.50%	31.50%

The energy balance based on the distribution loss considered above and transmission loss as per GETCO Order is given in Table 5 below:

Table 5: Energy Balance considered for FY 2009-10

(MUs)

Particulars	Unit	Approved as per Order dt. 14th Dec 2009	FY 2009-10 (R E)	FY 2009-10 (H1 - Actual)	Considered for calculating Energy requirement
Energy Sales	MUs	13084	12849	6085	12733
Distribution Losses	MUs	5088	5909	3305	5855
Distribution Losses	%	28.00%	31.50%	35.20%	31.50%
Energy Requirement	MUs	18172	18758	9390	18588
Transmission Losses	MUs	807	987	490	825
Hansinission Losses	%	4.25%	5.00%	4.96%	4.25%
Total Energy to be input to Transmission System	MUs	18978	19745	9880	19413
Pooled Losses in PGCIL System	MUs	272.43	162.00	165.79	332
Total Energy Requirement	MUs	19251	19907	10045	19745

## 3.3. Power Purchase Cost

#### Petitioner's submission

The total power purchase cost for the Petitioner consists of the basic power purchase cost, transmission charges payable to GETCO & PGCIL and the Discom's share of GUVNL cost and E-Urja charges. The total estimated power purchase cost for FY

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2009-10 is submitted by the Petitioner is based on H1 actual and estimated cost of H2 based on the estimated demand presented above.

Table 6: Power Purchase Cost FY 2009-10

(Rs. Lakhs)

Particulars	Approved as per Order dt. 14th Dec 2009	H1 Actual FY 2009-10	Revised Estimates submitted by PGVCL for FY 2009-10
Total Power Purchase Cost	449488	244477	493661

#### Commission's View

The cost of total power purchased for FY 2009-10 will consist of actual power purchased in H1 and estimated power purchase for H2. To estimate the total power purchase cost the Commission has considered the actual cost incurred during the H1 and energy required during H2. It has followed the merit order principles to estimate the cost of power required during H2 as adopted by the Commission during MYT Order. In terms of sources of power, the Commission has considered the allocation of PPAs as submitted by the Petitioner for FY 2009-10.

To estimate the Power Purchase Cost of H2, fixed and variable costs of GSECL stations are considered for FY 2009-10, as per the Tariff Order for GSECL for FY 2010-11. The fixed and variable costs of IPPs and the central stations are considered as approved in the MYT Order.

Based on the above, the power purchase costs for the Control Period have been calculated and approved by the Commission is as shown in Table 7 below:



**Table 7: Approved Power Purchase Cost FY 2009-10** 

Particulars	Approved as per Order dated 14- 12-2009	Revised Estimates submitted by PGVCL for FY 2009-10	FY 2009- 10 (H1 - Actual)	FY 2009- 10 (H2 - Projected)	Revised Estimates considered for APR
Total Power Purchase Cost	449488	493661	244477	209631	454108

# 3.4. O&M Expenditure

Operation and Maintenance (O&M) expenditure comprises employee related expenditure, Administrative and General (A&G) expenditure, and Repair and Maintenance (R&M) expenditure.

# a. Employee Expenses

#### Petitioner's submission

The Petitioner has projected revised expenses of Rs. 41168 Lakhs as compared to the approved expenses of Rs. 27270 Lakhs in FY 2009-10 in the Order dated 14 December, 2009.

Table 8: Employee Cost estimated by PGVCL for FY 2009-10

(Rs. Lakhs)

Particulars	Approved as per Order dated 14-12-2009	H1 Actual FY 2009- 10	H2 Estimated FY 2009- 10	Revised Estimates submitted by PGVCL for FY 2009-10
Employee Cost excluding treatment of Sixth Pay Commission	24320	20693	17525	38218
40% of component of Sixth Pay Commission for FY 2007-08 approved for payment in 2009-10	2950	1	-	2950
Total Employee Cost Considered	27270	20693	17525	41168

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Actual employee cost for H1 of FY 2009-10 is Rs. 20,693 Lakhs. The Petitioner has submitted that employee expenditure is estimated on the basis of actual employee cost incurred by the company during H1 of FY 2009-10. Further, employee cost for H2 of FY 2009-10 is estimated after considering the 4% escalation on actual employee cost for H1 of FY 2009-10 after excluding gratuity fund provision of Rs. 3842 Lakhs.

It is further submitted that the Employee Cost has been estimated considering the trend of H1 Employee Cost, increase in Dearness Allowance and other expenses such as House Rent Allowance (HRA). Further, revised expenses also include increase in salary resulting from regular increments and promotions.

# Commission's View

The Commission has observed that employee expense in H1 is relatively higher as compared to the total employee expenses approved for FY 2009-10. The Commission had asked for a detailed justification for the substantial increase in the employee cost for FY 2009-10.

In the MYT Order, it was stated that the Employee Cost was approved, based on actual Employee Cost of FY 2007-08. Accordingly, the impact of the Sixth Pay Commission was not considered by the Commission, while approving Employee Cost for the FY 2008-09 to FY 2011-12. Meanwhile, the directive from the GoG for the sixth pay revision came into effect from 1<sup>st</sup> January, 2006, which resulted in an average increase of around 28% to 30% in salaries. The gap in the approved and actual Employee Cost further increased because of the incremental effect on the said hike of 28-30%. This was a new element that was not accounted for while escalating the base figures of FY 2007-08 by 6%.

As discussed in the earlier section 'Approach for APR for FY 2009-10', the Commission has not revised the controllable expenses for FY 2009-10. Therefore, it has considered the employee expenses as approved in the Order dated 14<sup>th</sup> December, 2009. The Commission will review the actual employee expenses for FY 2009-10 during the next APR process. The approved employee expense for FY 2009-10 is shown in Table 9 below:



Table 9: Employee expenses approved by Commission for FY 2009-10

Particulars	Approved as per Order dated 14-12-2009	Revised Estimates submitted by PGVCL for FY 2009-10	Revised Estimates considered for APR
Employee Cost excluding treatment of Sixth Pay Commission	24320	38218	24320
40% of component of Sixth Pay Commission for FY 2007-08 approved for payment in 2009-10	2950	2950	2950
Total Employee Cost Considered	27270	41168	27270

# b. R&M Expenses

#### Petitioner's submission

The Petitioner has revised the R&M expenses for FY 2009-10 to Rs. 7317 Lakhs. The same has been estimated by considering 10% increase on the provisional R&M expenses for FY 2008-09. The actual R&M cost for H1 of FY 2009-10 is Rs. 5,598 Lakhs.

Table 10: R&M expenses estimated by PGVCL for FY 2009-10

(Rs. Lakhs)

Particulars	Approved as per Order dated 14- 12-2009	H1 Actual FY 2009-10	H2 Estimated FY 2009-10	Revised Estimates submitted by PGVCL for FY 2009-10
Repair & Maintenance Costs	9205	5598	1719	7317



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

The Commission has noted the projection as submitted by the Petitioner. The actual expenditure incurred during H1 is already sixty percent of the approved cost in the last Tariff Order. In view of this, the Commission has not revised the approved R & M expenses as proposed by the Petitioner for FY 2009-10. The approved R&M expenditure is as shown in the Table 11 below:

Table 11: R&M expenses approved by Commission for FY 2009-10

(Rs. Lakhs)

Particulars	Approved as per Order dated 14- 12-2009	Revised Estimates submitted by PGVCL for FY 2009-10	Revised Estimates considered for APR
Repair & Maintenance Costs	9205	7317	9205

## c. Administration & General (A&G) Expenses

## Petitioner's submission

The Petitioner has revised the A&G expenses for FY 2009-10 to Rs. 7416 Lakhs by considering an escalation of 8% on the actual A&G expenditure for FY 2008-09. The actual A&G expense for H1 of FY 2009-10 is Rs. 3,776 Lakhs.

Table 12: A&G Expenses estimated by PGVCL for FY 2009-10

(Rs. Lakhs)

Particulars	Approved as per Order dated 14-12-2009	H1 Actual FY 2009-10	H2 Estimated FY 2009- 10	Revised Estimates submitted by PGVCL for FY 2009-10
Administration & General Charges	6179	3776	3640	7416

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#### Commission's View

As discussed in the earlier section 'Approach for APR for the FY 2009-10, the Commission has not revised the controllable expenses for FY 2009-10. Accordingly, it has considered the A&G expenses as approved in the Tariff Order dated 14<sup>th</sup> December, 2009. The Commission will review the actual A&G expenses for FY 2009-10 during the next APR process. The approved A&G expense for FY 2009-10 is shown in Table 13

Table 13: A&G Expenses approved by Commission for FY 2009-10

(Rs. Lakhs)

Particulars	Approved	Revised Estimates	Revised
	as per	submitted by	Estimates
	Order dated	PGVCL for FY 2009-	considered
	14-12-2009	10	for APR
Administration & General Charges	6179	7416	6179

# **Summary of O & M expenses**

The total O&M expenses approved by the Commission for FY 2009-10 is summarised in the following Table 14:

Table 14: Revised Approved O& M Expenses by the Commission for FY 2009-10

(Rs. Lakhs)

Particulars	Approved as per Order dated 14-12-2009	Revised Estimates submitted by PGVCL for FY 2009-10	Revised Estimates considered for APR
Employee Expenses	27270	41168	27270
Repair & Maintenance Costs	9205	7317	9205
Administration & General Charges	6179	7416	6179
Total O&M Expenses	42654	55901	42654



# 3.5. Capital Expenditure and Capitalization

Actual capital expenditure incurred by the Petitioner in H1 and total estimated capital expenditure for FY 2009-10 is shown in Table 15 below:

Table 15: Capital Expenditure as submitted by PGVCL

(Rs. Lakhs)

Sr. No.	Schemes	Approved as per MYT Order dated 17-01- 2009	H1 Actual FY 2009- 10	Revised Estimates submitted by PGVCL for FY 2009-10
Α	Distribution Schemes			
	Normal Development Scheme	10500	6441	12000
	System Improvement Scheme	8000	3559	7500
	Electrification of hutments	955	193	690
	Kutir Jyoti Scheme		0	0
	Scheme for meters	5000	1955	4000
	Others - Harijan Basti		0	0
	Total	24455	12148	24190
В	Rural Electrification Schemes			
	TASP (Wells and Petapara)		0	0
	Special Component plan	234	16	50
	Others Petapara		0	0
	RE Normal		0	0
	RE wells, OA & SPA etc.		15975	31250
	Dark Zone		0	0
	BADP	160	13	160
	Total	394	16004	31460
С	Others			
	Energy Efficient Pump	1800	0	546
	Energy Conservation	10	0	5
	Independent Certification Agency	3	0	0
	Total	1813	0	551
D	Non Plan Schemes			
	RE Non Plan (Tatkal)		0	0
	RAPDRP		7	4500
	Primary School Electrification		0	490
	RGGVY	3500	2	3500
	DRUM		0	0



Sr. No.	Schemes	Approved as per MYT Order dated 17-01-2009	H1 Actual FY 2009- 10	Revised Estimates submitted by PGVCL for FY 2009-10
	Total	3500	9	8490
E	Other New Schemes			
	Civil Works	1000	51	1500
	Automatic PF Control Panels	1500	0	1000
	Ring Main Unit		0	0
	Aerial Bunch Conductors	1000	0	200
	HVDS in Selected Sub-division	5000	316	4000
	Automatic Meter Reading	100	0	300
	GIS in cities	700	0	0
	JGY Load Shedding Transformers	100	94	100
	Marine Cable for Shiyalbet		0	0
	Other Schemes (General Schemes)		0	0
	Earthquake Rehabilitation		0	0
	Coastal Area Scheme		1294	2618
	Fault Passage Indicator	70	0	0
	Total	9470	1755	9718
F	Golden Goal Schemes			
	Golden Goal Schemes	49316	0	0
ı	Capital Expenditure Total	88948	29916	74409

#### Petitioner's submission

The Petitioner has submitted that it has incurred a capital expenditure of Rs. 29916 Lakhs in the first half of FY 2009-10. Further, it has revised estimate of capital expenditure to Rs. 74409 Lakhs which is lower than the capital expenditure approved by the Hon'ble Commission.

## Commission's View

The Commission noted that while the overall capital expenditure is lower than the revised estimates, there is significant variation in the expenditure proposed against some of the schemes at the individual level. Also, some schemes which were not approved by the Commission during the MYT Order have been additionally proposed.



In the regulated business where the returns to the investors are linked to the equity invested in the business, which in turn is linked to the existing asset base and assets added every year, steep increase in the asset base every year will have implication on the consumer through tariff. In view of this, all the capital expenditure needs to be prioritised and incurred considering cost benefit analysis and its impact on consumers.

For FY 2009-10, the Commission has considered the revised capital expenditure as submitted by the Petitioner at Rs 74409 Lakhs. Further, it is assumed that the Utility would also be able to capitalize the same during the financial year.

Table 16: Approved Capitalization by Commission for FY 2009-10

(Rs. Lakhs)

Particulars	Approved as per Order dated 14-12-2009	Revised Estimates submitted by PGVCL for FY 2009-10	Revised Estimates considered for APR
Capital Expenditure	-	74409	-
Capitalization	73084	-	74409
Less : Consumer Contribution	16056	14882	14882
Grants	3662	3662	3662
Balance CAPEX	53366	55865	55865
Debt @ 70%	37356	39106	39106
Equity @ 30%	16010	16760	16760

# 3.6. Depreciation

## Petitioner's submission

The Petitioner has considered Gross Fixed Assets & Depreciation for FY 2009-10 on the basis of actual of FY 2008-09 as per the final accounts with the addition during FY 2009-10 on the basis of revised capital expenditure plan for FY 2009-10. The Petitioner has further submitted that the GERC regulations specify that the CERC rates have to be used for computation of depreciation. Therefore the Petitioner has revised the deprecation rates from 3.64% to 5.28% for FY 2009-10 in line with the new rates notified by the CERC in the terms and conditions for tariff applicable for 2009 to 2014. This is shown in the Table 17 below



Table 17: Depreciation for 2009-10 submitted by the PGVCL

Particulars	Approved as per Order dated 14- 12-2009	Revised Estimates submitted by PGVCL for FY 2009-10
Gross Block in the beginning of the Year	376455	376455
Additions during the Year (Net)	73084	58642
Depreciation for the Year	21809	21419
Average Rate of Depreciation	5.28%	5.28%

#### Commission's View

The Commission, in its order dated 14 December, 2009, had considered depreciation expenditure of Rs 16743Lakhs for FY 2009-10 The closing gross fixed assets (GFA) of the FY 2008-09 is considered as opening GFA for FY 2009-10 and the depreciation rates were considered as per new rates prescribed under CERC Tariff Regulations.

It must be noted here that Clause 17 of Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009 specifies that depreciation shall be calculated annually based on Straight Line Method at rates specified in Appendix-III of the said regulations. Provided that, the remaining depreciable value as on 31<sup>st</sup> March of the year closing after a period of twelve years from date of commercial operation shall be spread over the balance useful life of the assets.

It further specifies that in case of the existing projects, the balance depreciable value as on 1<sup>st</sup> April, 2009 shall be worked out by deducting the cumulative depreciation as admitted by the Commission up to 31<sup>st</sup> March 2009 from the gross depreciable value of the assets.

The Petitioner has calculated the depreciation by applying the new rates on the total gross assets without segregating the assets as mentioned in the regulation. The Commission has considered the depreciation as submitted by the Petitioner but hereby directs the Petitioner to submit the recomputed depreciation as per Clause 17 of CERC (Terms and Conditions of Tariff) Regulations, 2009 during the truing-up of FY 2009-10.

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As explained in the earlier section 'Capital Expenditure and Capitalization', the net addition to assets implies the total amount capitalized by the utility and not the capital expenditure incurred during any financial year. The Commission has assumed that the utility would be able to capitalize the capital expenditure (excluding cost of land) as projected and accordingly approved the depreciation.

It was observed that the capital expenditure proposed by the Petitioner (Rs 74409 Lakhs) does not tally with the gross addition (Rs 58642 Lakhs) proposed during the financial year. A clarification was sought from the Petitioner, where it was clarified to the Commission that there has been an error. The gross addition in the asset shall be equal to the total capital expenditure. Based on the submission made by the Petitioner, the Commission has rectified the error as shown in the table below.

It may be noted that the Commission will consider the depreciation based on actual capitalisation during the entire year, subject to prudence check, for the purpose of sharing of gains/losses during the APR process of FY 2010-11.

Table 18: Depreciation Approved by Commission for FY 2009-10

(Rs. Lakhs)

Particulars	Approved as per Order dated 14-12-2009	Revised Estimates submitted by PGVCL for FY 2009-10	Revised Estimates considered for APR
Gross Block in Beginning of the year	376455	376455	376455
Additions during the Year	73084	58642	74409
Depreciation for the Year	21809	21419	21835
Average Rate of Depreciation	5.28%	5.28%	5.28%

## 3.7. Interest Expenses

#### Petitioner's submission

The Petitioner has projected revised interest expenses of Rs.18037 Lakhs for FY 2009-10 as compared to the approved expenses of Rs.10144 Lakhs in the Order dated 14<sup>th</sup> December, 2009.

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Table 19: Projected Interest Expenses for FY 2009-10

Particulars	Approved as per Order dated 14-12-2009	H1 Actual FY 2009- 10	H2 Estimated FY 2009- 10	Revised Estimates submitted by PGVCL for FY 2009-10
Opening Loans	-	123666	122668	123666
Opening Loans considered for Capital Expenditure	53429	-	-	-
Loan Additions during the Year	37356	18942	18942	37884
Repayment during the Year	12151	19940	19940	39880
Closing Loans	78633	122668	121670	121670
Average Loans	39316	123167	122169	122668
Interest on Loan	6603	7226	0	14393
Interest in Security Deposit	3314	1705	1705	3409
Guarantee Charges	228	0	234	234
Total Interest & Financial Charges	10144	8931	1939	18037
Weighted Average Rate of Interest	10.00%	11.73%	0.00%	11.73%

The opening balance of Loan for FY 2009-10 is revised to Rs.123666 Lakhs as against Rs.147661 Lakhs, as per the closing balance (balance sheet) of FY 2008-09. The loan addition in FY 2009-10 has been computed at Rs. 37884 Lakhs as per the Capex funding plan discussed above. The repayment is computed on the assumption that the loan would be paid in the same proportion as it was repaid last year. i.e {(40535 x 123666) /125695=39880} as shown in Table 22 below. The total repayment of existing and new loan during the year is computed at Rs.39880 Lakhs. Further, it is submitted that based on the interest paid on the outstanding loans, the weighted average rate of interest works out to @ 11.73% as against 10% approved by the Commission.

The interest on Security Deposit has been considered based on the actual of H1 of FY 2009-10 and Guarantee Charges have been considered based on the accounts of FY 2008-09. Further, the Interest and Finance Charges considered above has an element of Interest on Working Capital, which is claimed separately on a normative basis; hence, the same was deducted to arrive at the final interest charges.



#### Commission's View

The Commission in its last tariff Order dated 14<sup>th</sup> December, 2009 had taken note that Interest and Finance charges approved in the MYT Order had an element of Interest on Working Capital that had been separately claimed on a normative basis. Further, while claiming Interest and Finance charges, Interest on Working Capital have been deducted to avoid double counting.

The Commission had noted that that the said approach was not correct and had directed that rather than deducting Interest on Working capital from the total Interest and Finance charges, the principal loan amount should be segregated. Based on the suggested approach, the Commission also segregated the opening balance in proportion to the actual interest paid for capital expenditure and interest paid for financing working capital in FY 2008-09, as shown in Table 20 below:

Table 20: Loan allocation based on Interest on Working Capital

Particulars	Unit
Net Interest in FY 2008-09 (Rs. Lakhs) #	10451
Actual Interest on Working Capital (Rs. Lakhs)	5552
% of Loan Allocated for Working Capital	53%
% of Loan Allocated for Capital Expenditure	47%

<sup>#</sup> Net interest after deducting guarantee charges and interest on security deposit

The Petitioner has not adopted the said approach and has continued with the approach followed in last year's petition. The Petitioner was asked to segregate the total loans between loans utilized for financing the working capital and that used for incurring capital expenditure. Based on the direction, the Petitioner has segregated the total loans as shown in the table below:

**Table 21: Details of Segregated Loans** 

(Rs. Lakhs)

FY 2008-09	Opening Balance	Addition	Repayment	Closing Balance
Loan taken by Discom	215	2071	116	2170
Loan from GUVNL	125633	36435	40572	121496
Total Loan	125848	38506	40688	123667
Less: Loan towards Working Capital	44095	36313	25044	55363
Loan towards Capital Expenditure	81754	2193	15644	68303



Based on the details submitted by the Petitioner, the Commission has adopted the revised opening balance of loan as mentioned above. The total capital expenditure proposed for FY 2009-10 is Rs 55865 Lakhs (excluding grants) and total loan proposed to be taken by the Petitioner is Rs 37884 Lakhs.

The Petitioner has submitted that the proposed loan is for funding the capital expenditure and balance for funding the past liabilities. The Commission notes that the proposed loan amount exceeds the total capital expenditure (excluding grants) proposed by the Petitioner. Also, the Petitioner has not provided any detailed explanation of past liabilities.

The Commission has considered fresh loans up to the seventy percent of the proposed capital expenditure (excluding grants) and correspondingly recomputed the repayments as shown in Table 22 below.

Table 22: Repayment considered for FY 2009-10

(Rs. Lakhs)

Closing Loans	Actuals as per Final accounts FY 2008-09	Revised Estimates submitted by PGVCL for FY 2009-10	Revised Estimates considered for APR
Opening Loans	125695	123666	68303
Additions	38506	37884	39106
Repayments	40535	39880	22027
Closing	123666	121670	85382

The Commission has considered the revised weighted average rate of interest (11.73%) for estimating the interest cost for FY 2009-10. Further, Interest on Security Deposit and Guarantee charges has been considered as per the Petitioner's estimation. Approved Interest and Finance Charges, after considering the above allocation, has been tabulated as shown below.



Table 23: Interest & Financial Charges for FY 2009-10

Closing Loans	Approved as per Order dated 14- 12-2009	Revised Estimates submitted by PGVCL for FY 2009-10	Revised Estimates considered for APR
Opening Loans	-	123666 <sup>1</sup>	
Opening Loans considered for Capital Expenditure	53429	-	68303
Loan Additions during the Year	37356	37884	39106
Repayment during the Year	12151	39880	22027
Closing Loans	78633	121670	85382
Average Loans	39316	122668	42691
Interest on Loan	6603	14393	5009
Interest in Security Deposit	3314	3409	3409
Guarantee Charges	228	234	234
Total Interest & Financial Charges	10144	18037	8653
Weighted Average Rate of Interest	10.00%	11.73%	11.73%

# 3.8. Interest on Working Capital

## Petitioner's submission

The Petitioner has estimated interest on a normative working capital in accordance with the GERC Tariff Regulations which works out to Rs. 5980 Lakhs. However, instead of considering revenues for two months, revenues of the company for only one month have been considered for projecting the total working capital during the FY 2009-10. The Petitioner has computed the interest on working capital at current short-term prime lending rate of SBI i.e. 10.25% as shown below



<sup>&</sup>lt;sup>1</sup> Rs 123666 Lakhs is inclusive of Loans taken to fund Working Capital.

