GUJARAT ELECTRICITY REGULATORY COMMISSION



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

For

Uttar Gujarat Vij Company Limited

Case No. 992/2010

31st March 2010

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GUJARAT ELECTRICITY REGULATORY COMMISSION (GERC)

AHMEDABAD

Annual Performance Review for FY 2009-10 &

Aggregate Revenue Requirement for FY 2010-11

FOR
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Case No. 992/2009

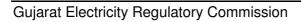
31st March 2010

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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
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. 992/2010

Date of Order: 31st March, 2010

CORAM

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

ORDER

Background and Brief History

1.1. Background

The Uttar Gujarat Vij Company Limited (herein after referred to as UGVCL 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 22nd 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 UGVCL on 4th January 2010.

1.2. Uttar Gujarat Vij Company Limited (UGVCL)

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/19th 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 15th September, 2003. One of the distribution companies, UGVCL is engaged in the distribution of electricity in the north zone of Gujarat.

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

1.3. Commission's Order for First Control Period

On 31st 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 17th 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 21st August 2009. Based on preliminary scrutiny and evaluation the Commission admitted the petition on 4th 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 14th 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.

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 2010-11for distribution business (Case No 992 of 2010) on 4th 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 7th 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.ugvcl.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 8th February, 2010. The Commission received objections/suggestions on the petition from sixteen respondents. The Commission thereafter fixed the dates of public hearing on 25th to 26th February and 3rd 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. T The fifth chapter deals with compliance of earlier directives and issue of fresh directives.

6.

- 7. The sixth chapter deals with fuel and power purchase cost adjustment.
- 8. The seventh chapter deals with computation of wheeling charges and cross-subsidy surcharge.
- 9. 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 17th January, 2009 and subsequently revised the ARR for FY 2009-10 in its Order dated 14th 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

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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 17th 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 25th to 26th February and 3rd 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. 40825 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.

UGVCL'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

UGVCL'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.

UGVCL'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 1st 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.

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UGVCL'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.

UGVCL'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.

UGVCL'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.

UGVCL'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 Petitioner 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.

UGVCL's response

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.

UGVCL'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.

UGVCL's response

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.

UGVCL'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

Objections

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.

UGVCL's response

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.

UGVCL'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.

UGVCL'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.

UGVCL'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.

UGVCL's response

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.

UGVCL'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.

UGVCL'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.

UGVCL'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.

UGVCL'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.

UGVCL'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.



UGVCL'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.

UGVCL'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. 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 losses of JGY feeders.

UGVCL's response:

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 3.5% during the year FY 2008-09.

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

Table 1: Distribution loss in JGY

No.	Year	Unit sent out [MUs]	Unit sold out [MUs]	% Loss
1	2007-08	1551.96	1091.57	29.67
2	2008-09	1701.94	1256.07	26.20

Following activities have been undertaken for reduction of losses of selected JGY feeders during FY 2008-09.

Table 2: Activities undertaken for reduction of losses

Sr.No.	Description	UNIT	FY 2008-09
1	Nos. of JGY Feeders	Nos.	553
2	Nos. of Villages	Nos.	4628
3	11 KV crossing removal	Nos.	2516
4	Meters provided on TC	Nos.	27626
5	Maintenance		
	HT line	KM	68563

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Sr.No.	Description	UNIT	FY 2008-09
	LT line	KM	36653
	Transformer	No.	59528
	Village	No.	2244
	XLPE conductor	KM	856
	Arial Bunch Conductor	KM	42.77
	Insulated conductor	KM	124
	Deteriorated conductor replacement	KM	696
6	Installation Checking		
	Nos	No.	641985
	Detection	No.	14701
	Assessment	Rs. In Lacs	2437.46
7	Meter Replacement		
	1 Ph.	No.	138057
	3Ph	No.	13927
8	Installation Sealing		
	1Ph	No.	231014
	3Ph	No.	14721
9	Installation of Meter Boxes.		
	1Ph	No.	135621
	3Ph	No.	9296
10	Feeder Bifurcation	No.	208
11	Panel Meter testing	No.	2716
12	Amorphous X'mer replacement	No. 3269	
13	HVDS (X'mer) installation	No.	5657
14	Nos. of connections released in Lighting category	Nos.	132193

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 27%. The Commission directs the Petitioner to target an annual reduction of at least 10% in the loss level.