Table 24: Interest on Working Capital submitted by PGVCL

Particulars	Approved as per Order dated 14- 12-2009	H1 Actual FY 2009-10	H2 Estimated FY 2009-10	Revised Estimates submitted by PGVCL for FY 2009-10
O & M expenses	3554	2506	1907	4658
Maintenance Spares	3175	1985	1844	4274
Receivables	35492	24623	22529	49413
Total Working Capital	42222	29114	26280	58345
Rate of Interest on Working Capital	10.25%	10.25%	10.25%	10.25%
Interest on Working Capital	4328	2984	2694	5980

#### Commission's View

The Commission has estimated the working capital as per clause No. 66 of the GERC terms and conditions of tariff, and accordingly considered Operation and Maintenance expenses for one month, Maintenance spares at 1% of the historical cost escalated at 6% per annum from the date of commercial operation, and Receivables equivalent to one month's sales (as proposed by the Petitioner). Further, the estimation is based on the O&M, historical costs and sales approved by the Commission in this Tariff Order.

According to Regulation 20 (v) (b), the Commission, in its MYT Order dated 17<sup>th</sup> January, 2009, has calculated a rate of interest on working capital that is equal to the short-term prime lending rate of SBI as on 1<sup>st</sup> April 2004, which is 10.25%.

The Commission has observed that while calculating the interest on working capital based on the above provision, the Petitioner has considered receivables equivalent to one month, as submitted above. But instead of calculating 1/12 of the sales, the Petitioner has calculated 1/12 of ARR. The Commission has corrected this error and has recomputed the normative interest on working capital at 10.25%, as shown in Table 25 below.



Table 25: Interest on Working Capital for FY 2009-10

Particulars	Approved as per Order dated 14-12-2009	Revised Estimates submitted by PGVCL for FY 2009-10	Revised Estimates considered for APR
O & M expenses	3554	4658	3554
Maintenance Spares	3175	4274	4431
Receivables	35492	49413	38944
Total Working Capital	42222	58345	46930
Rate of Interest on Working Capital	10.25%	10.25%	10.25%
Interest on Working Capital	4328	5980	4810

## 3.9. Provision for Bad Debts

## Petitioner's submission

The Petitioner has estimated the provisioning for write-off of bad debts at 0.20% of the revenue from sale of power i.e Rs.1086 Lakhs as shown in Table 26 below

Table 26: Proposed provision for Bad Debts

(Rs. Lakhs)

Particulars	Approved as per Order dated 14- 12-2009	H1 Actual FY 2009- 10	H2 Estimated FY 2009- 10	Revised Estimates submitted by PGVCL for FY 2009-10
Provision for Bad and Doubtful Debts	852	519	523	1042



# **Commission's Analysis**

The Commission in its Order dated 14<sup>th</sup> December, 2009 approved Rs 852 Lakhs towards bad debt. The Commission has recomputed the bad debts at 0.20% of the revenue as shown in the Table 27 below:

Table 27: Approved provision for Bad Debts

(Rs. Lakhs)

Particulars	Approved as per Order dated 14-12-2009	Revised Estimates submitted by PGVCL for FY 2009-10	Revised Estimates considered for APR
Provision for Bad and Doubtful Debts	852	1042	935

# 3.10. Other Expenses

In addition to the expenses mentioned above, the Petitioner has included certain other expenses in the petition, for the purpose of approval, as shown in the table below:

Table 28: Other Expenses proposed in FY 2009-10

(Rs. Lakhs)

Particulars	Approved as per Order dated 14- 12-2009	H1 Actual FY 2009-10	H2 Estimated FY 2009- 10	Revised Estimates submitted by PGVCL for FY 2009- 10
Other Debits	340	789	353	1142
Extraordinary Items	0	0	0	0
Net Prior Period Expenses/(Income)	0	1007	1007	2014
Other Expenses Capitalized	(4772)	(3764)	(3764)	(7528)
Total Other Costs	(4432)	(1968)	(2757)	(4372)



### Petitioner's submission

#### **Other Debits**

Other Debits comprise write-offs for Small Capital Items (less than Rs. 5000), energy conservation and R&D expenses, waiver of DPC charges due to settlements in Lok Adalat & Government Bodies., deferred revenue expenses written off etc.

#### .

### **Commission's Analysis**

The Petitioner has projected Rs 1142 Lakhs as expenses in Other Debits based on the H1 actual expenses of Rs 789 Lakhs. As discussed earlier, all the controllable expenses are considered as approved in the Tariff Order dated 14<sup>th</sup> December, 2009. Accordingly, the approved amount considered for the same is Rs 340 Lakhs.

### **Extraordinary Items**

The Petitioner has not estimated any amount under Extraordinary Items. Accordingly, it has been considered at Nil for FY 2009-10.

## **Net Prior Period Expenses**

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

These expenses pertain to earlier accounting years in which they have not been provided for, and are therefore paid during the current year.

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

The Petitioner has projected Rs 2014 Lakhs as expenses in Net Prior Period Expenses based on the H1 actual expenses of Rs 1007 Lakhs. As discussed earlier, all the controllable expenses are considered as approved in the Tariff Order dated 14<sup>th</sup> December, 2009. Accordingly, the approved amount considered for the same is Nil.



#### **Other Expenses Capitalized**

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

Generally, Employee Cost and Administration & General Expenses are incurred at the corporate office and other field offices and the same are apportioned to Capital Work in Progress (WIP) at pre-determined rates. Since such portion of common expenses are booked and included in their respective revenue expense heads, they are reduced under the head "Other expenses capitalized" due to their capitalization in Capital WIP in the books.

# **Commission's Analysis**

The Commission has considered Other Expenses Capitalized at the same level as that approved in its Tariff Order dated 14<sup>th</sup> December, 2009, i.e Rs 4772 Lakhs.

## Summing up

The Other Expenses for FY 2009-10 considered for APR are shown in the table below, and summed up under the head Total Other Costs.

Table 29: Other expenses for FY 2009-10

(Rs. Lakhs)

Particulars	Approved as per Order dated 14-12-2009	Revised Estimates submitted by PGVCL for FY 2009-10	Revised Estimates considered for APR
Other Debits	340	1142	340
Extraordinary Items	0	0	0
Net Prior Period Expenses / (Income)	0	2014	0
Other Expenses Capitalized	(4772)	(7528)	(4772)
Total Other Costs	(4432)	(4372)	(4432)

## 3.11. Return on Equity

#### Petitioner's submission

The Petitioner has submitted the revised estimate of Return on Equity for FY 2009-10 as Rs 16957 Lakhs. The Return on Equity has been computed at 14% on the average equity, which is the opening balance of equity and normative additions



during the year, arrived at by considering 30% of the capital expenditure net of consumer contribution and grants funded from equity

Table 30: RoE estimated by PGVCL

(Rs. Lakhs)

Particulars	Approved as per Order dated 14-12-2009	H1 Actual FY 2009-10	H2 Estimated FY 2009- 10	Revised Estimates submitted by PGVCL for FY 2009-10
Return on Equity	15670	8149	8736	16957

# **Commission's Analysis**

The Commission has observed that against the approved RoE of Rs. 15670 Lakhs in its Order dated 14<sup>th</sup> December 2009 by the Commission; the Petitioner has claimed RoE of Rs. 16957 Lakhs.

While the Petitioner has calculated RoE on the capital expenditure incurred, the Commission has considered expenditure capitalized, for the purpose of calculation of RoE.

On the funding of capital expenditure, the Commission has considered funding from the consumer contributions and grants as per the Petitioner's submission. Balance capital expenditure is assumedly funded in the ratio proposed by the Petitioner (70%:30%).

The Commission's analysis of the RoE is detailed below:

Table 31: Approved RoE for FY 2009-10

(Rs. Lakhs)

Particulars	Approved as per Order dated 14-12-2009	Revised Estimates submitted by PGVCL for FY 2009-10	Revised Estimates considered for APR
Opening Equity Capital	103922	112740	103922
Equity Additions during the Year	16010	16760	16760
Closing Equity	119931	129499	120681
Average Equity	111926	121119	112301

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Rate of Return on the Equity	14.00%	14.00%	14.00%
Return on Equity	15670	16957	15722

#### 3.12. Taxes

#### Petitioner's submission

The Petitioner has estimated that the income tax for FY 2009-10 is Rs 2621 Lakhs as against Rs 136 Lakhs as approved by the Commission in the MYT Order.

The Petitioner has calculated tax considering the applicability of the Minimum Alternative Tax (MAT). Further, tax is calculated on the RoE as estimated by the Petitioner.

#### Commission's View

Since taxes are considered to be pass-through, the Commission has considered the tax amount as the same as approved in the MYT Order ie.Rs136 Lakhs for the FY 2009-10. It will consider the actual tax paid during the true-up process of FY 2009-10.

**Table 32: Taxes for FY 2009-10** 

(Rs. Lakhs)

Particulars	Approved as per Order dated 14- 12-2009	Revised Estimates submitted by PGVCL for FY 2009-10	Revised Estimates considered for APR
Provision for Tax	136	2621	136

# 3.13. Aggregate Revenue Requirement for FY 2009-10

Based on the analysis of each component discussed above, the Aggregate Revenue Requirement of the Petitioner for FY 2009-10 as approved by the Commission in its order dated 14<sup>th</sup> December, 2009, as estimated by the Petitioner in the APR Petition and as approved by the Commission in this Order, is given in Table 33 below:



Table 33: Aggregate Revenue Requirement for FY 2009-10

Particulars	Approved as per Order dated 14-12-2009	Revised Estimates submitted by PGVCL for FY 2009-10	Revised Estimates considered for APR
Cost of Power Purchase	449488	493661	454108
Operation & Maintenance Expenses	42654	55901	42654
Employee Cost	27270	41168	27270
Repair & Maintenance	9205	7317	9205
Administration & General Charges	6179	7416	6179
Depreciation	21809	21419	21835
Interest & Finance Charges	10144	13046	8653
Interest on Working Capital	4328	5980	4810
Other Debits	340	1142	340
Extraordinary Items	0	0	0
Provision for Bad Debts	852	1042	935
Net Prior Period Expenses / (Income)	0	2014	0
Other Expenses Capitalized	(4772)	(7528)	(4772)
Sub-Total	524843	586677	528562
Return on Equity	15670	16957	15722
Provision for Tax / Tax Paid	136	2621	136
Total Expenditure Less: Non-Tariff Income	<b>540649</b> 6597	<b>606254</b> 13296	<b>544420</b> 13296
Less. Non-Talli income	0097	13290	10290
Aggregate Revenue Requirement	534052	592958	531124



# 3.14. Revenue from sale of power for FY 2009-10

## Petitioner's submission

During H1 of FY 2009-10, the Petitioner has earned revenue of Rs. 259748 Lakhs. The Petitioner has revised its revenue estimates for FY 2009-10 to Rs. 521043 Lakhs, as against Rs. 5210436 Lakhs that was approved by the Commission in its Tariff Order dated 14<sup>th</sup> December, 2009. The H1 revenues are at actual (including FPPPA charges) and the H2 revenue has been estimated by considering an FPPPA of Rs. 0.77 per unit.

Table 34: Estimated Revenue in FY 2009-10

(Rs Lakhs)

Particulars	Approved as per Order dated 14-12-2009	H1 Actual FY 2009-10	H2 Estimated FY 2009-10	Revised Estimates submitted by PGVCL for FY 2009-10
LT Consumers				
Residential	69471	46168	42276	88445
Commercial	40934	25327	23977	49304
Industrial LT	57909	32823	30642	63465
Public Water Works	7871	8266	7278	15544
Agriculture	47654	37966	48207	86173
Public Lighting	2406	1359	1436	2795
LT Total (A)	226244	151909	153816	305726
HT Consumers				
Industrial HT	199662	107839	107479	215317
Railway Traction	-	-	-	-
HT Total (B)	199662	107839	107479	215317
Grand Total (A + B)	425905	259748	261295	521043

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

The Commission has estimated the Power purchase cost for H2 based on the estimated average realization (as per Order dated 14<sup>th</sup> Dec 2009) for FY 2009-10, as shown in the table below.



Table 35: Estimated Average Realization during FY 2009-10

Consumer Category	Approved Sales as per Order dated 14th Dec 2009	Approved Revenue as per Order dated 14th Dec 2009	Estimated Average Realization Rs/kWh
LT Consumers	mos	Tio. Editio	113/14711
Residential	2238	69471	3.10
Commercial	837	40934	4.89
Industrial LT	1254	57909	4.62
Public Water Works	286	7871	2.75
Agriculture	4424	47654	1.08
Street Light	70	2406	3.44
LT Total	9109	226244	
HT Consumers			
Industrial HT	3975	199662	5.02
Railway Traction	0	0	0.00
HT Total	3975	199662	
TOTAL	13084	425905	

Table 36: Projected Revenue in H2 – FY 2009-10

Particulars	Estimated Sales H2	Estimated Average Realization	Total Revenue
	MUs	Rs/kWh	Rs. Lakhs
LT Consumers			
Residential	1093	3.10	33928
Commercial	413	4.89	20217
Industrial LT	569	4.62	26290
Public Water Works	136	2.75	3746
Agriculture	2505	1.08	26982
Public Lighting	36	3.44	1237
LT Total (A)	4753		112401
HT Consumers			
Industrial HT	1895	5.02	95185
Railway Traction	0	0.00	0
HT Total (B)	1895		95185
Grand Total (A + B)	6648		207585

The total estimated revenue for FY 2009-10 is as shown in Table 37 below.

Table 37: Projected Revenue for FY 2009-10

(Rs. Lakhs)

Particulars	Approved as per Order dated 14-12- 2009	Revised Estimates submitted by PGVCL for FY 2009-10	Revised Estimates considered for APR
LT Consumers			
Residential	69471	88445	80097
Commercial	40934	49304	45544
Industrial LT	57909	63465	59113
Public Water Works	7871	15544	12012
Agriculture	47654	86173	64948
Public Lighting	2406	2795	2596
LT Total (A)	226244	305725	264310
HT Consumers			
Industrial HT	199662	215317	203023
Railway Traction	-	-	-
HT Total (B)	199662	215317	203023
Grand Total (A + B)	425905	521043	467334

#### 3.15. Non-Tariff Income

Non-tariff income comprises interest on loans & advances to employees/contractors, income from investments with banks, Delayed Payment Surcharges from consumers etc.

#### Petitioner's submission

The Petitioner has estimated Non-Tariff Income for FY 2009-10 of Rs.13,296 as against Rs 6,597 Lakhs approved by the Commission in its Tariff Order dated 14<sup>th</sup> December, 2009.

## Commission's views

The Commission has noted the submissions by the Petitioner and has accepted the estimate of the Non-Tariff Income as shown in Table 38 below.

Table 38: Approved Non-Tariff Income for FY 2009-10

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Particulars	Approved as per Order dated 14-12- 2009	Revised Estimates submitted by PGVCL for FY 2009-10	Revised Estimates considered for APR
Non-Tariff Income	6597	13296	13296

#### 3.16. Other Consumer related Income for FY 2009-10

Revenue from Other Consumer Related Income includes revenue on account of imposed charges and excludes the basic charges applicable to consumers. These include incomes on account of meter rent, wheeling charges, Inspection charges and miscellaneous charges.

#### Petitioner's submission

The Petitioner has estimated Other Consumer related Income for FY 2009-10 as Rs. 12705 Lakhs. Income from related income in H1 was Rs 5563 Lakhs.

#### Commission's views

The Commission has accepted the estimate of the Other Consumer related income as proposed by the Petitioner as shown in Table 39 below.

Table 39: Consumer Related Income for FY 2009-10

(Rs. Lakhs)

Particulars	Approved as per Order dated 14-12- 2009	Revised Estimates submitted by PGVCL for FY 2009-10	Revised Estimates considered for APR
Other Consumer related Income	12145	12075	12075



## 3.17. Subsidy for FY 2009-10

#### Petitioner's submission

The Petitioner has revised the amount of agricultural subsidy to Rs 39691 Lakhs from Rs 41100 Lakhs. Further, it has not estimated any amount under other subsidy in FY 2009-10.

#### Commission's views

It is observed that the Petitioner has not assumed any amount under the head Other Subsidies for FY 2009-10. The Petitioner had not provided any explanation in the Petition for the same; therefore a clarification was sought from the Petitioner. In response to the query it was mentioned that it is not discontinued and the same is included in Non- Tariff income. It was explained that this was done to ensure consistency with the accounts as this amount appears under the non tariff income head in the financial accounts of the Petitioner. Based on the response of the Petitioner, the Commission has accepted the subsidy amount for FY 2009-10 as proposed by the Petitioner.

Table 40: Subsidy for FY 2009-10

(Rs. Lakhs)

Particulars	Approved as per Order dated 14-12- 2009	Revised Estimates submitted by PGVCL for FY 2009-10	Revised Estimates considered for APR
Agriculture Subsidy	41100	39691	39691
Other Subsidies	7596	0	0
Total Subsidy	48696	39691	39691

## 3.18. Total Revenue for FY 2009-10

The total expected revenue of the company for the FY 2009-10, including revenue from sale of power at existing tariff, other consumer related income, agriculture subsidy and other subsidies is summarised below:



Table 40: Total Revenue for FY 2009-10

Particulars	Approved as per Order dated 14- 12-2009	Revised Estimates submitted by PGVCL for FY 2009-10	Revised Estimates considered for APR
Revenue with Existing Tariff	425905	521043	467334
Other Income (Consumer related)	12145	12075	12075
Total Revenue excluding subsidy	438050	533118	479408
Agriculture Subsidy	41100	39691	39691
Other Subsidies	7596	0	0
Total Revenue including subsidy	486746	572809	519100

# 3.19. Estimated Revenue Gap for FY 2009-10

Based on the above, the estimated revenue gap for FY 2009-10 at existing tariff is as outlined in the table below:

Table 41: Estimated Revenue Gap for FY 2009-10

(Rs. Lakhs)

	Approved as per Order dated 14- 12-2009	Revised Estimates submitted by PGVCL for FY	Revised Estimates considered for APR
Particulars Particulars		2009-10	
Revised Aggregate Revenue Requirement	534052	592958	531124
Total Revenue including Subsidy	486746	572809	519100
Revised Provisional Gap for FY 2009-10	47305	20149	12024



# 4. Determination of Aggregate Revenue Requirement for FY 2010-11

#### 4.1. Sales

## Petitioner's Approach to Sales Projections

The Petitioner has adopted the historical trend method, using CAGR to estimate the number of consumers, the connected load and the energy consumption. This is based on the assumption that the historical trend provides insight into the behaviour of each category. The Petitioner has also stated that the Commission has accepted this methodology in the MYT Order.

As per the methodology discussed above, the Petitioner has submitted the break-up of the past sales, number of consumers and connected load and their respective CAGR for different periods (five-year, three-year and year-on-year), as discussed in the subsequent sections<sup>2</sup>.

Category-wise break up of Sales and the CAGR for different periods (five-year, three-year and year-on-year) as submitted by the Petitioner is as follows:

Table 42: Historical Trend in Category-wise Units sold

(MU)

PGVCL	FY04-05	FY05-06	FY06-07	FY07-08	FY08-09	FY09-10 (Projection)
LT Consumers						
Residential	1407	1505	1657	1826	2032	2238
Commercial	442	494	561	646	732	837
Industrial LT	876	960	1064	1140	1151	1162
Public Water Works	203	210	219	236	269	286
Agriculture	3672	3897	4062	4198	4286	4424 <sup>3</sup>
Street Light	49	53	58	62	65	70
Temporary Supply at LT	0	0	0	0	0	0
LT Total	6649	7119	7621	8107	8534	9017

<sup>&</sup>lt;sup>2</sup> The five-year CAGR is for the period FY 2004-05 to FY 2008-09. The three-year CAGR is for the period FY 2006-07 to FY 2008-09.

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<sup>&</sup>lt;sup>3</sup> Revised agriculture sales as considered by the Commission for FY 2009-10

PGVCL	FY04-05	FY05-06	FY06-07	FY07-08	FY08-09	FY09-10 (Projection)
LT Consumers						
Industrial HT	1551	1993	3271	3730	3715	3715
Railway Traction	0	0	0	0	0	0
HT Total	1551	1993	3271	3730	3715	3715
TOTAL	8200	9111	10892	11837	12249	12732

Table 43: Category-wise Growth rates of Units Sold

Sales	CAGR (5 year) FY 09 over 05	CAGR (3 year) FY 09 over 07	FY 08 over FY 07	FY 09 over FY 08	FY 10 over FY 09
Low Tension Consumers					
Residential	9.62%	10.73%	10.18%	11.29%	10.16%
Commercial	13.44%	14.23%	15.15%	13.31%	14.34%
Industrial LT	7.06%	4.00%	7.12%	0.97%	0.97%
Public Water Works	7.33%	10.90%	7.77%	14.12%	6.18%
Agriculture	3.94%	2.72%	3.34%	2.09%	3.22%
Street Light	7.27%	5.76%	6.40%	5.14%	7.89%
Temporary Supply at LT	0.00%	0.00%	0.00%	0.00%	0.00%
LT Total	6.44%	5.82%	6.38%	5.27%	5.65%
High Tension Consumers					
Industrial HT	24.40%	6.57%	14.03%	-0.40%	0.00%
Railway Traction	0.00%	0.00%	0.00%	0.00%	0.00%
HT Total	24.40%	6.57%	14.03%	-0.40%	0.00%
TOTAL	10.55%	6.05%	8.68%	3.48%	3.94%

Category-wise break-up of number of Consumers and the CAGR for different periods (five-year, three-year and year-on-year), submitted by the Petitioner is as follows:

Table 44: Category-wise No. of Consumers

PGVCL	FY04-05	FY05-06	FY06-07	FY07-08	FY08-09	FY09-10 (Projection)
LT Consumers						
Residential	2179474	2245856	2322867	2419906	2566687	2657405
Commercial	394111	411346	431485	448836	470162	490247
Industrial LT	67906	70372	72643	74697	76207	78788
Public Water Works	10423	10522	10519	10717	11115	11205
Agriculture	334124	352003	362816	381011	404859	427126
Street Light	3922	3952	4112	4307	4561	4763
Temporary Supply at LT	0	0	0	0	0	0



LT Total	2989960	3094051	3204442	3339474	3533591	3669534
LT Consumers						
Industrial HT	1305	1500	1733	1957	2252	2341
Railway Traction	0	0	0	0	0	0
HT Total	1305	1500	1733	1957	2252	2341
TOTAL	2991265	3095551	3206175	3341431	3535843	3671875

Table 45: Growth rate of no. of Consumers

No. of Consumers	CAGR (5 year) FY 09 over 05	CAGR (3 year) FY 09 over 07	FY 08 over FY 07	FY 09 over FY 08	FY 10 over FY 09
LT Consumers					
Residential	4.17%	5.12%	4.18%	6.07%	3.53%
Commercial	4.51%	4.39%	4.02%	4.75%	4.27%
Industrial LT	2.93%	2.42%	2.83%	2.02%	3.39%
Public Water Works	1.62%	2.79%	1.88%	3.71%	0.81%
Agriculture	4.92%	5.64%	5.01%	6.26%	5.50%
Street Light	3.85%	5.32%	4.74%	5.90%	4.43%
Temporary Supply at LT	0.00%	0.00%	0.00%	0.00%	0.00%
LT Total	4.26%	5.01%	4.21%	5.81%	3.85%
LT Consumers					
Industrial HT	14.61%	13.99%	12.93%	15.07%	3.95%
Railway Traction	0.00%	0.00%	0.00%	0.00%	0.00%
HT Total	14.61%	13.99%	12.93%	15.07%	3.95%
TOTAL	4.27%	5.02%	4.22%	5.82%	3.85%

Break-up of the Connected Load and CAGR for different periods (five-year, three-year and year-on-year) submitted by the Petitioner is as follows:

Table 46: Category-wise Connected Load

(MW)

PGVCL	FY04-05	FY05-06	FY06-07	FY07-08	FY08-09	FY09-10 (Projection)
LT Consumers	920	1062	1506	1681	1855	2078
Residential	310	378	459	568	659	738
Commercial	729	774	821	893	945	1015
Industrial LT	102	103	102	106	109	110
Public Water Works	1934	2105	2166	2300	2462	2620
Agriculture	9	11	14	17	18	20
Street Light	0	0	0	0	0	0
Temporary Supply at LT	4004	4434	5068	5565	6048	6581
LT Total						
LT Consumers	514	640	916	1207	1273	1362
Industrial HT	0	0	0	0	0	0



Railway Traction	514	640	916	1207	1273	1362
HT Total	4518	5074	5984	6772	7321	7943
TOTAL	920	1062	1506	1681	1855	2078

Table 47: Growth Rate for Connected Load (in MW)

Load	CAGR (5 year) FY 09 over 05	CAGR (3 year) FY 09 over 07	FY 08 over FY 07	FY 09 over FY 08	FY 10 over FY 09
LT Consumers					
Residential	19.16%	10.98%	11.62%	10.35%	12.02%
Commercial	20.75%	19.82%	23.75%	16.02%	11.99%
Industrial LT	6.70%	7.29%	8.77%	5.82%	7.41%
Public Water Works	1.67%	3.37%	3.92%	2.83%	0.92%
Agriculture	6.22%	6.61%	6.19%	7.04%	6.42%
Street Light	18.92%	13.39%	21.43%	5.88%	11.11%
Temporary Supply at LT	0.00%	0.00%	0.00%	0.00%	0.00%
LT Total	10.86%	9.24%	9.81%	8.68%	8.81%
LT Consumers					
Industrial HT	25.45%	17.89%	31.77%	5.47%	6.99%
Railway Traction	0.00%	0.00%	0.00%	0.00%	0.00%
HT Total	25.45%	17.89%	31.77%	5.47%	6.99%
TOTAL	12.83%	10.61%	13.17%	8.11%	8.50%

# Commission's Approach for Sales Projections for FY 2010-11

The Commission has adopted the same approach that has been adopted in the MYT Order as well as by the Petitioner, in its submission for revised estimation of FY 2009-10. However, the Commission has examined the assumptions on categorywise CAGR, vis-à-vis the growth outlook in each category and accordingly approved the same.

The Petitioner's submission and the Commission's view for each consumer category are given below:



## a. Residential Category

#### Petitioner's submission

The Petitioner has submitted that it had witnessed a double digit growth in the units sold in the last few years with the three-year CAGR (between FY 2007-08 and FY 2009-10) of 10.73% p.a.

The number of consumers added in this category has witnessed a three-year CAGR of 5.12% p.a. (between FY 2007-08 and FY 2009-10). The Petitioner expects the above trend to continue.

The connected load has been growing at a three-year CAGR of 10.98% p.a. (between FY 2006-07 and FY 2008-09). However, the Petitioner projects a progressive trend for assuming growth rate of 12% for FY 2009-10.

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

The sales to this category constitute about 17% to 19% of total energy sales of the company. The Commission in its Multi-Year Tariff Order approved 2372 MUs for FY 2010-11. The revised sales based on CAGR as discussed in the above paragraph work out to 2478 MUs.

For FY 2010-11, the Commission has analyzed the sales projections on the basis of CAGR, as projected by the Petitioner. It has also considered the recent trend. Since there was no significant difference between the sales projected by the Petitioner and those projected by the Commission, the Commission has approved the sales projected by the Petitioner for FY 2010-11.

Table 48: Revised Approved Residential Sales for FY 2010-11

(MU)

Consumer Category	Approved as per MYT Order for FY 2010-11	Revised Estimates submitted by PGVCL for FY 2010- 11	Revised Approved for FY 2010-11
Residential	2372	2478	2478



# b. Commercial Category

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

The Petitioner has submitted that the commercial category had also witnessed a double digit growth. Three-year CAGR of sales to commercial consumers between FY 2006-07 and FY 2008-09 was 14.23% p.a.

Further, the last three-year CAGR recorded for the growth in consumers between FY 2006-07 and FY 2008-09 was 4.39% p.a. The Company expects the same trend to continue for FY 2010-11.

The three-year CAGR recorded between FY 2006-07 and FY 2008-09 for connected load was 19.82% p.a. The Petitioner believes that this high growth rate may not sustain, and accordingly estimates a 12% growth rate for FY 2010-11.

#### Commission's View

The sales to this category constitute about 5% to 7% of total energy sales of the company. The Commission in its Multi-Year Tariff Order dated 17<sup>th</sup> January, 2009 approved 925 MUs. The revised sales assumption based on the CAGR as projected in the above paragraph work out to 956 MUs.

For FY 2010-11, the Commission has analysed the sales projections on the basis of CAGR as projected by the Petitioner. It has also considered the recent trend. Since there was no significant difference between the sales projected by the Petitioner and that projected by the Commission, the Commission has approved the sales as projected by the Petitioner for FY 2010-11.

Table 49: Revised Approved Commercial Sales for FY 2010-11

(MUs)

Consumer Category	Approved as per MYT Order for FY 2010-11	Revised Estimates submitted by PGVCL for FY 2010-11	Revised Approved for FY 2010-11
Commercial	925	956	956

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### c. Industrial LT Category

#### Petitioner's submission

The Petitioner has submitted that sales in Industrial LT has recorded a CAGR of 4% p.a. during FY 2006-07 and FY 2008-09. Further, in the last three years, i.e. between FY 2006-07 and FY 2008-09, CAGR for the growth in consumers and for growth in the connected load was 2.42% p.a. and 7.29% p.a. respectively. The Company expects the same trend to continue for FY 2010-11.

#### Commission's View

The sales to this category constitute about 10% of the total energy sales of the company. The Commission, in its Multi-Year Tariff Order dated 17<sup>th</sup> January, 2009, approved 1526 MUs. The revised sales based on the CAGR as projected in the paragraph above work out to 1209 MUs.

For FY 2010-11, the Commission has analysed the sales projections on the basis of CAGR as projected by the Petitioner and has also considered the recent declining trend. Based on the analysis, the Commission has approved the sales as projected by the Petitioner for FY 2010-11.

Table 50: Revised Approved Industrial Sales for FY 2010-11

(MUs)

Consumer Category	Approved as per MYT Order for FY 2010-11	Revised Estimates submitted by PGVCL for FY 2010-11	Revised Approved for FY 2010-11
Industrial LT	1526	1208	1208

## d. Public Water Works

### Petitioner's submission

The Petitioner has submitted that the three-year CAGR for sales between FY 2006-07 and FY 2008-09 was 10.90% p.a.

The number of consumers added in the category has witnessed a CAGR of 2.79% p.a. between FY 2006-07 and FY 2008-09. The Company expects the above trend to continue

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The connected load has been growing at a CAGR of 3.37% p.a. between FY 2006-07 and FY 2008-09. The company expects a growth rate of 1% for this category in FY 2010-11.

#### Commission's View

The sales to this category constitute about 2-3% of the total energy sales of the company. The Commission in its Multi-Year Tariff Order dated 17th January, 2009 approved 265 MUs. The revised sales based on the CAGR, assumed as projected in the paragraph above, work out to 317 MUs.

For FY 2009-10, the Commission has analyzed sales projections on the basis of CAGR as assumed by the Petitioner and has also considered the recent trend. The Commission has approved the sales projected by the Petitioner for FY 2010-11

Table 51: Revised Approved Public Water Works for FY 2010-11

(MUs)

Consumer Category	Approved as per MYT Order for FY 2010-11	Revised Estimates submitted by PGVCL for FY 2010-11	Revised Approved for FY 2010-11
Public Water Works	265	317	317

#### e. Agriculture Category

#### Petitioner's submission

The sales to this category constitute about 34% of the total energy sales of the company. The consumption of electricity by irrigation pump-sets is not metered, except for the connections released during the recent years. The Petitioner has submitted that it plans to release around 28000 new connections under this category. The Petitioner has estimated an additional connected load of 178 MW, based on their current norm of 8.5 HP per connection. The average consumption on metered connections is proposed at 700 kWH/HP/Annum. The consumption on unmetered consumers is 1700 kWH/HP/Annum. For projection of sales for additional connections. Petitioner has proposed 1200 kWH/ HP/ the ((700+1700)/2=1200). This would translate into an additional consumption of around 286 MU (1200 kWH/ HP/ Annum) as shown below:



Table 52: Sales proposed for Agriculture FY 2010-11

(MUs)

Release of Pending Agriculture Connections	Unit	FY 2010-11
Number of New Agriculture Connections	Nos.	28,000
Total Additional Load in MW	MW	178
Additional Load Added in HP	HP	2,38,000
Additional Demand on Account of New Agriculture Connections	MU	286

#### Commission's View

The Commission has noted that all the proposed new connections will be metered connections. Further, taking a simple average of metered and unmetered consumption would not be the correct approach, as the number of connections is not the same in both the categories.

It is also observed by the Commission that although number of unmetered connections has not increased but the average load (HP) has increased in last three years. Thus, taking the same load as approved in the MYT Order would not be a correct approach.

In order to estimate the agriculture consumption for FY 2010-11 for both metered and unmetered connections the Commission has considered the current load (HP) as submitted in the revised Formats by the Petitioner. Based on the HP, the load (in MW) and Sales is computed (assuming 1700 kWh/HP/year and 650 kWh/HP/year for unmetered and metered connections respectively).

Total metered connections are arrived by addition of the existing connections and the new connections proposed to be added during the year by the Petitioner (169280+28000=197280). Unmetered connections is as considered by the Commission in MYT Order.

Table 53: Estimated Metered and unmetered Sales in FY 2010-11

FY 2010-11	Sales (MU's)	No. of Consumers	Load (in MW)	Load (in HP)
Metered	907	197280	1041	1395673
Unmetered	4000	257846	1755	2353040
Total	4907	455126	2797	3748713

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The agriculture sales as approved in MYT Order, revised estimates submitted by the Petitioner and approved sales by the Commission is shown below:

Table 54: Total Revised Sales for Agriculture FY 2010-11

(MUs)

Consumer Category	Approved as per MYT Order for FY 2010-11	Revised Estimates submitted by PGVCL for FY 2010-11	Revised Approved for FY 2010-11
Agriculture metered	1333	1119	907
Agriculture unmetered	3664	3708	4000
Total	4997	4827	4907

### Street (Public) Lighting

#### Petitioner's submission

The Petitioner has submitted that the three-year CAGR between FY 2006-07 and FY 2008-09 for sales under this category was 5.76% p.a.

Three-year CAGR for the growth in the number of consumers between FY 2006-07 and FY 2008-09 was 5.32% p.a. Further, three-year CAGR between FY 2006-07 and FY 2008-09, witnessed for the connected load, was 13.39% p.a. However, the Petitioner submitted that this high growth rate may not sustain. Therefore, it has estimated a growth rate of 12.00% for FY 2010-11.

### **Commission's View**

The sales to this category constitute about 0.5% to 1% of total energy sales.

The Commission in its Multi-Year Tariff Order dated 17<sup>th</sup> January,, 2009 approved 79 MUs. The revised sales based on the CAGR as discussed in the paragraph above work out to 74 MUs.

For FY 2010-11, the Commission has analysed the sales projections on the basis of CAGR, as projected by the Petitioner. It has also considered the recent trend. Since there was no significant difference between the sales projected by the Petitioner and those projected by the Commission, the Commission has approved the sales projected by the Petitioner for FY 2010-11.



Table 55: Revised Approved Public Lighting Sales for FY 2010-11

(MUs)

Consumer Category	Approved as per MYT Order for FY 2010-11	Revised Estimates submitted by PGVCL for FY 2010-11	Revised Approved for FY 2010-11
Public Lighting	79	74	74

### g. Industrial HT Category

#### Petitioner's submission

The Petitioner has submitted that the three-year CAGR between FY 2006-07 and FY 2008-09 for units sold to this category was 6.57% p.a., five-year CAGR between FY 2004-05 and FY 2008-09 was 24.40% p.a. and the year on year growth from FY 2008-09 to FY 2009-10 was negative. However, based on the past trends, a median value of 7% has been assumed as the growth rate for FY 2010-11.

Further, the Petitioner has submitted that the three-year CAGR for growth in the number of consumers and connected load between FY 2006-07 and FY 2008-09 was 13.99% p.a. and 17.89% p.a. respectively. These figures are very high. Accordingly a growth rate of 7% has been assumed for the FY 2010-11.

#### Commission's View

The sales to this category constitute about 28-30% of the total energy sales of the company. The Commission, in its Multi-Year Tariff Order dated 17<sup>th</sup> January, 2009, approved 4708 MUs. The revised sales based on CAGR, as discussed in the paragraph above, work out to 3975 MUs.

While this category has witnessed growth as high as 24.40% during the last three years, the growth is reducing gradually. This is due to an increase in industrial activity in the licence area, owing to the tax holiday/benefits announced by the Government of Gujarat for industrial projects in certain areas that come under the Petitioner's licence area. These concessions were discontinued subsequently and thereafter, the growth in demand from this category has come down. In view of this, the Commission has also considered the growth rate of 7% during FY 2010-11 in line with the Petitioner's submission.



Based on the above analysis, the Commission has approved the sales as given in the table below:

Table 56: Revised Approved Industrial HT for FY 2010-11

(MUs)

Consumer Category	Approved as per MYT Order for FY 2010-11	Revised Estimates submitted by PGVCL for FY 2010-11	Revised Approved for FY 2010-11
Industrial HT	4708	3975	3975

# h. Railway Traction Category

The Petitioner has submitted that there is no demand from Railways in the recent past and thus no sale is assumed in this category for the FY 2010-11.

The Commission has noted the submission by the Petitioner and has approved the Petitioner's proposal.

# **Total Energy Sales**

Based on above discussions, total energy sales as projected by the Petitioner and as approved by the Commission for FY 2010-11 are shown Table 57 below:

Table 57: Approved Sales for FY 2010-11

(MUs)

Consumer Category	Approved as per MYT Order for FY 2010-11	Revised Estimates submitted by PGVCL for FY 2010-11	Revised Approved for FY 2010-11
Low Tension Consumers			
Residential	2372	2478	2478
Commercial	925	956	956
Industrial LT	1526	1209	1209
Public Water Works	265	317	317
Agriculture - Metered	1353	1119	907
Agriculture - Un-Metered	3644	3708	4000
Street Light	79	74	74
Temporary Supply at LT	0	0	0
LT Total	10164	9861	9942
High Tension Consumers			



Consumer Category	Approved as per MYT Order for FY 2010-11	Revised Estimates submitted by PGVCL for FY 2010-11	Revised Approved for FY 2010-11
Industrial HT	4708	3975	3975
Railway Traction	0	0	0
HT Total	4708	3975	3975
TOTAL	14872	13836	13917

### 4.2. Distribution Losses and Energy Input Requirement

#### Petitioner's submission

The Petitioner has submitted that the company has made all possible efforts to reduce losses and its efforts shall continue and will be enhanced. Further, the Petitioner states that the revised estimate of distribution losses for the FY 2009-10 is 31.50% and improvement will be made on that level. In view of this, it has assumed that the distribution losses would be 30.00% in FY 2010-11.

#### Commission's view

The Commission has noted the submission made by the Petitioner. It must be noted that distribution loss is a controllable parameter and the licensee must strive to keep the distribution loss within the limits prescribed in the loss trajectory. The Commission has estimated the energy requirement based on the projected distribution losses. However it is clarified that this shall not be considered as approval of the higher distribution loss and the Commission will undertake the true-up based on the MYT approved distribution losses of 26%.

Table 58: Distribution Losses approved by Commission for FY 2010-11 (%)

Particulars	Approved as per MYT Order for FY 2010-11	Revised Estimates submitted by PGVCL for FY 2010-11	Revised Approved for FY 2010-11
Distribution Loss	26.00	30.00	30.00

The energy balance based on the approved distribution loss and transmission loss as per GETCO order is given in table below:

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Table 59: Energy Balance considered for FY 2010-11

(MUs)

Particulars	Unit	Approved as per MYT Order for FY 2010-11	Revised Estimates submitted by PGVCL for FY 2010-11	Revised Approved for FY 2010-11
Energy Sales	MUs	14872	13836	13917
Distribution Losses	MUs	5225	5930	5964
Distribution Losses	%	26.0%	30.0%	30.0%
Energy Requirement	MUs	20097	19766	19881
Transmission Losses	MUs	835	1062	872
Transmission Losses	%	4.0%	5.1%	4.2%
Total Energy to be input to Transmission System	MUs	20932	20828	20752
Pooled Losses in PGCIL System	MUs	383	151	151
Total Energy Requirement	MUs	21315	20979	20904

#### 4.3. Total Power Purchase Cost

The total cost of power purchase estimated by the Petitioner would comprise of the following components

- a. Cost of the energy or power purchase cost based on PPA allocation and merit order despatch
- b. Transmission charges of GETCO and PGCIL
- c. SLDC fees and charges
- d. Allocated gap/surplus of GUVNL
- e. E-Urja Cost (part of GUVNL cost)

### Petitioner's submission

The Petitioner has submitted revised power purchase cost for FY 2010-11 as shown below:



Table 60: Revised Power Purchase Cost submitted by PGVCL

(Rs. Lakhs)

S.No.	Particulars	Approved as per MYT Order for FY 2010-11	Revised Estimates submitted by PGVCL for FY 2010-11
1	Power Purchase Cost through Merit Order	451929	471535
2	Transmission Costs to PGCIL & GETCO	43398	67996
3	E-Urja Cost	1023	1023
4	GUVNL	0	0
5	SLDC Fees & Charges	0	282
6	Total Power Purchase Cost	496350	540835

The section below discusses the approach adopted by the Petitioner for each of the above components and gives the Commission's views on the same.

### a. Cost of energy

Once the energy requirement is arrived at, the power purchase cost is worked out by applying merit order dispatch principles for the allocated capacities/PPAs. In view of this, the allocation of capacities/PPAs and the principles and methodology for merit order dispatch adopted by the Petitioner, are discussed in the section below.

#### Allocation of Capacities/PPAs

The Petitioner has stated that the company has been allocated PPAs as mentioned in Table 61. The Petitioner has also stated that while most of the stations already exist, some are expected to come online during the FY 2010-11. Further, GUVNL has discontinued supply of power to Torrent Power Limited (TPL) from August, 2009 pursuant to the commissioning of Sugen CCPP. In view of this, the capacity retained by GUVNL for supply of power to TPL's Ahmedabad and Surat distribution areas has been allocated to the four distribution companies of Gujarat viz. DGVCL, MGVCL, PGVCL and UGVCL.



Table 61: PPA Allocation for FY 2010-11

(MW)

Generating Stations	Allocated Capacity
Ukai TPS	213
Ukai Hydro	229
Gandhinagar I to IV	66
Gandhinagar V	21
Wanakbori I to VI	315
Wanakbori VII	53
Sikka TPS	0
Kutch Lignite I to III	86
Kutch Lignite IV	30
Dhuvaran oil	0
Kadana Hydro	97
Utran Gas Based	0
Dhuvaran Gas Based - Stage-I	0
Dhuvaran Gas Based - Stage-II	0
Utran Extension	38
Sikka Extension	0
ESSAR	0
GPEC	0
GIPCL II (160)	80
GIPCL-SLPP	125
GSEG	28
GIPCL - I (145)	0
GMDC - Akrimota	125
GSEG Expansion	70
GIPCL, Expansion	63
GSPC-Pipavav	175
NPC - Tarapur- 1&2	128
NPC - Kakrapar	0
NPC - Tarapur- 3&4	0
NTPC - KORBA	308
NTPC - VINDHYACHAL - I	186
NTPC - VINDHYACHAL - II	190
NTPC - VINDHYACHAL - III	0
NTPC - KAWAS	0

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Generating Stations	Allocated Capacity
NTPC - JHANOR	0
NTPC - Kahalgoan	0
NTPC - Sipat Stage - II	216
SSNNL - Hydro	174
NTPC Kahalgaon (New)	12
NTPC North Karanpura	0
Sipat Stage-I	36
Wind Farms (Old Policy)	8
Wind Farms (New Policy)	303
Tarini Infrastructure Limited	2
APPL	700
Aryan	120

### **Merit Order Dispatch**

The Petitioner has worked out a comprehensive merit order dispatch (MOD) following the same principles as approved in the previous Tariff Order of the Commission, wherein the Nuclear Power Corporation (NPC) power plants and hydro power plants viz., SSNNL hydro, NPC Tarapore and Kakrapar and Ukai hydro have been considered must-run power plants and excluded from the merit order dispatch. The dispatch from individual generating stations has been worked out following the merit order based on the variable cost of each generating unit / station

### Commission's View on Purchase Cost for FY 2010-11

The Commission has considered energy requirement of the Petitioner for FY 2010-11 as given in the Table 59 and has also followed the merit order principles as adopted by the Commission during MYT Order. In terms of sources of power, the Commission has considered the allocation of PPAs as submitted by the Petitioner for FY 2010-11.

In order to estimate the power purchase cost fixed and variable costs of GSECL stations are considered as per the Tariff order for GSECL for FY 2010-11. The fixed and variable costs of IPPs and the central stations are considered as approved in MYT Order.