2.26. 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

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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.

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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 440 MUs higher 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 UGVCL for FY 2009-10	FY 2009- 10 (H1 - Actual)	FY 2009- 10 (H2 - Projected)	Revised Approved for FY 2009-10
LT Consumers					
Residential	1156	1156	632	524	1156
Commercial	403	403	221	182	403
Industrial LT	653	653	328	325	653
Public Water Works	425	425	227	198	425
Agriculture	6108	6547	2405	3703	6108
Street Light	39	39	17	22	39
Temporary Supply at LT	0	0	0	0	0

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Consumer Category	Approved as per Order dt. 14th Dec 2009	Revised Estimates submitted by UGVCL for FY 2009-10	FY 2009- 10 (H1 - Actual)	FY 2009- 10 (H2 - Projected)	Revised Approved for FY 2009-10
LT Total	8783	9223	3830	4953	8783
HT Consumers					
Industrial HT	2652	2652	1330	1322	2652
Railway Traction	12	12	6	6	12
HT Total	2664	2664	1336	1328	2664
TOTAL	11447	11887	5166	6281	11447

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 18% in the FY 2009-10 as against 15% approved by the Commission

The Petitioner has submitted that the revised estimate for distribution loss is 18% as against the approved level of 15.00% in the MYT Order. The actual distribution losses for H1 of FY 2009-10 are 23.95%.

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 15%) 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 UGVCL for FY 2009-10	Considered for calculating Energy requirement
Distribution Losses	15%	23.95%	18.00%	18.00%

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	11447	11887	5166	11448
Distribution	MUs	1902	2609	1627	2513
Distribution Losses	%	14.25%	18.00%	23.95%	18.00%
Energy Requirement	MUs	13349	14496	6793	13961
Turning to the total of the tot	MUs	593	763	355	620
Transmission Losses	%	4.25%	5.00%	4.96%	4.25%
Total Energy to be input to Transmission System	MUs	13942	15259	7148	14581
Pooled Losses in PGCIL System	MUs	121	144	72	144
Total Energy Requirement	MUs	14063	15403	7220	14725



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 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 UGVCL for FY 2009-10
Total Power Purchase Cost	360105	186423	434109

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 UGVCL for FY 2009-10	FY 2009-10 (H1 - Actual)	FY 2009- 10 (H2 - Projected)	Revised Estimates considered for APR
Total Power Purchase Cost	360105	434109	186423	199524	385947

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. 30188 Lakhs as compared to the approved expenses of Rs. 23508 Lakhs FY 2009-10 in the Order dated 14 December, 2009.

Table 8: Employee Cost estimated by UGVCL 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 UGVCL for FY 2009-10
Employee Cost excluding treatment of Sixth Pay Commission	21009	15224	12465	27689
40% of component of Sixth Pay Commission for FY 2007-08 approved for payment in 2009-10	2499	-	-	2499
Total Employee Cost Considered	23508	15224	12465	30188

Actual employee cost for H1 of FY 2009-10 is Rs. 15224 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. 3238 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 1st 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 14th 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 UGVCL for FY 2009-10	Revised Estimates considered for APR
Employee Cost excluding treatment of Sixth Pay Commission	21009	27689	21009
40% of component of Sixth Pay Commission for FY 2007-08 approved for payment in 2009-10	2499	2499	2499
Total Employee Cost Considered	23508	30188	23508

b. R&M Expenses

Petitioner's submission

The Petitioner has revised the R&M expenses for FY 2009-10 to Rs. 3846 Lakhs. The same has been estimated by considering 10% increase on the provisional expenses for FY 2008-09. The actual R&M cost for H1 of FY 2009-10 is Rs. 1923 Lakhs.

Table 10: R&M expenses estimated by UGVCL 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 UGVCL for FY 2009-10
Repair & Maintenance Costs	5397	1923	1923	3846



Commission's View

The Commission has noted the projection as submitted by the Petitioner. Since these expenses are controllable in nature, 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 UGVCL for FY 2009-10	Revised Estimates considered for APR
Repair & Maintenance Costs	5397	3846	5397

c. Administration & General (A&G) Expenses Petitioner's submission

The Petitioner has revised the A&G expenses for FY 2009-10 to Rs. 5762 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. 1992 Lakhs.

Table 12: A&G Expenses estimated by UGVCL 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 UGVCL for FY 2009-10
Administration & General Charges	5762	1992	3770	5762

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 14th

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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 the Commission for FY 2009-10

(Rs. Lakhs)

Particulars	Approved	Revised Estimates	Revised
	as per	submitted by	Estimates
	Order dated	UGVCL for FY 2009-	considered
	14-12-2009	10	for APR
Administration & General Charges	3292	5762	3292

Summary of O & M expenses

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

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 UGVCL for FY 2009-10	Revised Estimates considered for APR
Employee Expenses	23508	30188	23508
Repair & Maintenance Costs	5397	3846	5397
Administration & General Charges	3292	5762	3292
Total O&M Expenses	32197	39796	32197

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:

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Table 15: Capital Expenditure as submitted by UGVCL

				(113. Laki13)
Sr. No.	Schemes	Approved as per MYT Order dated 17-01-2009	H1 Actual FY 2009-10	Revised Estimates submitted by UGVCL for FY 2009-10
Α	Re-plan			
1	Tasp [well] & peta para	1790	759	1790
2	Scp [hb]	535	77	535
3	Rec wells	235	318	235
	A -Total	2560	1154	2560
В	Re-non plan			
1	Tatkal	0	1	0
2	Badp	40	13	40
3	Rggvy	3635	417	3635
4	Zoopad patti	920	473	920
5	Rapdrp		0	0
6	Urbun development scheme	1200	0	0
7	Energy conservation	500	0	500
8	Independent certification agency	10	0	10
9	Vds / hvds	1200	0	1200
10	Adivasi area scheme			
	B Total	7505	904	6305
С	Dist. Scheme			
1	Kutir jyoti	450	95	450
2	Si scheme	4200	771	4200
3	Si scheme (meter)	2100	19	2100
4	Load sheding transformer	500	0	500
5	Nd scheme	6300	5404	6300
6	Jyotigram	310	136	310
7	Automatic p.f. control panel	1000	0	1000
8	Other Renovation work	1400	0	0
9	Nirmal gujarat	100	0	100
10	Replacement of assets	0	1	0
11	Ge 14.91 to 14.96	0	204	0
12	Vivekadhin	0	0	0
13	Others	450	11	450
14	Hand held instruments	100	0	100
	C Total	16910	6641	15510

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Sr. No.	Schemes	Approved as per MYT Order dated 17-01-2009	H1 Actual FY 2009-10	Revised Estimates submitted by UGVCL for FY 2009-10
D	Other new Schemes			
1	Arial bunch conductor/u.g. cable	1415	0	1415
2	Automatic meter reading	35	0	35
3	Gis	630	0	630
4	Automation & computerization	310	0	310
5	Other Renovation work		0	1400
6	Pending ag connections (golden goal)	4454	0	0
7	Misc civil work	300	0	300
	D total	7144	0	4090
	Grand Total a+b+c+d	34119	8699	28465

Petitioner's submission

The Petitioner has submitted that it has incurred a capital expenditure of Rs. 8699 Lakhs in the first half of FY 2009-10. Further, it has revised estimate of capital expenditure to Rs. 28465 Lakhs which is lower than the capital expenditure approved by the 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 28465 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 UGVCL for FY 2009-10	Revised Estimates considered for APR
Capital Expenditure	0	28465	0
Capitalization	29690	0	28465
Less : Consumer Contribution	6288	5693	5693
Grants	5580	6844	6844
Balance CAPEX	17822	15928	15928
Debt @ 70%	12475	11150	11150
Equity @ 30%	5347	4778	4778