Based on the above, the power purchase costs for the Control Period have been calculated and approved by the Commission is as given in Table 62 below:



Table 62 : Revised approved Cost of Energy (Plant wise) for FY 2010-11

PGVCL	Units Available (MU)	Units Dispatched (MU)	Fixed Cost (Rs. Lacs)	Variable Cost (Rs./Unit)	Variable Cost (Rs. Lacs)	Incentive (Rs. Lacs)	Total Cost (Rs. Lacs)	Per Unit Cost (Rs./Unit)
Ukai TPS	1252	1252	6824	1.43	17906	0	24730	1.97
Ukai Hydro	478	478	2326	0.00	0	0	2326	0.49
Gandhinagar I to IV	389	389	3197	1.59	6179	0	9376	2.41
Gandhinagar V	154	154	1110	1.48	2279	50	3439	2.23
Wanakbori I to VI	2134	2134	10614	1.69	36071	314	46999	2.20
Wanakbori VII	389	389	2505	1.63	6336	127	8968	2.31
Sikka TPS	0	0	0	0.00	0	0	0	0.00
Kutch Lignite I to III	477	477	7447	1.05	5012	0	12459	2.61
Kutch Lignite IV	185	185	4034	0.96	1776	0	5810	3.14
Dhuvaran oil	0	0	0	0.00	0	0	0	0.00
Kadana Hydro	75	75	2994	0.00	0	0	2994	3.97
Utran Gas Based	0	0	0	0.00	0	0	0	0.00
Dhuvaran Gas -I	0	0	0	0.00	0	0	0	0.00
Dhuvaran Gas -II	0	0	0	0.00	0	0	0	0.00
Utran Extension	255	76	2880	1.86	1422	0	4303	5.63
Sikka Extension	0	0	0	0.00	0	0	0	0.00
ESSAR	0	0	0	0.00	0	0	0	0.00
GPEC	0	0	0	0.00	0	0	0	0.00
GIPCL II (160)	544	507	2568	1.72	8713	0	11281	2.23
GIPCL-SLPP	739	739	9036	0.95	7022	0	16057	2.17
GSEG	191	191	2074	1.48	2830	0	4904	2.56
GIPCL - I (145)	0	0	0	0.00	0	0	0	0.00
GMDC - Akrimota	739	739	11921	0.61	4509	0	16429	2.22
GSEG Expansion	327	98	191	2.12	2079	0	2270	2.32
GIPCL, Expansion	380	114	4380	1.75	1994	0	6374	5.59
GSPC-Pipavav	292	88	479	2.12	1856	0	2335	2.67
NPC - Tarapur- 1&2	807	807	0	0.94	7589	0	7589	0.94
NPC - Kakrapar	0	0	0	0.00	0	0	0	0.00
NPC - Tarapur- 3&4	0	0	0	0.00	0	0	0	0.00
NTPC - KORBA	1988	1988	7715	0.57	11332	0	19046	0.96
VINDHYACHAL - I	1186	1186	6038	1.03	12221	0	18258	1.54
VINDHYACHAL - II	1233	1233	8538	0.98	12079	0	20617	1.67
VINDHYACHAL - III	0	0	0	0.00	0	0	0	0.00

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NTPC - KAWAS	0	0	0	0.00	0	0	0	0.00
NTPC - JHANOR	0	0	0	0.00	0	0	0	0.00
NTPC - Kahalgoan	0	0	0	0.00	0	0	0	0.00
NTPC - Sipat - II	1399	1399	0	0.54	7552	0	7552	0.54
SSNNL - Hydro	215	215	0	2.05	4414	0	4414	2.05
NTPC Kahalgaon	76	76	823	1.70	1295	0	2118	2.78
NTPC Nt Karanpura	0	0	0	0.00	0	0	0	
Sipat Stage-I	233	233	2523	1.70	3967	0	6490	2.78
Captive Power Plant	0	0	0	0.00	0	0	0	0.00
Wind (Old Policy)	16	16	0	1.75	284	0	284	1.75
Wind (New Policy)	610	610	0	3.37	20542	0	20542	3.37
Tarini Inds Limited	13	13	0	3.00	402	0	402	3.00
APPL	4906	4906	65298	1.48	72549	0	137847	2.81
Aryan	136	136	2121	0.21	283	0	2404	1.77
Total	21819	20904	167635	1.25	260493	491	428619	2.05

Table 63: Approved Cost of Energy for FY 2010-11

(Rs. Lakhs)

Particulars	Approved as per MYT Order for FY 2010-11	Revised Estimates submitted by PGVCL for FY 2010-11	Revised Approved for FY 2010-11
Cost of Power through Merit Order	451929	471535	428619

# b. Transmission Charges of GETCO and PGCIL

### Petitioner's submission

The Petitioner has considered transmission charges to GETCO as per the tariff petition filed by GETCO for the FY 2010-11

Table 64: Revised Transmission Charges as submitted by PGVCL

(Rs. Lakhs)

Transmission Charges of Utilities	Approved as per MYT Order for FY 2010-11	Revised Estimates submitted by PGVCL for FY 2010-11

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Transmission Charges of Utilities	Approved as per MYT Order for FY 2010-11	Revised Estimates submitted by PGVCL for FY 2010-11
GETCO Charges	39022	53445
PGCIL Charges	4376	14550
Total Transmission Charges	43398	67996

The Petitioner has stated that the transmission charges of the PGCIL have been approved by the Central Electricity Regulatory Commission (CERC) and are to be paid by the Petitioner on the basis of calculations in the Regional Energy Account of WRPC.

#### Commission's view

For approval of these charges, the Commission has considered the PGCIL transmission charges as submitted by the Petitioner. However, the transmission charges of GETCO have been computed on the basis of the transmission tariff approved by the Commission in GETCO's order for FY 2010-11 applied to the net capacity allocated to the Petitioner. The approved transmission charges payable to PGCIL and GETCO are as shown in the following table:

Table 65: Revised Approved Transmission Charges for FY 2010-11

(Rs. Lakhs)

Transmission Charges	Approved as per MYT Order for FY 2010-11	Revised Estimates submitted by PGVCL for FY 2010- 11	Revised Approved for FY 2010-11
GETCO Charges	39022	53445	39597
PGCIL Charges	4376	14550	14550
Total Transmission Charges	43398	67996	54147

### c SLDC Fees and Charges

### Petitioner's submission

The Petitioner has proposed the SLDC Fees and Charges as proposed by SLDC in its petition for FY 2010-11, which are Rs 329.74/MW/ Half Year and Rs 534.21 /MW /

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Month respectively. The Petitioner has applied these charges on net capacity at 3985 MW. Total SLDC fees and charges for the Petitioner is estimated at Rs. 282 Lakhs.

#### Commission's views

The Commission has recomputed SLDC fees and charges on the basis of the approval in SLDC's Order, which are Rs 375/MW/ Half Year and Rs 519 /MW/Month. These charges are being applied to the net capacity to calculate the total SLDC fees and charges which is estimated at Rs 278 Lakhs.

# d. Allocated GUVNL Cost based on Gap / Surplus of GUVNL

#### Petitioner's submission

The Petitioner has submitted that GUVNL, the holding company formed on unbundling of the erstwhile GEB is entrusted with the responsibility of overall coordination between its subsidiary companies. It also undertakes the function of raising and managing the overall loan portfolio of GUNVL and its subsidiaries. It is currently supplying power to bulk licensees namely the Kandla Port Trust and undertakes trading of surplus power of Gujarat discoms to optimize the power purchase cost. In view of the above, the revenue surplus / gap, if any, of GUVNL is allocated to the four Discoms.

Table 66: Revised Cost of GUVNL as submitted by PGVCL

(Rs. Lakhs)

GUVNL Cost Allocation	Approved as per MYT Order for FY 2010-11	Revised Estimates submitted by DGVCL for FY 2010-11
Revenue		
Revenue from sale of power to TPL-A +TPL-S		0
Revenue from sale of power to KPT		911
Revenue from sale of power to Others	186933	1170
Revenue from trade of Discom's Surplus		69690
Other Income		16174
Total Revenue from Sale of Power (A)	186933	87945
Expenditure		
SLDC Fees & Charges	0	1

GUVNL Cost Allocation	Approved as per MYT Order for FY 2010-11	Revised Estimates submitted by DGVCL for FY 2010-11
Power purchase cost as per PPA allocation		1700
Average variable cost of Discom's surplus traded power	168480	37229
Employee Cost	1846	2440
Admin and General Expenses	1141	851
Depreciation	862	128
Interest and Financial Charges	13123	20322
Share of E-Urja utilization charge	97	97
Total Expenses (B)	185549	62767
Amount of Cost Allocation (C=B-A)	(1384)	(25179)

### Approach adopted for Estimation of Surplus/Gap of GUVNL and Allocation

This revenue surplus/gap is based on estimated Aggregate Revenue Requirement (ARR). The revenue from sales to bulk licensees and trading of surplus of energy from the Discoms has been deducted from the ARR, to arrive at the surplus/gap. The surplus/gap is then allocated to the Discoms on the basis of power purchase.

The Petitioner has submitted that while projecting GUNVL's revenue for FY 2010-11, the existing GERC approved tariff for KPT has been considered and the capacity retained by GUVNL for supply of power for TPL's Ahmedabad and Surat areas has been allocated to four Discoms from August 2009.

The Petitioner has also submitted that as per the current projections of demand and supply, the four Discoms shall have some surplus of energy during FY 2010-11, although this surplus is likely to appear only in terms of energy and not in terms of MW, i.e., the surplus is likely to be during off peak hours only. However, it has been assumed that 10% of the surplus being projected for a particular year shall be traded at a marginal cost plus a four paisa per unit trading margin. This has been included in the projections of GUVNL's expenses and revenues. Discoms would be able to recover some of the fixed cost that they pay for their allocated capacity from the revenues from trading.



#### Commission's View

GUVNL is the co-petitioner in the submission by the Petitioner. The Commission has noted the roles played and activities undertaken by GUVNL in the power sector of Gujarat. It has also noted the approach adopted by GUVNL in the allocation of surplus/gap. The Commission's view on the projected revenues and expenditure of GUVNL and the Petitioner's share of costs is analysed below:

### **Projected Revenue of GUVNL**

The Commission has observed that the revenue from bulk licensees has been calculated by projecting the expected units to be sold to each one of them and the prices as per their respective PPAs. The Commission has also observed that sale to TPL-A and TPL-S has not been considered in FY 2010-11, as it has been discontinued since August 2009 and the incremental capacities available with GUVNL have been allocated among the Discoms. The Commission has noted that sale to others comprises the residual power left with GUVNL, after supplying to the above parties, with the assumption of a margin of four paisa over the respective costs of those units as the sale price of the units sold to others.

In order to estimate trading during the FY 2010-11, the Commission asked GUVNL to furnish detail with regards to the number of MUs traded by GUVNL during FY 2000-10 and it was found that the total MUs traded (including UI Sale) by GUVNL up to Feb 2010 is 2191 MUs. These MUs are considered as a base to project the surplus power to be sold in FY 2010-11. Further, the Commission understand the uncertainty involved in estimation of surplus capacity with discoms and possibility of realization of sales.

Considering the peak deficit faced by the state, the Commission accepts that the surplus is more likely to be there during off peak hours; however, with the incremental capacities allocated to Discoms after discontinuation of supply to TPL Surat and Ahmedabad, it is expected that there is a possibility of further opportunity to optimize the net ARR through sale of surplus energy with Discoms. Based on the sales achieved in H1 of FY 2009-10, the Commission has estimated that GUVNL would be able to sell 3000 MUs during FY 2010-11.

#### **Projected Expenses of GUVNL**

The expenditure of GUVNL can broadly be divided into two parts – Operational Expenses and E-Urja Charges. Operational expenses include Employee Cost of GUVNL employees, A&G expenses, depreciation and interest and finance charges.

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It is observed that while Administrative & General (A&G) expense has been reduced, there has been a significant increase in Employee Cost, and interest and finance charges. The Petitioner has not submitted any reasons for the increase in interest and finance charges. This being controllable expense, the Commission has not taken a view in this order, but it will be reviewed during the next Tariff Order. The approved GUVNL expenses for FY 2010-11 are presented in Table 67 below.

**Table 67: Revised Approved GUVNL Operational Expenses** 

(Rs. Lakhs)

Particulars	Approved as per MYT Order for FY 2010-11	Revised Estimates submitted by PGVCL for FY 2010-11	Revised Approved for FY 2010-11
Employee Cost	1846	2440	2440
A&G expenses	1141	851	851
Depreciation	862	128	128
Interest and Finance Charges	13123	20322	20322

### e. E-Urja Cost

#### Petitioner's submission

The Petitioner has submitted that GUVNL has taken the assets created for the end-to-end ERP solution, namely, E-Urja, which is expected to benefit all the erstwhile GEB successor entities on its books. Hence, related costs such as depreciation, interest payment on the loans for the E-Urja project and the annual maintenance charges shall be allocated to the seven companies (including GUVNL) in the percentage of the number of licences provided to each company for use of the ERP package.

## Commission's views

The Commission has observed that the benefits of E-Urja are accruing to all the entities and approved proportional share as submitted by the Petitioner.



Table 68: Revised Approved Cost E-Urja for FY 2010-11

(Rs. Lakhs)

Annual Recurring Charges	Approved as per MYT Order for FY 2010-11	Revised Estimates submitted by PGVCL for FY 2010- 11	Revised Approved for FY 2010- 11
Depreciation	2826	2826	2826
Interest Cost	2136	2136	2136
Annual Maintenance Charges	960	960	960
Total Annual Expenditure	5923	5923	5922
Percentage of total licenses with the Company	17.27%	17.27%	17.27%
Allocation to the Company	1023	1023	1023

# Summary of (Surplus) / gap of GUVNL

Table 69: Approved GUVNL Cost for the FY 2010-11

(Rs. Lakhs)

GUVNL Cost Allocation	Approved as per MYT Order for FY 2010-11	Revised Estimates submitted by PGVCL for FY 2010-11	Revised Approved for FY 2010-11
Revenue			
Revenue from Sale of Power to TPL-A +TPL-S		0	0
Revenue from Sale of Power to KPT		911	820
Revenue from Sale of Power to Others	186933	1170	1247
Revenue from trade of Discom's Surplus		69690	111177
Other Income		16174	16174
Total Revenue from Sale of Power (A)	186933	87945	129417
Expenditure			
SLDC Fees & Charges	0	1	1
Power purchase cost as per PPA allocation		1700	1813
Average Variable Cost of Discom's Surplus Traded Power	168480	37229	50635
Employee Cost	1846	2440	2440
Admin and General Expenses	1141	851	851
Depreciation	862	128	128
Interest and Financial Charges	13123	20322	20322



GUVNL Cost Allocation	Approved as per MYT Order for FY 2010-11	Revised Estimates submitted by PGVCL for FY 2010-11	Revised Approved for FY 2010-11
Share of E-Urja Utilization Charge	97	97	97
Total Expenses (B)	185549	62767	76285
Amount of Cost Allocation (C=B-A)	(1384)	(25179)	(53132)

### **GUVNL Cost Allocation**

The surplus shown in the table above is distributed among all the discoms in the ratio of MUs purchased. This surplus will lead to reduction in the power purchase cost of the Petitioner as shown in the Table 70 below.

**Table 70: Sharing of GUVNL Cost /(Surplus)** 

(Rs. Lakhs)

GUVNL Cost Allocation	2010-11				
GOVINE COST Allocation	PGVCL	UGVCL	MGVCL	DGVCL	Total
MUs Purchased	20904	15410	7756	11789	55859
% of Allocation	37%	28%	14%	21%	100%
GUVNL Cost Allocated to Discoms	(19883)	(14658)	(7378)	(11214)	(53132)

# **Summary of Total Power Purchase Cost**

The Commission's analysis of total power purchase cost is summarized in the table below:

Table 71: Revised Total Power Purchase Cost for FY 2010-11

(Rs. Lakhs)

Particulars	Approved as per MYT Order for FY 2010-11	Revised Estimates submitted by PGVCL for FY 2010-11	Revised Approved for FY 2010-11
Power Purchase Cost	451929	471535	428619
Transmission Costs to PGCIL & GETCO	43398	67996	54147
E-Urja Cost	1023	1023	1023
GUVNL	0	0	(19883)

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Particulars	Approved as per MYT Order for FY 2010-11	Revised Estimates submitted by PGVCL for FY 2010-11	Revised Approved for FY 2010-11
SLDC Fees & Charges	0	282	278
Total Power Purchase Cost	496350	540836	464184

### 4.4. O&M Expenditure

Operation and Maintenance (O&M) expenditure comprises employee related Expenditure, Administrative and General (A&G) expenditure, and Repair and Maintenance (R&M) expenditure.

### a. Employee Expenses

#### Petitioner's submission

The Petitioner has projected revised expenses of Rs. 37126 Lakhs as compared to the approved expenses of Rs. 25779 Lakhs for FY 2010-11 in the MYT Order.

Table 72: Employee Cost estimated by PGVCL for FY 2010-11

(Rs. Lakhs)

Particulars	Approved as per MYT Order for FY 2010-11	Revised Estimates submitted by PGVCL for FY 2010-11
Employee Cost	25779	37126

The Petitioner submitted that the Employee Cost has been estimated considering the trend of the past year's Employee Cost, increase in dearness allowance and other expenses such as House Rent Allowance (HRA). Further, revised expenses also include increase in salary resulting from regular increments and promotions.

The Petitioner has proposed an increase of 8% in Employee Cost on FY 2009-10 after excluding gratuity fund provision of Rs. 3842 Lakhs for FY 2010-11.



#### Commission's View

As discussed in the earlier section 'Approach for ARR for the FY 2010-11, the Commission has not revised the controllable expenses for FY 2010-11. Accordingly, it has considered the employee expenses as approved in the MYT Order. The approved employee expense for FY 2010-11 is shown below:

Table 73: Employee expenses approved by Commission for FY 2010-11 (Rs. Lakhs)

Particulars	Approved as per MYT Order for FY 2010-11	Revised Estimates submitted by PGVCL for FY 2010-11	Revised Approved for FY 2010-11
Employee Cost	25779	37126	25779

### b. R&M Expenses

#### Petitioner's submission

The Petitioner has revised the R&M expenses for FY 2010-11 to Rs. 8048 Lakhs as compared to the approved expenses of Rs. 9205 Lakhs for FY 2010-11 in the MYT Order.

Table 74: R&M expenses estimated by PGVCL for FY 2010-11

(Rs. Lakhs)

Particulars	Approved as per MYT Order for FY 2010-11	Revised Estimates submitted by PGVCL for FY 2010-11
Repair & Maintenance	9757	8049

#### Commission's View

As discussed in the earlier section 'Approach for ARR for the FY 2010-11, the Commission has not revised the controllable expenses for FY 2010-11. Accordingly,







it has considered the R&M expenses as approved in the MYT Order. The approved R&M expense for FY 2010-11 is shown in Table 75 below:

Table 75: Approved R&M expenses of PGVCL for FY 2010-11

(Rs. Lakhs)

Particulars	Approved as per MYT Order for FY 2010-11	Revised Estimates submitted by PGVCL for FY 2010-11	Revised Approved for FY 2010-11
Repair & Maintenance	9757	8049	9757

### c. Administration & General (A&G) Expenses

#### Petitioner's submission

The Petitioner has revised the A&G expenses for FY 2010-11 to Rs. 8009 Lakhs. The same has been estimated by considering 8% increase on the provisional A&G expenses of FY 2010-11. The approved expenses as per the MYT Order for FY 2010-11 were Rs. 6549 Lakhs.

Table 76: A&G expenses estimated by PGVCL for FY 2010-11

(Rs. Lakhs)

Particulars	Approved as per MYT Order for FY 2010-11	Revised Estimates submitted by PGVCL for FY 2010-11
Administration & General Charges	6549	8009

### Commission's View

The Commission has analyzed the submission by the Petitioner. Further, the Commission has also noted that the Petitioner has not provided any explanation for revision in A&G expenses. Since these expenses are controllable in nature, the

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Commission has not revised the approved expenses. The Commission's analysis of the A & G expenses is as given in the Table 77 below.

Table 77: Approved A&G expenses by PGVCL for FY 2010-11

(Rs. Lakhs)

Particulars	Approved as per MYT Order for FY 2010-11	Revised Estimates submitted by PGVCL for FY 2010-11	Revised Approved for FY 2010-11
Administration & General Charges	6549	8009	6549

# **Summary of O & M expenses**

The total O&M expenses approved by the Commission for FY 2010-11 is summarised in the following Table:

Table 78: Revised Approved O& M Expenses by Commission for FY 2010-11

(Rs. Lakhs)

Particulars	Approved as per MYT Order for FY 2010-11	Revised Estimates submitted by PGVCL for FY 2010-11	Revised Approved for FY 2010-11
Employee Expenses	25779	37126	25779
Repair & Maintenance Costs	9757	8049	9757
Administration & General Charges	6549	8009	6549
Total O&M Expenses	42085	53184	42085

# 4.5. Capital Expenditure and Capitalization

The capital expenditure as submitted by the Petitioner is given in the Table 79 below:

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Table 79: Proposed Capital Expenditure for FY 2010-11

(Rs. Lakhs)

	(ns. Laki			
Sr. No.	Particulars	Approved as per MYT Order for FY 2010-11	Revised Estimates submitted by PGVCL for FY 2010- 11	
Α	Distribution Schemes			
	Normal Development Scheme	11500	13000	
	System Improvement Scheme	9000	8000	
	Electrification of hutments/harijan basti	1002	700	
	Scheme for Meters	6000	6000	
	Other	0	0	
	Total	27502	27700	
В	Rural Electrification Schemes			
	Special Component Plan	234	75	
	RE (Wells) New Guj. Pattern	0	33600	
	BADP	160	160	
		394	33835	
С	Others			
	Energy Efficient Pump	1800	546	
	Energy Conservation	10	5	
	Independent certification agency	3	0	
	Total	1813	551	
D	Non Plan Schemes			
	RE Non Plan (Tatkal)	0	0	
	RAPDRP	0	13011	
	RGGVY	3500	3500	
	Total	3500	16511	
E	Other New Schemes			
	Civil Works	1000	1500	
	Automatic PF control panels	1500	1000	
	Ring Main Unit		0	
	Aerial Bunch Conductors	1000	1000	
	HVDS in selected sub-division	5000	10000	
	Automatic meter reading	100	0	
	GIS in cities	700	0	
	JGY Load Shedding Transformers	100	100	
	Marine Cable for Shiyalbet	0	1600	
	Other Schemes (General Schemes)		0	



Sr. No.	Particulars	Approved as per MYT Order for FY 2010-11	Revised Estimates submitted by PGVCL for FY 2010- 11
	Earthquake Rehabilitation		0
	Coastal area scheme		0
	Fault Passage Indicator	70	0
	Total	9470	15200
F	Golden Goal Schemes		
	Golden Goal Schemes	49316	0
I	Capital Expenditure Total	91995	93797

#### Petitioner's submission

The Petitioner has submitted that all the schemes are in line with the schemes as approved by the Commission in the MYT Order. The only variation is change in capital expenditure against the Golden Goal Scheme which now stands withdrawn. Further, it submitted that similar activities (covered under Golden Goal Scheme) will be undertaken under the REC schemes under which it has estimated capital expenditure of Rs 33835 Lakhs. The revised capital expenditure for FY 2009-10 as submitted by the Petitioner is Rs 93797 Lakhs.