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 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 5.29% for FY 2009-10 in line with the new rates notified by CERC in the terms and conditions for tariff applicable for 2009 to 2014 as shown in the Table 17 below



Table 17: Depreciation for 2009-10 submitted by UGVCL

Particulars	Approved as per Order dated 14- 12-2009	Revised Estimates submitted by UGVCL for FY 2009-10
Gross Block in the beginning of the Year	226736	226736
Additions during the Year (Net)	29690	27013
Depreciation for the Year	12633	12710
Average Rate of Depreciation	5.23%	5.29%

Commission's View

The Commission, in its order dated 14 December, 2009, had considered depreciation expenditure of Rs 12633 Lakhs 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 31st 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 1st April,2009 shall be worked out by deducting the cumulative depreciation as admitted by the Commission up to 31st 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 also observed that the capital expenditure proposed by the Petitioner (Rs 28465 Lakhs) does not tally with the gross addition (Rs 27013 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 UGVCL for FY 2009-10	Revised Estimates considered for APR
Gross Block in Beginning of the year	226736	226736	226736
Additions during the Year	29690	27013	28465
Depreciation for the Year	12633	12710	12749
Average Rate of Depreciation	5.23%	5.29%	5.29%

3.7. Interest Expenses

Petitioner's submission

The Petitioner has projected revised interest expenses of Rs. 11100 Lakhs for FY 2009-10 as compared to the approved expenses of Rs. 7082 Lakhs in the Order dated 14th 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 UGVCL for FY 2009-10
Opening Loans	70010	92869	96258	92869
Opening Loans considered for Capital Expenditure	37388	-	-	-
Loan Additions during the Year	12475	34197	0	34197
Repayment during the Year	9376	30808	0	30808
Closing Loans	40488	96258	0	96258
Average Loans	38938	94563	48129	94563
Interest on Loan	3894	4211	4211	8422
Interest in Security Deposit	2957	1223	1223	2446
Guarantee Charges	232	0	232	232
Total Interest & Financial Charges	7082	5434	5666	11100
Weighted Average Rate of Interest	10.00%	8.91%	8.91%	8.91%

The Opening balance of Loan for FY 2009-10 is revised to Rs. 92869 Lakhs as against Rs. 89599 Lakhs, as per the closing balance (balance sheet) of FY 2008-09. The loan addition in FY 2009-10 has been computed at Rs. 34197 Lakhs as per the Capex funding plan discussed above and balance for funding the past liabilities. The repayment is computed on the assumption that the loan would be repaid in the same proportion as it was paid last year. {(29723 x 92869)/ 89559=30808} as shown in Table 22 below. The total repayment of existing and new loan during the year is computed at Rs.30808 Lakhs. Further, it is submitted that based on the interest paid on the outstanding loans, the weighted average rate of interest works out to @ 8.91% 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 14th 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) #	9181
Actual Interest on Working Capital (Rs. Lakhs)	4278
% of Loan Allocated for Working Capital	47%
% of Loan Allocated for Capital Expenditure	53%

[#] 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

FY 2008-09	Opening Balance	Addition	Repayment	Closing Balance
Loan taken by Discom	6847	7169	728	13288
Loan from GUVNL	82752	25824	28996	79580
Total Loan	89599	32993	29723	92869
Less: Loan towards Working Capital	35684	29565	18685	46564
Loan towards Capital Expenditure	53915	3428	11038	46305



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 15928 Lakhs (excluding grants) and total loan proposed to be taken by the Petitioner is Rs 34197 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 only up to the seventy percent of the proposed capital expenditure (excluding grants) and correspondingly recomputed the loan repayments as shown in Table 22 below.