Table 80: Estimated Capital Expenditure for FY 2009-10

(Rs. Lakhs)

Particulars	Approved as per MYT Order for FY 2010-11	Revised Estimates submitted by PGVCL for FY 2010-11
Capital Expenditure	91995	93797

#### Commission's View

The Commission noted that while the overall capital expenditure is marginally lower than the revised estimates, there is significant variation in the expenditure proposed against some of the schemes at the individual level. Also, some schemes have been proposed, which were not approved by the Commission during the MYT order.

In the regulated business where the returns to the investors are linked to the equity invested in the business, which is in turn linked to the existing asset base and assets added every year, a steep increase in the asset base every year will have an implication on the consumer through tariff. In view of this, all the capital expenditure





needs to be prioritised and incurred, considering cost benefit analysis and its impact on consumers.

It must be noted here that the Petitioner is entitled to ROE and interest for the amount equivalent to assets put to use and not on the capital expenditure. In order to perform trend analyses of the actual capitalization, the Commission directed the Petitioner to submit the following data as shown in Table 81 below.

Table 81: Capital expenditure and Capitalization trend of last three years

(Rs. Lakhs)

Particular	2006-07	2007-08	2008-09	Average
Proposed Capital Expenditure	41990	46404	80532	168926
Actual Capital Expenditure incurred	33550	36558	49999	120107
Actual Capitalization	33550	36558	49999	120107
Ratio	80%	79%	62%	71%

The average actual capitalization achieved by the Petitioner is 71% hence the Commission has considered that the Petitioner will be able to capitalize 71% proposed capital expenditure and has accordingly approved the capitalization for FY 2010-11 as shown in Table 82 below

**Table 82: Approved Capitalization for FY 2010-11** 

(Rs. Lakhs)

Particulars	Approved as per MYT Order for FY 2010-11	Revised Estimates submitted by PGVCL for FY 2010-11	Revised Approved for FY 2010-11
Capital Expenditure	91995	93797	-
Capitalization	-	-	66690
Less : Consumer Contribution	18488	18759	18759
Grants	9486	4616	4616
Balance CAPEX	64021	70421	43314
Debt @ 70%	44815	49295	30320
Equity @ 30%	19206	21126	12994



### 4.6. Depreciation

#### Petitioner's submission

The Petitioner has considered Gross Fixed Assets & Depreciation for FY 2010-11 on the basis on closing balance of FY 2009-10 with the proposed addition during FY 2010-11 on the basis of revised capital expenditure plan for FY 2010-11. The Petitioner has further submitted that GERC regulations specify that the CERC rates have to be used for computation of depreciation. Therefore the Petitioner has revised the deprecation rates from 3.64% to 5.27% for FY 2010-11 in line with the new rates notified by CERC in the terms and conditions for tariff applicable for 2009 to 2014.

Table 83: Proposed Depreciation for 2010-11

(Rs. Lakhs)

Particulars	Approved as per MYT Order for FY 2010-11	Revised Estimates submitted by PGVCL for FY 2010-11
Gross Block in the beginning of the Year	497359	435097
Additions during the Year (Net)	91995	93797
Depreciation for the Year	19763	25424
Average Rate of Depreciation	3.64%	5.27%

### **Commission's View**

The Commission, in its MYT Order, had considered depreciation expenditure of Rs 19763 Lakhs for FY 2010-11, which amounts to 3.64% of Opening level of Gross Fixed Assets (GFA) of the Petitioner FY 2010-11. The revised closing GFA of the FY 2009-10 is considered as opening GFA for FY 2010-11 and the depreciation rates were considered as prescribed under GERC Tariff Regulations.

It must be noted here that Clause 17 of Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009 specifies that depreciation shall be calculated annually based on Straight Line Method at rates specified in Appendix-III of the said regulations. Provided that, the remaining depreciable value as on 31st



March of the year closing after a period of 12 years from date of commercial operation shall be spread over the balance useful life of the assets.

It further specifies that in case of the existing projects, the balance depreciable value as on 1.4.2009 shall be worked out by deducting the cumulative depreciation as admitted by the Commission upto 31.3.2009 from the gross depreciable value of the assets.

The Petitioner has calculated the depreciation by applying the new rates on the total gross assets without segregating the assets as mentioned in the regulation. The Commission has considered the depreciation as submitted by the Petitioner but hereby directs the Petitioner to submit the recomputed depreciation as per Clause 17 of CERC (Terms and Conditions of Tariff) Regulations, 2009 during the truing-up of FY 2009-10.

As explained in the earlier section 'Capital Expenditure and Capitalization', the net addition to assets implies the total amount capitalized by the utility and not the capital expenditure incurred during any financial year. It may be noted that at the time of next APR process, the Commission will consider the depreciation based on actual capitalisation during the entire year, subject to prudence check, for the purpose of sharing of gains / losses.

Table 84: Depreciation Approved by Commission for FY 2010-11

(Rs. Lakhs)

Particulars	Approved as per MYT Order for FY 2010-11	Revised Estimates submitted by PGVCL for FY 2010-11	Revised Approved for FY 2010- 11
Gross Block in Beginning of the year	497359	435097	450864
Additions during the Year (Net)	91995	93797	66690
Depreciation for the Year	19763	25424	25541
Average Rate of Depreciation	3.64%	5.27%	5.27%



### 4.7. Interest Expenses

#### Petitioner's submission

The Petitioner has projected revised interest expenses of Rs. 19794 Lakhs for FY 2010-11 as compared to the approved expenses of Rs. 17895 Lakhs in the MYT Order.

Table 85: Projected Interest Expenses for FY 2010-11

(Rs. Lakhs)

Particulars	Approved as per MYT Order for FY 2010-11	Revised Estimates submitted by PGVCL for FY 2010-11
Opening Loans	168721	121670
Loan Additions during the Year	36660	49295
Repayment during the Year	16872	12167
Closing Loans	188509	158798
Average Loans	178615	140234
Interest on Loan	16212	16151
Interest in Security Deposit	1384	3409
Guarantee Charges	299	234
Total Interest & Financial Charges	17895	19794
Less: Interest on Working Capital	-	4991
Net Interest & Financial Charges	-	14803

The Opening balance of Loan for FY 2010-11 is revised to Rs. 121670 Lakhs as against Rs. 168721 Lakhs, which is closing balance as per MYT Order for FY 2009-10. The normative loan addition in FY 2010-11 is computed at Rs. 49295 Lakhs as per the Capex funding plan discussed above. Repayment of loan has been computed assuming that 1/10<sup>th</sup> portion would be repaid in every Financial Year. The total repayment of existing and new loan during the year is computed at Rs. 12,167 Lakhs.

Security Deposit and Guarantee Charges have been assumed at the same level as the provisional figures of FY 2009-10. Further, Interest and Finance Charges considered above also has an element of Interest on Working Capital which is claimed separately on a normative basis, hence the same is deducted to arrive at the final interest charges.



#### Commission's View

The Commission has noted that interest and finance charges approved in the MYT Order had an element of Interest on Working Capital which is claimed separately on a normative basis. The Petitioner, while claiming the interest and finance charges, has deducted the interest on working capital to avoid the double counting. However, the Commission feels that it is not a correct approach; rather than deducting interest on working capital from the total interest and finance charges, the principal loan amount should be segregated. The Commission has segregated the opening balance in proportion to the actual interest paid for capital expenditure and interest paid for financing the working capital in FY 2008-09 in its order dated December 14, 2009. The recomputed opening balance has been considered as the opening balance for FY 2009-10. The opening balance for FY 2010-11 is computed after adjusting the estimated loan requirements and repayments to be made in FY 2009-10.

The Commission has considered the revised weighted interest rate of 11.52 % as considered in the MYT order for estimating the interest cost for FY 2010-11. Further, interest on security deposit and guarantee charges has been considered as estimated by the Petitioner. The approved interest and finance charges, after considering the above allocation, are tabulated below.

Table 86: Interest & Financial Charges for FY 2010-11

(Rs. Lakhs)

Particulars	Approved as per MYT Order for FY 2010-11	Revised Estimates submitted by PGVCL for FY 2010-11	Revised Approved for FY 2010-11
Opening Loans	168721	121670 <sup>4</sup>	85382
Loan Additions during the Year	36660	49295	30320
Repayment during the Year	16872	12167	8538
Closing Loans	188509	158798	107164
Average Loans	178615	140234	96273
Interest on Loan	16212	16151	11088
Interest in Security Deposit	1384	3409	3409
Guarantee Charges	299	234	234
Total Interest & Financial Charges	17895	19794	14731

<sup>&</sup>lt;sup>4</sup> Opening Loans include loan taken for financing working capital

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### 4.8. Interest on Working Capital

#### Petitioner's submission

The Petitioner has estimated interest on a normative working capital in accordance with the GERC Tariff Regulations which works out to Rs. 6515 Lakhs. However, instead of considering revenues for two months, revenues of the company for only one month have been considered for projecting the total working capital during FY 2009-10. The Petitioner has computed the interest on working capital at current short-term prime lending rate of SBI, that is, 10.25% as shown below.

Table 87: Interest on Working Capital submitted for FY 2010-11

(Rs. Lakhs)

Particulars	Approved as per MYT Order for FY 2010-11	Revised Estimates submitted by PGVCL for FY 2010-11
O & M expenses	3507	4432
Maintenance Spares	2911	5468
Receivables	48951	53663
Total Working Capital	55369	63563
Rate of Interest on Working Capital	10.25%	10.25%
Interest on Working Capital	5675	6515

The Petitioner has further submitted that interest on working capital has been calculated based on the normative working methodology as specified by the Honourable Commission in its Terms and Conditions of Tariff Regulations. However, instead of considering revenues for two months, revenues of the company for only one month have been considered for projecting the total working capital during FY 2010-11.

### Commission's View

The Commission has estimated the working capital as per Clause No. 66 of the GERC terms and conditions of tariff and accordingly considered the Operation & Maintenance expenses for one month; maintenance spares @ 1% of the historical

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cost escalated @ 6% per annum from the date of commercial operation; and receivables equivalent to one month of sales (in line with the same proposed by the Petitioner). Further, the estimation is based on O&M, historical costs and sales as approved by the Commission in this tariff order.

According to Regulation 20 (v) (b), the Commission, in its MYT order dated January 17, 2009, has taken the rate of interest on working capital equal to the short-term prime lending rate of SBI as on 01/04/2004, which was 10.25%.

The Commission has observed that while calculating the interest on working capital based on the above provision, the Petitioner has considered receivables equivalent to one month as submitted above. But instead of taking 1/12th of sales, the Petitioner has calculated 1/12th of ARR. The Commission has corrected this error and recomputed the normative interest on working capital at 10.25% as shown in Table 88 below

Table 88: Approved Interest on Working Capital for FY 2010-11

(Rs. Lakhs)

Particulars	Approved as per MYT Order for FY 2010-11	Revised Estimates submitted by PGVCL for FY 2010-11	Revised Approved for FY 2010-11
O & M expenses	3507	4432	3507
Maintenance Spares	2911	5468	5364
Receivables	48951	53663	36896
Total Working Capital	55369	63563	45767
Rate of Interest on Working Capital	10.25%	10.25%	10.25%
Interest on Working Capital	5675	6515	4691

### 4.9. Provision for Bad Debts

The Petitioner has estimated the provisioning for write-off of bad debts at 0.20% of the revenue from sale of power i.e Rs. 1033 Lakhs. The Commission has recomputed the bad debts at 0.20% of the revenue as shown in the table below:

**Table 89: Provision for Bad Debts** 

(Rs. Lakhs)

Particulars	Approved as per MYT Order for FY 2010-11	Revised Estimates submitted by PGVCL for FY 2010-11	Revised Approved for FY 2010-11
Provision for Bad Debts	1096	1033	886

# 4.10. Other Expenses

#### **Other Debits**

For FY 2010-11, the Petitioner has projected Rs 1142 Lakhs in other debits. As discussed above all the controllable expenses are considered as approved in the MYT Order dated Jan 17, 2009. Accordingly, the approved amount considered for the same is as shown in

Table 90 below.

### **Extraordinary Items and Prior period expenses**

For FY 2010-11, the Petitioner has not projected any amount under the head of Extraordinary Items and Prior period expenses. Accordingly, the approved amount in both the cases is nil for FY 2010-11.

### **Other Expenses Capitalized**

The Petitioner has estimated that expenses capitalized for FY 2010-11 would be at the same levels as that of FY 2010-11. The Commission has considered Expenses



Capitalized as per the levels specified in the MYT Order. Accordingly, the approved amount in case of Other Expenses Capitalized is as shown in

Table 90 below.

Table 90: Other expenses for FY 2010-11

(Rs. Lakhs)

Particulars	Approved as per MYT Order for FY 2010-11	Revised Estimates submitted by PGVCL for FY 2010-11	Revised Approved for FY 2010- 11
Other Debits	357	1142	357
Extraordinary Items	0	0	0
Net Prior Period Expenses / (Income)	0	0	0
Other Expenses Capitalized	(5058)	(7528)	(5058)
Total Other Costs	(4701)	(6386)	(4701)

# 4.11. Return on Equity

## Petitioner's submission

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The Petitioner has submitted the revised estimate of Return on Equity for FY 2010-11 as Rs 19609 Lakhs. The RoE has been computed @ 14% of the average equity based on the opening balance of equity and normative additions during the year, which have been arrived at by considering 30% of the capital expenditure net of consumer contribution and grants as funded from equity.

Table 91: RoE for FY 2010-11 as submitted by PGVCL

(Rs. Lakhs)

Particulars	Approved as per MYT Order for FY 2009-10	Revised Estimates submitted by PGVCL for FY 2009-10
Opening Equity Capital	136762	129499
Equity Additions during the Year	19206	21126
Closing Equity	155968	150626
Average Equity	146365	140062
Rate of Return on the Equity	14.00%	14.00%
Return on Equity	20491	19609

#### Commission's View

The Commission has considered the opening equity as per the estimated closing balance of equity in FY 2009-10. For the purpose of equity addition during the year, the Commission has considered capitalised cost instead of capital expenditure as considered by the Petitioner. The Commission has also deducted consumer contribution and Government grants to arrive at the normative equity portion of allowable capitalised cost. Return on Equity as approved by the Commission for FY 2010-11 is summarised in the following Table 92.

Table 92: RoE for FY 2010-11

(Rs. Lakhs)

Particulars	Approved as per MYT Order for FY 2009-10	Revised Estimates submitted by PGVCL for FY 2009-10	Revised Approved for FY 2009-10
Opening Equity Capital	136762	129499	120681

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Equity Additions during the Year	19206	21126	12994
Closing Equity	155968	150626	133675
Average Equity	146365	140062	127178
Rate of Return on the Equity	14.00%	14.00%	14.00%
Return on Equity	20491	19609	17805

#### **4.12.** Taxes

#### Petitioner's submission

The Petitioner has estimated that the income tax for FY 2010-11 is Rs 3031 Lakhs as against Rs 129 Lakhs as approved by the Commission in the MYT Order.

The Petitioner has calculated tax considering applicability of Minimum Alternative Tax (MAT). Further, tax is calculated on the RoE as estimated by the Petitioner. Additionally, Fringe Benefit Tax has been computed at 0.50% of the total employee cost for FY 2009-10.

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

Since taxes are considered to be pass through, the Commission has considered the tax amount as the same as approved in the MYT Order ie. Rs 129 Lakhs for the FY 2010-11.

**Table 93: Taxes for FY 2010-11** 

(Rs. Lakhs)

Particulars	Approved as per	Revised Estimates	Revised
	MYT Order for FY	submitted by PGVCL	Approved for
	2010-11	for FY 2010-11	FY 2010-11
Provision for Tax	129	3031	129

#### 4.13. Aggregate Revenue Requirement for FY 2010-11

Based on the analysis of each component discussed above, the Aggregate Revenue Requirement of the Petitioner for FY 2010-11 as approved by the Commission in its MYT Order, as estimated by the Petitioner in the APR Petition and as approved by the Commission in this Order is provided in the following table

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Table 94 : Aggregate Revenue Requirement for FY 2010-11

(Rs. Lakhs)

Particulars	Approved as per MYT Order for FY 2010-11	Revised Estimates submitted by PGVCL for FY 2010-11	Revised Approved for FY 2010- 11
Cost of Power Purchase	496350	540835	464184
Operation & Maintenance Expenses	42085	53184	42085
Employee Cost	25779	37126	25779
Repair & Maintenance	9757	8049	9757
Administration & General Charges	6549	8009	6549
Depreciation	19763	25424	25541
Interest & Finance Charges	17895	14803	14731
Interest on Working Capital	5675	6515	4691
Other Debits	357	1142	357
Extraordinary Items	0	0	0
Provision for Bad Debts	1096	1033	886
Net Prior Period Expenses / (Income)	0	0	0
Other Expenses Capitalized	(5058)	(7528)	(5058)
Sub-Total	578163	635408	547417
Return on Equity	20491	19609	17805
Provision for Tax / Tax Paid	129	3031	129
Total Expenditure	598783	658048	565350
Less: Non-Tariff Income	6992	14094	14094
Aggregate Revenue Requirement	591791	643954	551256

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#### 4.14. Revenue from sale of power for FY 2010-11

#### Petitioner's submission

The Petitioner has estimated category wise revenue based on the existing tariff which works out to Rs. 516686 Lakhs for FY 2010-11. It includes the FPPPA charges at Rs 0.77/kWh.

#### Commission's View

The Commission has considered revenue on the basis of the revised approved sales and at existing tariffs. The Commission has considered the FPPA charges at 0.12/kWh, as considered at the time of the MYT Order. The Commission's analysis of revenue from Sale of Power is provided in Table 95 below:

Table 95: Projected Revenue for FY 2010-11

(Rs. Lakhs)

	Reve	Revenue FY 2010-11			
	Approved as per MYT Order for FY 2010-11	Revised Estimates submitted by PGVCL for FY 2010-11	Revised Approved for FY 2010-11		
LT Consumers					
Residential	72820	93688	77543		
Commercial	44400	52751	46537		
Industrial LT	66534	64357	56500		
Public Water Works	7288	10748	8686		
Agriculture	47472	67758	52423		
Street Light	2702	3013	2532		
LT Total	241215	292315	244221		
HT Consumers					
Industrial HT	218922	224371	198533		
Railway Traction	0	0	0		
HT Total	218922	224371	198533		
TOTAL	460137	516686	442754		



#### 4.15. Non-Tariff Income

Non-tariff income comprises interest on loans and advances to employees/contractors, income from investments with banks, Delayed Payment Surcharges from consumers etc.

#### Petitioner's submission

The Petitioner has estimated Non-Tariff Income for FY 2010-11 by assuming 6% escalation over the estimated figures of FY 2009-10.

#### Commission's views

The Commission has considered the submissions by the Petitioner and has approved the projections made by the Petitioner. The approved Non-Tariff Income for FY 2010-11 is as shown in Table 96 below.

Table 96: Non-Tariff Income for FY 2010-11

(Rs. Lakhs)

Particulars	Approved as per MYT Order for FY 2010-11	Revised Estimates submitted by PGVCL for FY 2010-11	Revised Approved for FY 2010-11
Non Tariff Income	6992	14094	14094

#### 4.16. Other Consumer related Income for FY 2010-11

Revenue from Other Consumer Related Income comprises of revenue on account of charge imposed other than the basic charges applicable to the Consumers. These include income on account of meter rent, wheeling charges, Inspection charges and miscellaneous charges.

#### Petitioner's submission

The Petitioner has estimated Other Consumer related Income for FY 2010-11 by escalating the provisional figures of FY 2009-10 by the average increase in number of consumers during FY 2009-10.

#### Commission's views

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The methodology adopted by the Petitioner is in line with the methodology adopted by the Commission in its MYT Order. Accordingly, the Commission has considered the Other Income for FY 2010-11 as submitted by the Petitioner. The Commission's analysis of the consumer related income is given in the table below:

Table 97: Other Consumer related Income for FY 2010-11

(Rs. Lakhs)

Particulars	Approved as per MYT Order for FY 2010-11	Revised Estimates submitted by PGVCL for FY 2010-11	Revised Approved for FY 2010-11
Other Income	11983	12694	12694

#### 4.17. Subsidy for FY 2010-11

#### Petitioner's submission

The Petitioner has submitted that it has assumed that the agricultural subsidy will continue to be received by the four Discoms i.e. MGVCL, PGVCL, UGVCL and DGVCL in proportion to their respective percentage share in agricultural consumption. Further, the Petitioner has assumed the quantum of agricultural subsidy at the same level as last year i.e., Rs. 110000 Lakhs for the FY 2010-11. Apart from the above, the Petitioner has submitted that the Petitioner writes back 10% of its balance amount of consumer contribution and government grants every year.

#### Commission's views

The Commission has noted that fact that no amount on account of other subsidy was written back by the Petitioner for FY 2010-11. A query was raised regarding the same by the Commission on 1<sup>st</sup> February 2010. The Petitioner has clarified that the amount of other subsidy be added to Non-tariff Income. This change have been proposed to ensure the consistency of the other income as shown in the annual accounts with the income (in the annual account other subsides is a part of Non-tariff Income) shown/proposed in the ARR.



The Commission has the studied the methodology adopted by the Petitioner, has analyzed the quantum of subsidy as estimated by the Petitioner and accordingly approves the subsidy as shown in Table 98 below:

Table 98: Subsidy for FY 2009-10

(Rs. Lakhs)

Particulars	Approved as per MYT Order for FY 2010-11	Revised Estimates submitted by PGVCL for FY 2010-11	Revised Approved for FY 2010-11
% Share in Unmetered Agriculture Sales	44.03%	37.10%	37.10%
Share of Agriculture Subsidy	48433	40805	40805
Other Subsidies (Write back of C.C. / Grants)	8685	0	0
Total	57118	40805	40805

#### 4.18. Total Revenue for FY 2010-11

The total expected revenue of the company for FY 2010-11 comprising of revenue from Sale of Power at existing tariff, Other Consumer-related Income, agriculture subsidy and Other Subsidies is summarised below:

Table 99: Total Revenue for FY 2010-11

(Rs. Lakhs)

Particulars	Approved as per MYT Order for FY 2010-11	Revised Estimates submitted by PGVCL for FY 2010-11	Revised Approved for FY 2010-11
Revenue from sale of power at Current Tariff	460137	516686	442754
Other Income (Consumer related)	11983	12694	12694
Agriculture Subsidy	48436	40805	40805
Other Subsidies	8685	0	0
Total Revenue including Subsidy	529241	570184	496253

#### 4.19. Estimated Revenue Gap for FY 2010-11

Based on the above, the estimated revenue gap for FY 2010-11 at existing tariff is as outlined in the table below:

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Table 100: Estimated revenue gap during FY 2010-11

(Rs. Lakhs)

Particulars	Approved as per MYT Order for FY 2010-11	Revised Estimates submitted by PGVCL for FY 2010-11	Revised Approved for FY 2010-11
Revised ARR	591791	658888	551256
Revenue from Sale of Power	460137	516686	442754
Other Income (Consumer-related)	11983	12694	12694
Total Revenue before Subsidy	472120	529380	455448
Agriculture Subsidy	48436	40805	40805
Other Subsidies	8685	0	0
Total Revenue After Subsidy	529241	570184	496253
Gap/(Surplus)	62550	88704(#)	55004

Note: The estimated of FY 20101-11 by the Petitioner is inclusive of gap of FY 2009-10  $\,$ 



## 5. Compliance of Directives

The Commission, in its order dated 14<sup>th</sup> December, 2009, had issued various directives to the Petitioner. The Petitioner has submitted the details of compliance with these directives. The Commission's comments on the status of Compliance of the Directives by the Petitioner are given below. The Commission has also given specific directives to the licensee wherever required.

#### 5.1. Compliance of Earlier Directives

#### **Directive 1**

#### Consumption by agricultural pump sets

A realistic consumption by agricultural pump-sets could be obtained only by providing meters at distribution transformers and properly noting LT losses on the LT network below distribution transformers. The progress on this is very poor. Only 4867 transformers are metered, out of the targeted 71644. The metering of distribution transformers should be expedited.

Wherever meters are provided at the distribution transformers, consumption by the pump sets under these transformers may be assessed and furnished to the Commission by reading the meters regularly. A report for the year 2008-09 may be furnished by May 2009.

#### Compliance

The Petitioner has replied that it is a fast-growing company. The growth in the agricultural sector has been higher than 5% on year-on-year basis, while, in terms of load, the growth rate has been more than 7%. The Petitioner has decided to implement High Voltage Distribution System, particularly while releasing new agricultural connections. Therefore, the transformer population of agricultural category has also increased and has crossed 120000.

Till date, PGVCL has installed about 7999 meters on agricultural category transformers. A comprehensive report on reading of meters shall be submitted to the Commission separately.

It is further added that M/s Feedback Ventures Limited has been engaged for studying the consumption of agricultural pump set of all four Distribution Companies. The Petitioner has planned to provide meters at all Distribution Transformer Centres by December 2010.

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#### **Commission's comments**

The Commission notes that the Petitioner has been able to meter only 7799 agricultural transformers out of a total of 71644. Thus the progress on the same is very poor. The Petitioner should expedite the metering process and complete the same by December 2010.

Further, the Petitioner is directed to expedite the study and to share the detailed approach and methodology with the Commission.

#### **Directive 2**

#### **Energy Audit**

The Petitioner shall intensify the energy audit in urban areas where there is scope for reduction. The results of this could be obtained quickly. The loss reduction in Bhavanagar and Rajkot is very marginal. Even without GIS, Energy Audit has produced good results elsewhere. Considering distribution transformers and the services fed by transformers, the company shall take up Energy Audit in all urban areas without waiting for GIS.

#### Compliance

Feeder-wise energy audit has already been carried out by the Company. The technical and commercial loss is segregated from the total loss and reported to various authorities. Based on consumers catered to by the feeders, the feeder category is created and category-wise loss is also worked out. For example, feeders catering to urban areas are segregated from total feeders thereby working out urban loss. The Petitioner is installing meters on Agriculture Transformer Centres as well as on other category transformers. Sixty seven percent transformer centres have been provided with meters in the non-agricultural category, while in the agricultural category, 7% transformer centres have been provided with meters.

The Petitioner has initiated Energy Audit, particularly in urban areas. However, looking at the quantum of work and number of consumers, it is difficult for it to take full advantage of Energy Audit without IT support. The Petitioner has taken up work on hand, as a pilot project, in one of the urban sub-divisions under an E-Urja system. The final outcome of the pilot project shall be analysed and applied to other sub-divisions as well.

#### Commission's comments

The Commission has noted that progress on the Energy Audit of urban areas needs to be expedited. The results of the pilot project need to be quickly analysed and applied to all other sub-divisions.

#### **Directive 3**

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#### **Distribution losses**

Though losses during FY 2006-07 are considerably reduced, the same level of achievement was absent during FY 2007-08. The Petitioner shall concentrate on changing all old electromagnetic meters with static meters, which will produce good results. At the same time, it shall concentrate on curbing theft or pilferage of energy. The company shall draw out a programme to reduce the losses by up to 15%.

#### Compliance

The Petitioner has stated that it takes various steps, narrated as under, for reduction of distribution losses. It makes significant efforts to reduce distribution losses and ensures that the loss reduction trajectory as approved by the Commission is followed. It thus endeavours to achieve, at least, the approved distribution loss level at the end of the control period. The Petitioner has proposed the capital expenditure accordingly.

#### **Technical loss reduction activities**

- Providing Coated Conductor in theft-prone areas and replacement of deteriorated conductor with optimum size
- · Bifurcation of feeders.
- Proper maintenance, i. e., removal of joints/crossings and rejumpering etc.
- Installations of APFC panels
- Installation of Amorphous Transformer
- Lowering of LT/HT ratio through HVDS

#### **Commercial loss reduction activities**

- Replacement of all conventional three-phase meters by static meters: 21300 three-phase meters have been replaced during FY 2008-09 and 14142 by September 2009.
- Replacement of single-phase meters by high quality/static meters: 2.64 Lakhs single-phase meters have been replaced during FY 2008-09 and 44957 by September 2009.
- Enhanced vigilance activity: Creation of Checking Squad up to Divisional Level and separate checking squads for High Tension Consumers. More than 9 Lakh consumers' installations were checked during FY 2008-09 and about 4.6 Lakhs by September 2009.
- Review of consumers having zero or low consumption.

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- Frequent reading of heavy consumption/seasonal consumers.
- Providing Automatic Meter Reading Facility to HT Consumers and high valued (Seasonal/High Consumption) LT consumers: 2277 High Tension Consumers





have been provided with Automatic Meter Reading facility and 1495 high valued Low Tension Consumers have been provided with Automatic Meter Reading facility.

- Providing MMB and sealing of single-phase consumers: More than 2.92 Lakh single-phase consumers and 24338 three-phase consumers have been provided with Meter Boxes. Similarly, up to September 2009 1.18 Lakhs single-phase and 12081 three-phase consumers have been provided with Meter Boxes.
- Maximizing the release of new connection particularly in the rural areas for reducing loss of JGY feeders.
- Providing of insulated/aerial bunch conductor in theft-prone areas.

#### Commission's View

The Commission notes the meter replacement drive undertaken by the Petitioner, and its efforts towards reduction of theft/ pilferage. However, the scope of such loss reduction activities is still narrow. Consequently, the Petitioner has not been able to reduce distribution loss during H1 of FY 2009-10 to the extent specified in the MYT order. The Commission has, therefore, provided a fresh directive to the Petitioner with regard to chalking out a comprehensive loss reduction program.

#### **Directive 4**

#### Jyotigram feeder loss

Jyotigram is a laudable scheme. Important measures such as providing aerial bunched cables, implementing high voltage distribution, curbing tapping of lines, replacement of old meters, etc. shall be undertaken in a planned manner to reduce loss.

#### Compliance

Loss from the JGY category contributes significantly to the overall loss of PGVCL and therefore, reduction in JGY losses is the prime task of PGVCL. It has taken up this task in a phased manner whereby high loss feeders have been assigned to various officers for close monitoring. Due to enhanced vigilance and intensive efforts, JGY category losses have reduced by more than 5% during the FY 2008-09 and by about 2.5% during the current FY up to September 2009.



Distribution loss of the JGY Category for FY 2007-08, FY 2008-09 and H1 of FY 2009-10 are as under:

Table100: Distribution loss in JGY

No.	Year	Unit sent out [MUs]	Unit sold out [MUs]	% Loss
1	FY 2007-08	3248.89	1099.90	65.84
2	FY 2008-09	3333.16	1334.69	59.70
3	H1 FY 2009-10	1775	759	57.26

The following measures have been undertaken for reduction of losses of selected JGY feeders, up to September 2009:

Table 101: Measures undertaken for reduction of losses

Na	Measures Undertaken		Phase - 1	Phase -	Phase -	Total
No.	No. of Feeders		176	213	190	579
	No. of Villages		1571	1614	985	4170
1	Removal of 11kv crossing		2333	2707	3009	12504
2	No of T/C for which meter provided		4682	4813	1795	6835
3	Replacement of old / defective	1ph	114428	121600	73240	309268
4	meters	3ph	2644	2096	1027	5767
5	MMB provided	1ph	104131	115508	64619	284258
6		3ph	1866	1737	844	4447
7	Sealing done	1ph	142196	148847	84906	375949
8	Sealing done	3ph	2709	2223.15	1109	6041
9	Coated conductor to be provided in LT line		3438.18	4673	3878	11989
10	1 ph 2 w / 3 w LT line to be provided		350.35	453	854	1657
	where no 3ph connection exists		000.00	100	001	1007
11	De-augmentation of village transformer		990	714	304	2008
12	No. of drives carried out		1961	1614	1903	5478
13	No. of connections released		49848	33539	19389	102776

#### Commission's View

The Commission has taken note of the various measures undertaken by the Petitioner to curb JGY losses. However, the Commission is concerned that at almost 60%, the loss level is still very high. The Commission directs the Petitioner to target an annual reduction of at least 10% in the loss level.

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#### **Directive 5**

#### Effective metering, billing and revenue collection

The effort to replace old meters with static meters has been noted. Handheld meter reading instruments shall be introduced, if not already done, to take meter readings, generate bills and deliver them to the consumer on the spot. This will eliminate human error to some extent and also improve revenue realisation. Spot billing with handheld machines is to be implemented. A report may be submitted to the Commission by June 2009.

#### Compliance

Replacement of existing electro-magnetic meters by high precision quality meters has been taken up from FY 2003-04. Between FY 2004-05 and until September 2009, 12.98 Lakh meters have been replaced. Further replacement of meters is planned as shown below:

Table 2: Planned Meter Replacement in FY 2010-11

Pla	Planning for the replacement of the meters by static /quality meters					
Sr. No.	Name of Circle	FY 2009-10	FY 2010-11			
1	Rajkot City	13374	14310			
2	Rajkot Rural	36514	39070			
3	Porbandar	31598	33809			
4	Jamnagar	47934	51289			
5	Bhuj	17145	18346			
6	Junagadh	33233	35559			
7	Bhavnagar	51860	55490			
8	Amreli	43656	46712			
9	Surendranagar	23407	25045			
	PGVCL Total	298721	319630			



The Petitioner has already introduced billing through hand-held instruments in selected areas. At present more than 6 Lakh consumers are billed through hand-held instruments. Additionally, consumers of district headquarters, except Amreliare billed using outsourcing and hand-held equipment. Therefore, out of about 34.5 Lakh metered consumers, more than 15 Lakh are billed through hand-held Instruments. This has largely eliminated human error and has increased billing efficiency and accuracy. Further, a special clause has been incorporated in the terms and conditions of the contract for deviation in the scheduled Billing Program. This will help in adhering to the billing program.

The Petitioner has also planned to provide hand-held equipment to all meter readers of the Company. A total of 2277 High Tension Consumers out of 2433, and 1495 high valued (seasonal/ high consumption) LT consumers have been provided with the automatic meter reading facility. This has resulted in accurate, timely billing of important consumers, besides savings in time and certain other expenses. Consumer related information is now furnished on the back of the bill. Tariff-related information and other information related to payment of the bills are already being indicated on the back of bill.

#### Commission's View

The compliance by the Petitioner on this directive is noted. However, it is directed to submit the report at the earliest.

#### **Directive 6**

#### Cent percent metering

Consumers may be convinced of the need for energy accounting by the utility and the provision of metering for the remaining unmetered services may be expedited.



#### Compliance

The status of metering at various levels is given below:

Table 101: Status of metering

No.	Description	% Completed
1	11KV/22 KV Feeders	100
2	Distribution Transformer on agriculture dominant feeders	6.92
3	Distribution Transformer on feeders other than agriculture dominant feeders	67.66
4	Individual Consumers other than agricultural consumers	100
5	Agricultural consumers (Metered Consumers/Total Consumers)	36

The Petitioner is educating consumers on the issue of providing meters at presently unmetered agricultural installations, since the large quantum of work is being resisted by organizations such as Kishan Sangh. At the same time, the Petitioner has started processing pending agricultural applications expeditiously and in accordance with the enhanced targets. All new connections are released with meters and thereby the Petitioner is increasing its metering ratio.

#### Commission's View

The Commission has noted the poor progress on metering of agricultural consumers. 100% metering is crucial for proper energy accounting, determination of exact cost of supply and determination of subsidy. The Commission directs the Petitioner to improve the status of metering of agricultural consumers.

#### **Directive 7**

#### **Distribution Transformer Failures**

The failure rate of distribution transformers is still high. Efforts should be made to bring down the transformer failures to less than 10%.



#### Compliance

The Petitioner is taking necessary measures to reduce the Distribution Transformer Failure rate by way of stringent maintenance measures, reviewing loading of existing Distribution Transformer Centre under the System Improvement Scheme, etc. Additionally, the Petitioner has adopted a High Voltage Distribution System, particularly for new agricultural consumers, which will further reduce the Transformer failure rate.

The Year-wise Transformer Failure rate is given below:

Table 102: Transformer Failure Rate in the last three years

Year	Total nos. of Transformers	Nos. of failed Transformers	% failure
FY 2006-07	113451	27429	24.18
FY 2007-08	127226	27430	21.56
FY 2008-09	148127	29317	19.79
H1 FY 2009-01	160111	18399	11.49

#### Commission's View

The Commission notes that the failure rate is still very high and the Petitioner has not been able to meet the target of less than 10% failure rate. The Commission directs the Petitioner to step up efforts to reduce the failure rate.

#### **Directive 8**

#### **Allocation of PPAs**

The allocation of PPAs shall be firmed up at the earliest.

#### Compliance

The Petitioner has not submitted any response to the above compliance.

#### Commission's View

The utilities are directed to firm up the allocation of PPAs.



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#### 5.2. Fresh Directives

The Petitioner has not submitted its compliance regarding the fresh directives issued by the Commission in its order dated December 15, 2009. Therefore, the Commission is re-issuing the directives along with one other directive to the Petitioners. It also directs the Petitioner to submit compliance of the fresh directives during the next APR exercise.

#### **Directive 1**

The Petitioner shall provide details of the internal processes and procedures that are put in place, to ensure that meter readers read the meters on time. It shall also provide the details of the process followed to correct any discrepancies found..

#### **Directive 2**

The Petitioner shall provide a comprehensive loss reduction program along with definite timelines aimed at reducing commercial and technical losses. The scope of such a program needs to be wide enough to ensure substantial loss reduction. Special emphasis shall be given to reducing JGY feeder losses.

#### **Directive 3**

The Petitioner is henceforth directed to submit in advance, the number of old meters it plans to replace in every ARR petition. Subsequently in the APR petition for that year, it shall also submit the details of actual meters replaced vis-à-vis the target.

#### **Directive 4**

The Petitioner is directed to submit details of the number of theft cases reported and status of penal action taken in its petition. Further, it shall also submit the total amount recovered from such consumers.

#### **Directive 5**

The Petitioner is directed to submit all financial figures in its future ARR and APR petitions in units of Rupees Crore.

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#### **Directive 6**

The Petitioner is directed to include estimated expenses of the following items of the ARR into O&M expenses.

- Other Debits
- Extraordinary Items
- Net Prior Period Expenses/(Income)
- Other Expenses Capitalised

#### **Directive 7**

The Petitioner has calculated the depreciation by applying the new rates on the total gross assets without segregating the assets as mentioned in Clause 17 of Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009. The Petitioner is directed to submit the recomputed depreciation as per Clause 17 during the truing-up of FY 2009-10 and thereafter.

#### **Directive 8**

The Petitioner is directed to segregate the total loans between loans utilized for financing the working capital and loans used for incurring capital expenditure in future petitions.



## 6. Fuel and Power Purchase Cost Adjustment

#### **Submission by Petitioner**

The Commission has allowed Discoms to claim the increase in the fuel price and power purchase cost according to the approved formula for any increase in Fuel Price and Power Purchase cost (FPPPA) from its customers. The formula approved by the Commission for the calculation of FPPPA charges is reproduced below.

 $FPPPA = [F_{OG} + PPP_1 + PPP_2] / [S.E.]$ 

Where.

**F**<sub>og</sub> Adjustment on account of variations in delivered cost of Fuel at GEB's

(now GSECL) Thermal Power Stations Rs. Millions

**PPP**<sub>1</sub> Adjustment on account of variable cost of power purchased in Rs.

Millions

**PPP**<sub>2</sub> Adjustment on account of fixed cost of power purchased in Rs. Millions

**SE** Saleable Energy in Million Units

The Petitioner has submitted that for all the generating stations from which GUVNL is purchasing power, the cost for the same will be determined / approved by the appropriate Commissions. For example, the cost of power purchase from GSECL stations is determined by the Hon'ble GERC and that from IPPs is governed by the provisions of the PPAs. For central generating stations the tariff will be either determined by the Central Electricity Regulatory Commission or the Department of Atomic Energy in case of Nuclear Power Plant and in case of Competitive Bidding, the tariff is adopted by the GERC. The tariff for renewable sources is also determined by the Hon'ble GERC.

In essence, the tariff for the entire power purchased by GUVNL/Discoms is determined/approved by the appropriate Commission and hence the entire power procurement by GUVNL/Discoms is purchase of power only.

Further, it has been submitted that currently, any increase in fixed and variable cost of power purchased from all the sources is considered for FPPPA except GSECL owned stations. Given this background the Petitioner has submitted that it is inappropriate to include only the fuel component part for increase in fuel cost of GSECL owned stations in the FPPPA formula. It has therefore requested the

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Commission to have only one component in the formula for variation in power purchase price including power purchase from GSECL owned stations.

The proposed formula for calculation of per unit power purchase price adjustment charges is as follows

#### **PPPA** = [(**PPCA** - **PPCB**)] / [1-LA]

Where,

PPCA	Is the average power purchase cost per unit of delivered					
	energy, computed based on the operational parameters					
	approved by the Commission or principles laid down in the					
	power purchase agreements in Rs. / KWh for all the					
	generating stations who have supplied power in the given					
	quarter, calculated as total power purchase cost billed in Rs.					
	Million divided by the total quantum of power purchase in					
	million units made during the quarter.					
PPCB	Is the approved average base power purchase cost per unit of					
	delivered energy for all the generating stations considered by					
	the Hon'ble Commission for supplying power to the company					
	in Rs. / KWh, calculated as the total power purchase cost					
	approved by the Hon'ble Commission in Rs. Million divided by					
	the total quantum of power purchase in million units					
	considered by the Commission;					
LA	Is the weighted average of the approved level of Transmission					
	and Distribution losses for the four Discoms applicable for a					
	particular quarter.					



#### Commission's view:

The Commission has taken note of the submission. The Commission does not envisage any change in the FPPPA formula at this juncture. The Commission may consider the same during the next control period.

#### Base Power Purchase cost for Calculation of FPPPA for FY 2010-11

The base rates approved vide the multi-year tariff order dated 17th January, 2009 will be considered as indicated in the table below (expect Variable Cost of GSECL stations which is will be modified as per latest CEA Regulations). Further, FPPPA will be recovered in the form of fuel and power purchase adjustment charge for every unit of energy consumption and will be forming a part of the energy bill to be served on monthly/bimonthly or any other periodical basis. The implementation and application of the formula and all other terms shall continue to be as per the Commission's earlier orders

Table 103: Base Power Purchase for Calculation of FPPPA for FY 2010-11

Sr. No.	Power Stations	Capacity (MW)	Fixed Cost (Rs. Lakhs)	Energy Purchase (MU)	Variable Cost (Rs/Kwh)
	GSECL				
1	Ukai TPS	850	30417	5014	1.50
2	Ukai Hydro	305	2519	637	-
3	Gandhinagar I to IV	660	28544	1156	1.75
4	Gandhinagar V	210	9237	1540	1.47
5	Wanakbori I to VI	1,260	43781	4081	1.73
6	Wanakbori VII	210	9049	1540	1.64
7	Sikka TPS	240	10848	422	1.99
8	Kutch Lignite I to III	215	16492	1190	1.07
9	Kutch Lignite IV	75	6768	461	0.98
10	Dhuvaran oil	220	7532	644	3.76
11	Kadana Hydro	242	6820	189	0.00
12	Utran Gas Based	135	5117	313	2.16
13	Dhuvaran Gas Based - Stage-I	107	4944	245	2.21
14	Dhuvaran Gas Based - Stage-II	112	6982	258	2.22
15	Utran Extension	375	24841	757	1.86
16	Sikka Extension			0	0.00

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Sr. No.	Power Stations	Capacity (MW)	Fixed Cost (Rs. Lakhs)	Energy Purchase (MU)	Variable Cost (Rs/Kwh)
	Total of GSECL Plants	5,216	30417	18447	
	IPPs				
17	ESSAR	300	11106	535	2.01
18	GPEC	655	45919	1203	2.47
19	GIPCL II (160)	160	5136	1089	1.72
20	GIPCL-SLPP	250	18071	1478	0.95
21	GSEG	156	11522	1062	1.48
22	GIPCL - I (145)	42	922	74	2.17
23	GMDC - Akrimota	250	23841	1478	0.61
24	GSEG Expansion	350	957	490	2.12
25	GIPCL, Expansion	250	17520	456	1.75
26	GSPC-Pipavav	360	986	180	2.12
	Total of IPPs	2,773	135980	8047	2.01
	Share from Central Sector				
27	NPC - Tarapur- 1&2	160	0	1009	0.94
28	NPC - Kakrapar	125	0	767	2.03
29	NPC - Tarapur- 3&4	274	0	1728	2.73
30	NTPC - KORBA	360	9014	2323	0.57
31	NTPC - VINDHYACHAL - I	230	7464	1467	1.03
32	NTPC - VINDHYACHAL - II	239	10733	1549	0.98
33	NTPC - VINDHYACHAL - III	266	11982	1724	0.94
34	NTPC - KAWAS	187	10417	381	3.09
35	NTPC - JHANOR	237	11965	483	1.73
36	NTPC - Kahalgoan	166	10005	1076	1.21
37	NTPC - Sipat Stage - II	273	0	1770	0.54
38	SSNNL - Hydro	231	0	286	2.05
39	NTPC Kahalgaon (New)	260	18221	1685	1.70
40	NTPC North Karanpura	77	5396	0	1.70
41	Sipat Stage-I	540	37843	3500	1.70
	Total from central Sector	3,625	133040	19749	

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OTHERS	Capacity (MW)	MU	Energy Purchase (MU)	Variable Cost (Rs/Kwh)
Reliance Industries LTD. Naroda	23	161	23	2.34
United Phosphorous LTD. Jhagadia	-	0	0	0.00
Gujarat Alkalis & Chemical LTD. Baruch	8	54	8	1.97
ONGC Anlkeshwar	6	44	6	1.90
ONGC, Hazira	2	16	2	1.90
Adani Exports (Philips Carbon)	8	54	8	2.00
Arvind Mills LTD	-	0	0	0.00
Wind Farms	Capacity	Fixed Cost	Energy	Variable Cost
WIIIU FAIIIIS	(MW)	(Rs. Lakhs)	Purchase (MU)	(Rs/Kwh)
Wind Farms (Old Policy)		(Rs.		
	(MW)	(Rs. Lakhs)	(MU)	(Rs/Kwh)
Wind Farms (Old Policy)	(MW) 24	(Rs. Lakhs) 24	(MU) 48	(Rs/Kwh) 1.75
Wind Farms (Old Policy) Wind Farms (New Policy)	(MW) 24	(Rs. Lakhs) 24	(MU) 48	(Rs/Kwh) 1.75
Wind Farms (Old Policy) Wind Farms (New Policy)  Bagasse Plants	(MW) 24 701	(Rs. Lakhs) 24 0	(MU) 48 1411	(Rs/Kwh)  1.75  3.37
Wind Farms (Old Policy) Wind Farms (New Policy)  Bagasse Plants  Bagasse	(MW) 24 701	(Rs. Lakhs) 24 0	(MU) 48 1411	(Rs/Kwh)  1.75  3.37

# 7. Open Access – Transmission Charges, Wheeling charges and cross subsidy surcharge

The Gujarat Energy Transmission Corporation (GETCO) and the four Distribution Companies – DGVCL, MGVCL, UGVCL and PGVCL, the successor entitles of Gujarat Electricity Board (GEB), filed the petitions for determination of Annual Revenue Requirement (ARR), transmission charges for FY 2010-11.

The Commission approved the ARR of the above utilities, transmission charges and retail supply tariffs in the respective orders. Based on the approved charges, the Commission revises the open access charges as below. These charges are applicable for FY 2010-11.

#### 7.1. Transmission Charges

The transmission charges as given below are applicable for the use of transmission lines (system) of GETCO, the transmission licensee, Generating Companies, Distribution Licensees, other licensees and also consumers who are permitted to avail open access facility under section 42 (2) of the Electricity Act 2003.

#### Rates:

Transmission charges for FY 2010-11 Rs. 2720/MW/Day

Rs. 81600/MW/Month

Plus

Energy loss in kind at 4.20%

The Current transmission loss shall be effective until Intra State ABT is operational. Post which it shall be as specified under Intra State ABT.

The transmission charges payable in cash by long term and short term open access users shall be –

Long term open access users = Rs. 2720/MW/Day

Short term open access users = Rs. 680/MW/Day

(1/4 X long term rate = 1/4X2720 = Rs. 680)

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The transmission charges for short term open access users shall be as per the following

(a)	Upto 6 hours in a day in one block –  (1/4 X Short term rate (1/4 X 680)	II	Rs.170/ MW
(b)	More than 6 hours and upto 12 hours in one block (1/2 Short term – 1/2 X 680)	=	Rs. 340/ MW
(c)	More than 12 hours upto 24 hours in one block is the short term rate	=	Rs. 680/ MW

In addition the applicable system losses and other charges as in Commission's open access Regulations will also be charged. The long and short term open access is as defined in the Regulations of the Commission.

#### 7.2. Wheeling Charges

The wheeling charges for the four Distribution companies – DGVCL, MGVCL, PGVCL and UGVCL for FY 2010-11 are as given below. The charges are applicable for use of the distribution system of a licensee by other licensees or generating companies or captive power plants or users who are permitted open access under section 42 (2) of the Electricity Act 2003.

Particulars	Units	Existing	Proposed
ARR of all four Discoms	Rs. Lakhs	1429957	1723437
Less: Total Power Purchase Cost	Rs. Lakhs	1218311	1514787
Distribution costs	Rs. Lakhs	211646	208650
Distribution costs at 11 kV	Rs. Lakhs	63494	62595
Energy input at 11 KV	MU	47105	52032
Wheeling charges at 11 kV	Rs / kWh	0.13	0.12
Wheeling charges at 400 V (LT)	Rs / kWh	0.45	0.40



#### Plus

Point of injection	Point of energy delivered			
	11 kV	400 Volts		
11 kV, 22 kV and 33 kV	10.01%	18.57%		
400 volts	-	9.51%		

The losses in HT and LT Network are 10.01% and 9.51%, respectively, with respect to energy input to that segment of the system. In case injection at HT level and drawal at LT level envisages use of both the networks i.e HT and LT, in that case, the combined loss works out to 18.57% of the energy injected at HT Network.

The above wheeling charges payable shall be uniform in all the four distribution companies – DGVCL, MGVCL, PGVCL and UGVCL.

#### 7.3. Cross-Subsidy Surcharge

The Commission has decided to continue with the existing Cross-Subsidy Surcharge for FY 2010-11 and will review the same during next control period.



## 8. Tariff Philosophy and Category-Wise Tariffs

#### 8.1. Introduction – Tariff Philosophy

The Commission has been guided by the provisions of the Electricity Act, 2003, the National Electricity Policy (NEP), the Regulations on Terms and Conditions of Tariff issued by the Central Electricity Regulatory Commission and the Regulations on Terms and Conditions of tariff and MYT Regulations notified by the Commission.

Section 61 of the Act lays down the broad principles, which should guide determination of retail tariff. These principles envisage that tariff should progressively reflect cost of supply of electricity and also reduce the cross subsidies within a period to be specified by the Commission.

#### 8.2. Tariff rationalisation is the key Focus

The Petitioner has not proposed any increase in the existing tariff for FY 2010-11. However, the Commission, keeping in view the issues raised during the public hearing and on various occasions in the past, attempted to rationalize the tariff structure. Some rationale behind tariff rationalization is as mentioned below.

- Reduction in number of Slabs: In order to simplify the current multiple-slabs structure (up to five slabs in some categories) the Commission has reduced number of slabs in Residential category. The Commission feels that this will bring more clarity and will simplify the tariff structure.
- Removing ambiguity with respect to applicability of tariff: The Commission has observed that in respect to HT categories there is a lot of ambiguity with respect to applicability of tariff to certain category of consumers. Also, there are several cases in courts. The Commission feels that huge amount of money and valuable time is wasted in fighting the cases in courts by consumers as well as the utility. Doing away with such ambiguity has been the key focus of this rationalization. The Commission has tried to bring clarity in applicability of HT tariff and has merged some existing HT categories in HTP-I category.
- Addressing of Consumer Grievances: During the course of public hearing, several recommendations with respect to change in existing tariff were suggested to the Commission. The Petitioner was also given an opportunity to present its views on the same and in a few cases the Petitioner has agreed to the



suggestions made by consumers. The Commission has decided to incorporate those suggestions in this tariff order.

#### 8.3. Tariff rationalisation results in moderate tariff hike

Tariff rationalization can result in increase or decrease in some categories of tariff. An overall decrease in revenue due to tariff rationalization would adversely affect the finances of the utility. Hence some tariff increase to prevent such a situation in necessary. The compelling reasons for moderate tariff hike are as mentioned below

 Huge Revenue Gap: The Commission noted that the gap of Rs. 550 crore is estimated for FY 2010-11. The Commission is of the opinion that some tariff increase is essential to cover the huge revenue gap of the Utilities. Gradual tariff increase would safeguard consumers in the long term from any tariff shock which might arise given the current revenue deficit situation.

It must be noted here that the Petitioner instead of asking for tariff-hike to fill the huge revenue gap has prayed to the Commission to treat the gap as a 'Regulatory Assets' and permit its recovery over a period no longer than three years. As per the Tariff Policy, considering revenue gap as 'Regulatory Assets' should be exceptional. It further provides that the recovery of 'Regulatory Assets' should be time bound and preferably within the control period.

- Rationalization will lead to Moderate tariff Increase: As discussed above, the
  Commission has tried to rationalize the present tariff structure in order to remove
  practical difficulties of implementation. In view of this rationalization, there is
  moderate tariff hike.
- Impact of Tariff hike is neutralized by reduction in FPPPA: It is expected that the consumer will not be affected adversely due the said tariff hike as there is reduction in FPPPA charges during recent quarters (i.e from 91 paise per unit to 62 paise per unit) which can neutralize the impact of tariff hike.



#### 8.4. Changes in the Tariff Schedule

The Commission, keeping in view the above aspects, approves the following changes in tariff structure.

1. In LFD – I for Residential Premises existing five slabs are regrouped into four slabs as shown below;

Existing LFD-I Slabs	New LFD-I Slabs
1-50 kWh	1-50 kWh
51-100 kWh	51-100 kWh
101-200 kWh	101-250 kWh
201-300 kWh	Above 250 kWh
Above 300 kWh	

2. In LFD – II for Commercial Purposes existing four slabs are regrouped into three slabs as shown below;

Existing LFD-II Slabs	New LFD-II Slabs
1-50 kWh	1-50 kWh
51-150 kWh	51-150 kWh
151-300 kWh	Above 150 kWh
Above 300 kWh	

- 3. Marginal increase in energy charges for each slab. I.e. LFD-I Residential Premises, LFD-II Commercial Premises (except the last slab) , LFD-III Educational and Other Institutions.
- 4. For Motive power services (LTP tariff) increase of Rs 0.10/Unit and Rs 0.15/Unit in LTP-I Motive Power Service for installation having contracted load upto and including 10 BHP and contracted load exceeding 10 BHP respectively. Increase of Rs 0.10/Unit in LTP-II Educational Institutions and Research Laboratories.
- 5. Energy charges for Street lighting increased by Rs 0.05/Unit.
- 6. In the existing tariff structure different energy charges are applied to Water Works and Sewerage Pumps operated by Gram Panchayat and Municipalities / Nagarpalikas. (Rs 2.40/Unit and Rs 2.70/Unit respectively) As the nature of demand and load profile are similar, tariff for both the slabs is revised to Rs 2.50/Unit.
- 7. It may be noted here that tariff for agriculture category has not increased since ten years (last revision of agriculture tariff was made in FY 2000-01). At this



juncture where moderate tariff hike is proposed across the board, the Commission feels that tariff in agriculture category should also be increased in order to ensure that level of cross- subsidy is maintained if not reduced. Also, incremental revenue from increased tariff will help the Petitioner to clear the backlog of pending agriculture connections.

It is noted that a substantial portion of agriculture tariff is paid by the government of Gujarat. The incremental outflow on account of higher agriculture tariff would be neutralized by higher revenue from electricity duty on account of tariff rationalization and increased sales. Therefore the Commission has decided to increase the HP based tariff by 20/BHP/Month. However, the metered tariff will remain the same.

- 8. The existing HTP-II-A and HTP-II-B categories are merged into HTP-I category. Further, there will be a separate category for water pumping stations and sewage pumps operated by local authorities (HTP-II).
- 9. Power factor adjustment charges shall be applicable only on energy charge of the consumers.
- 10. Minimum ceiling of demand in LTP-III category to be reduced from 20 kW to 15 kW

The approved tariff schedule for different categories of consumers is annexed.

#### 8.5. Impact of Electricity Duty

During the public hearing, several consumer organisations and others brought to the notice of the Commission the high rates of electricity duty in Gujarat. It may be noted that imposition of Electricity Duty is the prerogative of the Government. However, the Commission has noted the issue and observes that there is a need to rationalise electricity duty. The Commission feels that the system of *ad-valorem* duty makes the impact of any tariff increase compound even further.

The *ad-valorem* structure increases the burden on the consumers, impacts on the finances of the utilities and distorts the tariff structure. The Commission has therefore suggested that the Government should consider rationalising electricity duty, keeping in view the above aspects and the practices in other States, so that it becomes reasonable, stable and predictable.



#### 8.6. Revised Gap

The table below shows the estimated gap for FY 2010-11 after considering the revised tariff.

**Table 104: Net Gap for FY 2010-11** 

(Rs Lakhs)

<b>Particulars</b>	Approved as per MYT Order for FY 2010- 11	Revised Estimates submitted by PGVCL for FY 2010- 11	Revised Approved for FY 2010-11	Estimated Gap for FY 2010-11 with Revised Tariff
Revised ARR	591791	658889	551256	551256
Revenue with Existing Tariff	460137	516686	442754	453953
Other Income (Consumer related)	11983	12694	12694	12694
Total Revenue excluding subsidy	472120	529380	455448	466646
Agriculture Subsidy	48436	40805	40805	40805
Other Subsidies	8685	0	0	0
Total Revenue including subsidy	529241	570184	496253	507451
Gap / (Surplus)	62550	88704	55004	43805

The total revenue based on the existing tariff for FY 2010-11 was Rs 55004 Lakhs. The net gap calculated with the revised tariff is Rs 43805 Lakhs. Regarding the plea of the Petitioner for creation of regulatory asset for the gap in respect of FY 2009-10, the Commission has decided that it will revisit the same when the audited data would be made available to the Commission.



## **COMMISSION'S ORDER**

The Commission approves the Aggregate Revenue Requirement (ARR) for Paschim Gujarat Vij Company Limited (PGVCL) for FY 2010-11 as shown in the following table:

Table 105: Revised Approved ARR for FY 2010-11

(Rs. Lakhs)

Particulars	Revised Approved ARR for FY 2010-11		
Cost of Power Purchase	464184		
Operations & Maintenance Expenses	42085		
Employee Cost	25779		
Repair & Maintenance	9757		
Administration & General Charges	6549		
Depreciation	25541		
Interest & Finance Charges	14731		
Interest on Working Capital	4691		
Other Debits	357		
Extraordinary Items	0		
Provision for Bad Debts	886		
Net Prior Period Expenses / (Income)	0		
Other Expenses Capitalized	(5058)		
Sub-Total	547417		
Return on Equity	17805		
Provision for Tax / Tax Paid	129		
Total Expenditure	565350		
Less: Non-Tariff Income	14094		
Aggregate Revenue Requirement	551256		

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March 2010

The approved retail supply tariff will be in accordance with the Tariff Schedule annexed to this order. The order shall come into force from the 1<sup>st</sup> April 2010.

Sd/- Sd/-

DR. P K MISHRA Chairman SHRI PRAVINBHAI PATEL
Member

Place: Ahmedabad Date: 31<sup>st</sup> March, 2010

#### **TARIFF SCHEDULE**

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

#### Effective from 1st April 2010

#### **GENERAL**

- 1. The tariff figures indicated in this tariff schedule are the tariff rates payable by the consumers of unbundled Distribution Licensees of the erstwhile GEB.
- These tariffs are exclusive of Electricity Duty, tax on sale of electricity, taxes and other charges levied by the Government or other competent authorities from time to time which are payable by the consumers, in addition to the charges levied as per the tariff.
- 3. All these tariffs for power supply are applicable to only one point of supply.
- 4. The charges specified are on monthly basis. Distribution Licensee may decide the period of billing and adjust the tariff rate accordingly.
- 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.
- Except in cases where the supply is used for the purpose for which the Distribution Licensee 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. Meter charges shall be applicable as prescribed under 'GERC (Licensee's Power to Recover Expenditure incurred in providing supply and other Miscellaneous Charges) Regulations, 2005 as in force from time to time.
- 8. 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.

Gujarat Electricity Regulatory Commission



- 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.
- 10. Delayed payment charges for all consumers:

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

Delayed payment charges will be levied at the rate of 18% per annum (up to the time of ultimate disconnection of supply) in case of all consumers except Agricultural category and for the period from the date of permanent disconnection, the delayed payment charges will be levied at the rate of 15% per annum. Delayed payment charges will be levied at the rate of 12% per annum for the consumer governed under Rate AG from the date of billing till the date of payment if the bill is paid after ten days from the date of billing.

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



#### PART - I

# SCHEDULE OF TARIFF FOR SUPPLY OF ELECTRICITY AT LOW AND MEDIUM VOLTAGE

#### 1. RATE LFD-I:

This tariff will apply to services for lights, fans and small electrical appliances such as refrigerators, cookers, heaters and small motors having individual capacity not exceeding two BHP attached to domestic appliances in the residential premises which are not covered under LFD-I (Rural Category).

Single-phase supply (aggregate load upto 6 kW)

Three-phase supply (aggregate load above 6 kW including small motive power load up to 10 kW).

#### 1.1. Fixed Charges/Month:

Range of Connected Load: (Other than BPL Consumers)

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

#### For BPL Household Consumers:

Fixed charges	Rs.5/- per month
3 3	· <b> </b>

#### **PLUS**

#### 1.2. Energy Charges: For the total monthly consumption: (Other than BPL consumers)

**Gujarat Electricity Regulatory Commission** 



(a)	First 50 units	280 Paise per Unit
(b)	Next 50 units	310 Paise per Unit
(c)	Next 150 units	375 Paise per Unit
(d)	Above 250 units	475 Paise per Unit

## 1.3. Energy charges: For the total monthly consumption – For the consumer below poverty line (BPL)\*\*

Ī	(a)	First 30 units	150 Paise per Unit
Ī	(b)	For remaining units	Rate as per LFD-I

<sup>\*\*</sup>The consumer who wants to avail the benefit of the above tariff has to produce a copy of the Card issued by the authority concerned at the sub-division office of the Distribution Licensee. The concessional tariff is only for 30 units per month.

#### 1.4. Minimum bill (excluding meter charges)

Payment of fixed charges as specified in 1.1 above.

#### 2. RATE LFD-I (Rural):

This tariff will apply to services for residential premises located in areas within gram panchayat as defined in the Gujarat Panchayats Act.

However, this will not apply to villages which are located within the geographical jurisdiction of Urban Development Authority.

Single-phase supply (aggregate load upto 6 kW)

Three-phase supply (aggregate load above 6 kW including small motive power load up to 10 kW)

#### 2.1. Fixed Charges/Month:

Range of Connected Load: (Other than BPL Consumers)

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

#### For BPL Household Consumers:

Fixed charges	Rs.5/- per month

#### **PLUS**

#### 2.2. Energy Charges: For the total monthly consumption: (Other than BPL consumers)

(a)	First 50 units	230 Paise per Unit
(b)	Next 50 units	260 Paise per Unit
(c)	Next 150 units	325 Paise per Unit
(d)	Above 250 units	435 Paise per Unit

## 2.3. Energy charges: For the total monthly consumption – For the consumer below poverty line (BPL)\*\*

	(a)	First 30 units	150 Paise per Unit
Ī	(b)	For remaining units	Rate as per LFD-I (Rural)

<sup>\*\*</sup>The consumer who wants to avail the benefit of the above tariff has to produce a copy of the Card issued by the authority concerned at the sub-division office of the Distribution Licensee. The concessional tariff is only for 30 units per month.

#### 2.4. Minimum bill (excluding meter charges):

Payment of fixed charges as specified in 2.1 above.

**Note:** If the part of the residential premises is used for non-residential (commercial) purposes by the consumers located within 'Gram Panchayat' as defined in Gujarat Panchayats Act, entire consumption will be charged under this tariff.

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#### 3.0 RATE LFD-II (For Commercial Premises)

This tariff will apply to the services for the purposes specified in the rate LFD-I in respect of commercial premises, such as shops, workshop, hotels, restaurants, showrooms, offices, etc., etc.

#### 3.1 Fixed Charges:

#### Range of Connected Load:

(a)	Upto and including 2 kW	Rs.50/- per month
(b)	Above 2 to 4 kW	Rs.100/- per month
(c)	Above 4 kW to 6 kW	Rs.150/- per month
(d)	Above 6 kW	Rs.200/- per month

#### **PLUS**

#### 3.2 Energy charges:

(a)	For the first 50 units per month	370 Paise per unit
(b)	For the next 100 units per month	430 Paise per unit
(c)	For the remaining units per month	490 Paise per unit

#### 3.3 Minimum Bill (excluding meter charges):

Payment of fixed charges as specified in 3.1 above.

#### 4.0 RATE LFD-III

This tariff is applicable to the educational and other institutions registered with the Charity Commissioner.

(a)	Fixed charges	Rs.45/- per month
(b)	Energy charges	320 Paise per Unit

#### 5.0 RATE-LTP

This tariff shall be applicable for motive power services

**Gujarat Electricity Regulatory Commission** 



#### 5.1 RATE LTP-I

This tariff is applicable for aggregate motive power load not exceeding 125 BHP.

#### 5.1.1 Fixed charges per month:

For an installation having the contracted load upto 10 BHP	Rs.22/- per BHP	
For installation having contracted load exceeding 10 BHP:		
(i) For first 10 BHP of contracted load	Rs.22/- per BHP	
(ii) For next 40 BHP of contracted load	Rs.40/- per BHP	
(iii) For next 25 BHP of contracted load	Rs.65/- per BHP	
(iv) For next 25 BHP of contracted load	Rs.100/- per BHP	
(v) Balance BHP of contracted load	Rs.155/- per BHP	

#### **PLUS**

#### 5.1.2 Energy charges:

(a)	For installation having contracted load upto and including 10 BHP: For entire consumption during the month	370 Paise per Unit
(b)	For installation having contracted load exceeding 10 BHP: For entire consumption during the month	400 Paise per Unit

#### PLUS

#### **5.1.3 Reactive Energy Charges:**

For installation having contracted load of 50 BHP and above for all reactive units (KVRAH) drawn during the month	10 Paise per KVARH
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## 5.1.4 Minimum bill per installation per month for consumers other than Seasonal Consumers:

(a)	When contracted load is upto 75 BHP	Rs.105 per BHP
(b)	When contracted load exceeds 75 BHP	Rs.180 per BHP



#### 5.1.5 Minimum Bill Per Installation for Seasonal Consumers

- (a) "Seasonal Consumer", shall mean a consumer who takes and uses power supply for ice factory, ice candy machines, ginning and pressing factory, oil mill, rice mill, huller, salt industry, sugar factory, khandsari, cold storage plants (including such plants in fisheries industry), tapioca industries manufacturing starch, etc.
- (b) Any consumer, who desires to be billed for the minimum charges on annual basis shall intimate to that effect in writing in advance about the off-season period during which energy consumption, if any, shall be mainly for overhauling of the plant and machinery. The total period of the off-season so declared and observed shall be not less than three calendar months in a calendar year.
- (c) The total minimum amount under the head "Fixed and Energy Charges" payable by the seasonal consumer satisfying the eligibility criteria under sub-clause (a) above and complying with the provision stipulated under sub-clause (b) above shall be Rs.1200/- per annum per BHP of the contracted load for the installation having the contracted load upto 75 BHP, and Rs.2000/- per annum per BHP when contracted load is exceeding 75 BHP.
- (d) The units consumed during the off-season period shall be charged for at a flat rate of 415 Paise per unit.
- (e) The electricity bills related to the off-season period shall not be taken into account towards the amount payable against the annual minimum bill. The amount paid by the consumer towards the electricity bills related to the seasonal period only under the heads "Fixed Charges" and "Energy Charges", shall be taken into account while determining the amount of short-fall payable towards the annual minimum bill as specified under sub-clause (c) above.

#### 5.2 RATE LTP-II

This tariff shall be applicable to educational institutions and research and development laboratories for motive power services where machines and appliances are primarily used for demonstration/research purposes only.

#### 5.2.1 Energy Charges



For all units consumed during the month	410 Paise per Unit
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#### NOTE:

The educational institutions and research laboratories will have an option to either select of the rate LTP-I with minimum charges or rate LTP-II without minimum charges. The option can be exercised to switch over from LTP-I tariff to LTP-II and vice versa twice in a calendar year by giving not less than one month's notice in writing.

#### 5.3 RATE LTP-III

This tariff shall be applicable to consumers using electricity for motive power services for minimum contract demand of 15 kW and up to 100 kW at low voltage.

#### 5.3.1 Fixed charges:

(a)	For billing demand upto the contract demand	
	(i) For first 15 to 40 kW of billing demand	Rs.65/- per kW per month
	(ii) Next 20 kW of billing demand	Rs.100/- per kW per month
	(iii) Above 60 kW of billing demand	Rs.165/- per kW per month
(b)	For billing demand in excess of the contract demand	Rs.210/- per kW

#### **PLUS**

#### 5.3.2 Energy charges:

For the entire consumption during the month	405 Paise per Unit

#### **PLUS**

#### 5.3.3 Reactive Energy Charges:

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

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#### 5.3.4 Billing Demand

The billing demand shall be highest of the following, rounded to the next full kW:

- (a) Eighty-five percent of the contract demand
- (b) Actual maximum demand registered during the month
- (c) 15 kW

#### 5.3.5 Minimum Bill

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

#### **NOTE:**

- 1. This tariff shall be applicable if the consumer so opts to be charged in place of LTP-I Tariff.
- 2. The option can be exercised to switch over from LTP-I tariff to LTP-III tariff and vice versa twice in a calendar year by giving not less than one month's notice in writing.
- 3. Consumer has to provide metering system in the event when proper metering system is not provided by Distribution Licensee.
- 4. In the event of actual maximum demand exceeds 100 kW more than three occasions during the period of six months, the consumer has to provide his distribution transformer at his cost and maintain at his cost.

#### 5.4 RATE LTP-IV

This tariff is applicable for aggregate motive power load not exceeding 125 BHP and using electricity <u>exclusively during night hours</u> from 10.00 PM to 06.00 AM next day. (The supply hours shall be regulated through time switch to be provided by the consumer at his cost.)

#### 5.4.1 Fixed Charges per month:

Fixed charges specified in RATE LTP-I above.

**PLUS** 

#### 5.4.2 Energy Charges:

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For entire consumption during the month	200 Paise per Unit	
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#### 5.4.3 Reactive Energy Charges:

For contract load of 50 BHP and above: For all reactive	10 Paise per KVARH
units (KVARH) drawn during the month	10 Laise per RVAITI

#### **NOTE:**

- 1. 10% of total units consumed and 15% of the contract load can be availed beyond the prescribed hours for the purpose of maintenance.
- 2. For the purpose of office lighting, fans etc. the consumer may apply for a separate connection.
- 3. This tariff shall be applicable if the consumer so opts to be charged in place of LTP-I tariff by using electricity exclusively during night hours as above.
- 4. The option can be exercised to switch over from LTP-I tariff to LTP-IV tariff and vice versa twice in a calendar year by giving not less than one month's notice in writing.
- 5. In case the consumer is not fulfilling the conditions of this tariff category, then such consumer for the relevant billing period will be billed under tariff category LTP-I

#### 5.5 RATE LTP-IV (A)

This tariff is applicable to consumers using electricity for motive power services for minimum contract demand of 15 kW and upto 100 kW at low voltage and using electricity exclusively during night hours from 10.00 PM to 06.00 AM next day. The supply hours shall be regulated through time switch to be provided by the consumer at his cost.

#### 5.5.1 Fixed Charges per month:

Fixed charges specified in RATE LTP-III above.

#### **PLUS**

#### 5.5.2 Energy Charges:

For entire consumption during the month	200 Paise per Unit
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#### 5.5.3 Reactive Energy Charges:

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

#### NOTE:

- 1. 10% of total units consumed and 15% of the contract demand can be availed beyond the prescribed hours for the purpose of maintenance.
- 2. For the purpose of office lighting, fans etc. the consumer may apply for a separate connection.
- 3. This tariff shall be applicable if the consumer so opts to be charged in place of LTP-III tariff by using electricity exclusively during night hours as above.
- 4. The option can be exercised to switch over from LTP-III tariff to LTP-IV(A) tariff and vice versa twice in a calendar year by giving not less than one month's notice in writing.
- 5. In case the consumer is not fulfilling the conditions of this tariff category, then such consumer for the relevant billing period will be billed under tariff category LT-III.

#### 5.5 RATE LTP-V

Applicable for supply of electricity to Low Tension Agricultural consumers contracting load up to 125 BHP requiring continuous (twenty-four hours) power supply for lifting water from surface water sources such as cannel, river, & dam and supplying water directly to the fields of farmers for agricultural irrigation only.

(a)	Fixed charges per month	Rs. 25/- per BHP	
PLUS			
(b)	Energy charges For entire consumption during the month	160 Paise per Unit	

#### 6.0 RATE WW (Water Works)

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

6.1 Type I – Water works and sewerage pumps operated by other than local authority:

(a)	Fixed charges per month	Rs.15/- per BHP
PLUS		
(b)	Energy charges per month: For entire consumption during the month	360 Paise per Unit

6.2 Type II – Water works and sewerage pumps operated by local authority such as Municipal Corporation. Gujarat Water Supply & Sewerage Board located outside Gram Panchayat Area will also attract this tariff:

(a)	Fixed charges per month	Rs.9 per BHP
PLUS		
(b)	Energy charges per month:  For entire consumption during the month	340 Paise per Unit

6.3 Type III – Water works and sewerage pumps operated by Municipalities / Nagarpalikas and Gram Panchayat or Gujarat Water Supply & Sewerage Board for its installations located in Gram Panchayats:

Energy charges per month:	250 Paise/Unit
For entire consumption during the month	250 Taise/Offit

#### 6.4 Time of Use Discount:

Applicable to all the water works consumers having connected load of 50 HP and above for the Energy consumption during the Off-Peak Load Hours of the Day.

**Gujarat Electricity Regulatory Commission** 



For energy consumption during the off-peak period, viz., 1100 Hrs to 1800 Hrs.	·
For energy consumption during night hours, viz., 2200 Hrs to 0600 Hrs. next day	75 Paise per Unit

#### 7.0 RATE-AG (Agricultural)

This tariff is applicable to motive power services used for irrigation purposes only excluding installations covered under LTP-V category.]

- 7.1 The rates for following group are as under:
- 7.1.1 HP Based Tariff:

For entire contracted load	Rs.160/BHP/month

#### **ALTERNATIVELY**

#### 7.1.2 Metered Tariff:

Fixed Charges	Rs.10 per BHP per month
Energy Charges: For entire consumption	50 Paise per Unit per month

#### 7.1.3 Tatkal Scheme:

Fixed Charges	Rs.10 per BHP per month
Energy Charges:	70 Paise per Unit per month
For entire consumption	70 i alse per offit per month

<u>NOTE:</u> The consumers under Tatkal Scheme shall be eligible for normal metered tariff as above, on completion of five years period from the date of commencement of supply.

7.2 No machinery other than pump water for irrigation will be permitted under this tariff. Any other machinery connected in the installation governed under this tariff shall be charged separately at appropriate tariff for which consumers shall have to take separate connection.

Gujarat Electricity Regulatory Commission



- 7.3 Agricultural consumers who desire to supply water to brick manufacturing units shall have to pay Rs. 100/HP per annum subject to minimum of Rs. 2000/- per year for each brick Mfg. Unit to which water is supplied in addition to existing rate of HP based / metered agricultural tariff.
- 7.4 Such Agricultural consumers shall have to pay the above charges for a full financial year irrespective of whether they supply water to the brick manufacturing unit for full or part of the Financial Year.

Agricultural consumers shall have to declare their intension for supply of the water to such brick manufacturing units in advance and pay charges accordingly before commencement of the financial year (i.e. in March every year).

#### 8.0 RATE SL (Street Lights)

#### 8.1 Tariff for Street Light for Local Authorities and Industrial Estates:

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

#### 8.1.1 Energy Charges:

Fo	or all the units consumed during the month: For streetlights operated by	335 Paise per Unit
in	dustrial estates and local authority	333 r alse per Offit

#### 8.1.2 Minimum Charges:

The minimum energy consumption is prescribed for consumer with more than 50 street lights within a village or an industrial estate, as the case may be, as equivalent to 2200 units per annum per kilo watt of connected load during the year.

#### 8.1.3 Renewal and Replacements of Lamps:

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

## 8.2 Tariff for power supply for street lighting purposes to consumers other than the local authorities and industrial estates:

#### 8.2.1 Fixed Charges:

Rs. 20 per kW per month	

#### 8.2.2 Energy charges:

For all units consumed during the month	335 Paise per kWh
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#### 8.2.3 Renewal and Replacement of Lamps:

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

#### 8.2.4 Maintenance other than Replacement of Lamps:

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

#### 9.0 RATE TMP (Temporary):

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

#### 9.1 Energy Charges:

For the supply used for the purposes stipulated in respective tariff for permanent supply:

(a)	Rate LFD-I (for residential premises) & LFD-I (Rural)	435 Paise/Unit
(b)	Rate LFD-II (for non-residential premises)	480 Paise/Unit
(c)	Rate LFD-III (for educational and other institutions)	480 Paise/Unit
(d)	Rate LTP-I, LTP-II and LTP-III	640 Paise/Unit

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#### 9.2 Minimum charges:

(	a)	For the purpose stipulated in LFD:	Rs.20/- per day
(	b)	For the purpose stipulated in Rate LTP-I	Rs.200/- per BHP per month
(	c)	For the purpose stipulated in Rate LTP-III	Rs.225/- per kW per month

<u>NOTE</u>: Payment of bill is to be made within seven days from the date of issue of the bill. Supply would be disconnected for non-payment of dues on 24 hours notice.



#### **PART-II**

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

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

#### 10.0 **RATE HTP-I**:

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

#### 10.1 Demand Charges;

#### 10.1.1 For billing demand up to contract demand.

(a)	For first 500 kVA of billing demand	Rs.100/- per kVA per month
(b)	For next 500 kVA of billing demand	Rs.140/- per kVA per month
(c)	For next 1500 kVA of billing demand	Rs.210/- per kVA per month
(d)	For billing demand in excess of 2500 kVA	Rs.240/- per kVA per month

#### 10.1.2 For Billing Demand in Excess of Contract Demand

For	billing	demand	in	excess	over	the	Rs.370 per kVA per month
con	tract der	mand					113.070 per KVA per month

#### **PLUS**

#### 10.2 Energy Charges

For	For entire consumption during the month			
(a)	Upto 1000 kVA billing demand	390 Paise per Unit		
(b)	For 1001 kVA to 2500 kVA billing demand	410 paise per Unit		
(c)	Above 2500 kVA billing demand	420 Paise per Unit		

#### **PLUS**

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#### 10.3 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	75 Paise per Unit
Hrs to 1100 Hrs and 1800 Hrs to 2200 Hrs	75 Faise per Offit

#### 10.4 Billing Demand:

The billing demand shall be the highest of the following:

- (a) Actual maximum demand established during the month
- (b) Eighty-five percent of the contract demand
- (c) One hundred kVA

#### 10.5 Minimum Bills:

Payment of "demand charges" based on kVA of billing demand.

#### 10.6 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 creche, laboratory, stores, time keeper's office, yards, watch and ward, first aid centres, and dispensaries during a month registered at the main meter on HT side shall be charged at the energy charges specified above.

#### 10.7 Power Factor:

#### 10.7.1 Power Factor Adjustment Charges:

- (a) The power factor adjustment charges shall be levied at the rate of 1% on the total amount of electricity bills for the month under the head "Energy Charges" for every 1% drop or part thereof in the average power factor during the month below 90% upto 85%.
- (b) In addition to the above clause, for every 1% drop or part thereof in average power factor during the month below 85% at the rate of 2% on the total amount of electricity bill for that month under the head "Energy Charges", will be charged.

#### 10.7.2 Power Factor Rebate:

If the power factor of the consumer's installation in any month is above 95%, the consumer will be entitled to a rebate at the rate of 0.5% (half percent) in excess of 95% power factor on



the total amount of electricity bill for that month under the head "Energy Charges" for every 1% rise or part thereof in the average power factor during the month above 95%.

#### 10.8 Maximum Demand and its Measurement:

The maximum demand in kW or kVA, as the case may be, shall mean an average KW/KVA supplied during consecutive 30/15 minutes period of maximum use where such meter reading directly the maximum demand in KW/KVA have been provided.

#### 10.9 Contract Demand:

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

#### 10.10 Rebate for Supply at EHV:

On E	nergy 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%

#### 10.11 Concession for Use of Electricity during Night Hours:

For the consumer eligible for using supply at any time during 24 hours, entire consumption shall be billed at the energy charges specified above. However, the energy consumed during night hours of 10.00 PM to 06.00 AM next morning (recorded by a polyphase meter operated through time-switch) as is in excess of one third of the total energy consumed during the month, shall be eligible for concession at the rate of 75 Paise per unit. The polyphase meter and time switch shall be procured and installed by the consumer at his cost and sealed by the Distribution Licensee.

#### 10.12 Seasonal Consumers taking HT Supply:

- 10.12.1 The expression, "Seasonal Consumer", shall mean a consumer who takes and uses power supply for ice factory, ice-candy machines, ginning and pressing factory, oil mill, rice mill, salt industry, sugar factory, khandsari, cold storage plants (including such plants in fishery industry), tapioca industries manufacturing starch, pumping load or irrigation, white coal manufacturers etc.
- 10.12.2 A consumer, who desires to be billed for minimum charges on annual basis, shall intimate in writing in advance about the off-season during which energy consumption,



if any, shall be mainly for overhauling of the plant and machinery. The off-season period at any time shall be a full calendar month/months. The total period of off-season so declared and observed shall be not less than three calendar months in a calendar year.

- 10.12.3 The total minimum amount under the head "Demand and Energy Charges" payable by a seasonal consumer satisfying the eligibility criteria under sub clause 10.12.1 above and complying with provisions stipulated under sub clauses 10.12.2 above shall be Rs.4000/- per annum per kVA of the billing demand.
- 10.12.4 .4 The billing demand shall be the highest of the following:
  - (i) The highest of the actual maximum demand registered during the calendar year.
  - (ii) Eighty-five percent of the arithmetic average of contract demand during the year.
  - (iii) One hundred kVA.
- 10.12.5 Units consumed during the off-season period shall be charged for at the flat rate of 420 Paise per unit.
- 10.12.6 Electricity bills paid during off-season period shall not be taken into account towards the amount payable against the annual minimum bill. The amount paid by the consumer towards the electricity bills for seasonal period only under the heads "Demand Charges" and "Energy Charges" shall be taken into account while determining the amount payable towards the annual minimum bill.

#### 11.0 RATE HTP-II

Applicability: This tariff shall be applicable for supply of energy to HT consumers contracting for 100 KVA and above, requiring power supply for Water Works and Sewerage pumping stations run by Local Authorities and GW & SB. GIDC Water Works.

#### 11.1 Demand Charges:

11.1.1 For billing demand upto contract demand.

(a)	For first 500 kVA of billing demand	Rs.90/- per kVA per month
(b)	For next 500 kVA of billing demand	Rs.130/- per kVA per month

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(c)	For next 1500 kVA of billing demand	Rs.190/- per kVA per month
(d)	For billing demand in excess of 2500 kVA	Rs.220/- per kVA per month

#### 11.1.2 For billing demand in excess of contract demand

For	billing	demand	in	excess	over	the	Rs.335 per kVA per month
con	tract der	mand					113.333 per KVA per monur

#### **PLUS**

#### 11.2 Energy Charges:

For	For entire consumption during the month					
(a)	Upto 1000 kVA billing demand	390 Paise per Unit				
(b)	For 1001 kVA to 2500 kVA billing demand	410 paise per Unit				
(c)	Above 2500 kVA billing demand	420 Paise per Unit				

#### **PLUS**

#### 11.3 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,	75 Paise per Unit
viz., 0700 Hrs to 1100 Hrs and 1800 Hrs to 2200 Hrs	75 Faise per Offit

- 11.4 Billing demand
- 11.5 Minimum bill
- 11.6 Power Factor
- 11.7 Maximum demand and its measurement
- 11.8 Contract demand
- 11.9 Rebate for supply at EHV

same as per HTP-I Tariff

#### 12.0 RATE HTP-III:

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

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regular basis under a proper agreement shall be deemed to be taking supply for temporary period.

#### 12.1 Demand Charges:

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

#### **PLUS**

#### 12.2 Energy Charges:

For all units consumed during the month	630 Paise per Unit
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#### **PLUS**

#### 12.3 Time of use charges:

(These charges be levied from the consumer who is having contracted demand or actual demand of 500 kVA and above).

Additional charge for the energy consumption during two peak	75 Paise per Unit
periods, i.e., 07.00 Hrs to 11.00 Hrs and 18.00 Hrs to 22.00 Hrs.	75 Faise per Offit

- 12.4 Billing demand
- 12.5 Minimum bill
- 12.6 Power factor
- 12.7 Maximum demand and its measurement
- 12.8 Contract demand
- 12.9 Rebate for supply at EHV

same as per HTP-I Tariff

#### 13.0 RATE HTP-IV:

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

#### 13.1 Demand Charges:

Same rates as specified in Rate HTP-I

**PLUS** 

#### 13.2 Energy Charges:

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For all	units consumed during the month	200 Paise per Unit
13.3	Billing demand	`
13.4	Minimum bill	
13.5	Power factor	same as per HTP-I Tariff
13.6	Maximum demand and its measurement	>
13.7	Contract demand	
13.8	Rebate for supply at EHV	J

#### NOTE:

- 1. 10% of total units consumed and 15% of the contract demand can be availed beyond the prescribed hours for the purpose of maintenance.
- 2. For the purpose of office lighting, fans etc. the consumer may apply for a separate connection.
- 3. This tariff shall be applicable if the consumer so opts to be charged in place of HTP-I tariff by using electricity exclusively during night hours as above.
- 4. The option can be exercised to switch over from HTP-I tariff to HTP-IV tariff and vice versa twice in a calendar year by giving not less than one month's notice in writing.
- 5. In case the consumer is not fulfilling the conditions of this tariff category, then such consumer for the relevant billing period will be billed under tariff category HTP-I.

#### 14.0 **RATE HTP- V**

#### HT - Agricultural (for HT Lift Irrigation scheme only)

This tariff shall be applicable for supply of electricity to High Tension Agricultural consumers contracting for 100 kVA and above, requiring power supply for lifting water from surface water sources such as canal, river and dam, and supplying water directly to the fields of farmers for agricultural irrigation only.

#### 14.1 Demand Charges:

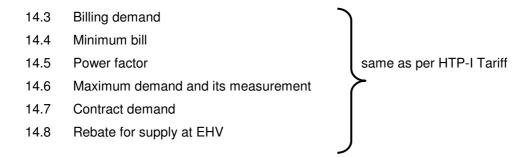
Demand Charges Rs. 25 per kVA per Month	

#### PLUS

#### 14.2 Energy Charges:

For all units consumed during the month	160 Paise per Unit
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#### 15.0 **RATE – Railway Traction:**

This tariff is applicable for power supply to Railway Traction at 132 kV/66 kV.

#### 15.1 Demand Charges:

(a) For billing demand upto the contract demand	Rs.160 per kVA per month
(b) For billing demand in excess of contract demand	Rs.400 per kVA per month

<u>NOTE</u>: In case of the load transfer for traction supply due to non-availability of power supply at preceding or succeeding point of supply or maintenance at Discom's level, excess demand over the contract demand shall be charged at normal rate at appropriate point of supply.

Normal Demand Charges will also apply in case of bunching of trains. However, Discoms shall charge excess demand charges while raising the bills and Railways have to give convincing details and documentary proof of bunching of trains if they want to be charged at the normal demand charges. If satisfactory proof of bunching of trains is provided, Discom shall consider that occasion for normal demand charges, otherwise excess demand charges will be applicable specified as above at 15.1(b).

#### **PLUS**

#### 15.2 Energy Charges:

	For all units consumed during the month		455 Paise per Unit	
15.3 15.4 15.5	Billing demand Minimum bill Power factor	sa	ame as per HTP-I Tariff	
15.6	Maximum demand and its measurement	>		
15.7	Contract demand			
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15.8 Rebate for supply at EHV



### **Annexure 1.1 – List of Objectors**

#### List of Organizations and Individuals who filed objections/suggestions

1	Consumer Education and Research Society
2	Gondal Chambers of Commerce and Industires
3	Sh.Vipulbhai H. Raiyani
4	Dr. Vithal n. Kamat,CAER
5	M/S Suzlon Power Infra
6	Sh. Hasmukh R. Shah
7	Rajkot Engineering Association
8	Akhil Bhartiya Grahak Panchayat
9	Gujarat Krushi Vij Grahak Suraksha Sangh
10	Sh. Surendrabhai B. Mehta
11	Federation of Gujarat Industries
12	Sh. Sunil B. Oza
13	The Jahlod taluka Lift Irrigation Co.Op.Mandli
14	M/S Axis Ad Print Media Ltd.
15	M/S Arayan Packging
16	GEB Engineers Association



### **Annexure 1.2 – List of participants in Public Hearing**

#### List of participants in Public Hearing

1.	Consumer Education and Research Society
2.	Sh.Vipulbhai H. Raiyani
3.	Dr. Vithal n. Kamat,CAER
4.	M/S Suzlon Power Infra
5.	Sh. Hasmukh R. Shah
6.	Rajkot Engineering Association
7.	Akhil Bhartiya Grahak Panchayat
8.	Gujarat Krushi Vij Grahak Suraksha Sangh
9.	Sh. Surendrabhai B. Mehta
10.	Federation of Gujarat Industries
11.	Sh. Sunil B. Oza
12.	The Jahlod taluka Lift Irrigation Co.Op.Mandli
13.	M/S Axis Ad Print Media Ltd.
14.	Utility users Wellfare Association and Cosumer Protection Council



### **Annexure 1.3 – ARR for FY 2008-09**

The final ARR for the Petitioner based on the audited figures for FY 2008-09 is as shown below:

Table 106: Table showing the Final ARR of FY 2008-09

Particulars	Approved as per MYT Order for FY 2008-09	Revised Estimates submitted by PGVCL or FY 2008- 09	Approved as per Order dated 14- 12-2009	FY 2008- 09 (Audited)
Cost of Power Purchase	397656	483055	481553	481748
Operation & Maintenance Expenses	41882	50689	38768	49865
Employee Cost	27369	35919	27469	36346
Repair & Maintenance	8684	7317	6652	6652
Administration & General Charges	5829	7453	4647	6866
Depreciation	13391	12697	12793	12793
Interest & Finance Charges	15393	10944	7924	13148
Interest on Working Capital	4715	5538	4758	5531
Other Debits	324	0	0	1142
Extraordinary Items	0	1	1	0
Provision for Bad Debts	886	970	848	0
Net Prior Period Expenses / (Income)	0	26	0	1255
Return on Equity	15383	14279	14239	14998
Provision for Tax / Tax Paid	137	104	57	111
Less: Other Expenses Capitalised	(4502)	(10059)	0	(12156)
ARR	485265	568244	560941	568435
Non - Tariff Income	6223	5317	5744	12544
Total ARR	479042	562926	555197	555891