Table 22: Repayment considered for FY 2009-10

(Rs. Lakhs)

Closing Loans	Actual as per Final accounts FY 2008-09	Revised Estimates submitted by UGVCL for FY 2009-10	Revised Estimates considered for APR
Opening Loans	89599	92869	46305
Additions	32993	34197	11150
Repayments	29723	30808	15361
Closing	92869	96258	42094

The Commission has considered the revised weighted average rate of interest (8.91%) 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 UGVCL for FY 2009-10	Revised Estimates considered for APR
Opening Loans	70010	92869 ¹	
Opening Loans considered for Capital Expenditure	37388	0	46305
Loan Additions during the Year	12475	34197	11150
Repayment during the Year	9376	30808	15361
Closing Loans	40488	96258	42094
Average Loans	38938	94563	44199
Interest on Loan	3894	8422	3936
Interest in Security Deposit	2957	2446	2446
Guarantee Charges	232	232	232
Total Interest & Financial Charges	7082	11100	6614
Weighted Average Rate of Interest	10.00%	8.91%	8.91%

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. 4846 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

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¹ Rs 92869 Lakhs is inclusive of Loans taken to fund Working Capital.

Table 24: Interest on Working Capital submitted by UGVCL

Particulars	Approved as per Order dated 14- 12-2009	H1 Actual FY 2009-10	H2 Estimated FY 2009-10	Revised Estimates submitted by UGVCL for FY 2009-10
O & M expenses	2683	1595	1513	3316
Maintenance Spares	1921	1241	1168	2607
Receivables	23980	18298	22432	41357
Total Working Capital	28583	21134	25113	47280
Rate of Interest on Working Capital	10.25%	10.25%	10.25%	10.25%
Interest on Working Capital	2930	2166	2574	4846

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 17th 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 1st 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 UGVCL for FY 2009-10	Revised Estimates considered for APR
O & M expenses	2683	3316	2683
Maintenance Spares	1921	2607	2621
Receivables	23980	41357	27514
Total Working Capital	28583	47280	32819
Rate of Interest on Working Capital	10.25%	10.25%	10.25%
Interest on Working Capital	2930	4846	3364

3.9. Provision for Bad Debts

Petitioner's submission

The Petitioner has estimated the provisioning for write-off of bad debts at 0.10% of the revenue from sale of power i.e Rs. 386 Lakhs as shown in Table 26 below

Table 26: Proposed provision for Bad Debts

Particulars	Approved as per Order dated 14- 12-2009	H1 Actual FY 2009- 10	H2 Estimated FY 2009- 10	Revised Estimates submitted by UGVCL for FY 2009-10
Provision for Bad and Doubtful Debts	288	183	203	386



Commission's Analysis

The Commission in its Order dated 14th December, 2009 approved Rs 288 Lakhs towards bad debt. The Commission has recomputed the bad debts at 0.10% 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 UGVCL for FY 2009-10	Revised Estimates considered for APR
Provision for Bad and Doubtful Debts	288	386	330

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

Particulars	Approved as per Order dated 14- 12-2009	H1 Actual FY 2009-10	H2 Estimated FY 2009- 10	Revised Estimates submitted by UGVCL for FY 2009- 10
Other Debits	348	1107	475	1582
Extraordinary Items	33	46	46	92
Net Prior Period Expenses/(Income)	0	151	151	302
Other Expenses Capitalized	(5707)	(1694)	(1694)	(3388)
Total Other Costs	(5326)	(390)	(1022)	(1412)



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 1582 Lakhs as expenses in Other Debits based on the H1 actual expenses of Rs 1107 Lakhs. As discussed earlier, all the controllable expenses are considered as approved in the Tariff Order dated 14th December, 2009. Accordingly, the approved amount considered for the same is Rs 348 Lakhs.

Extraordinary Items

Petitioner's submission

Generally this includes expenses incurred due to Flood, Fire, Cyclone, etc.

Commission's Analysis of Extraordinary Items

For FY 2009-10, UGVCL has projected Rs 92 lakh under the head Extraordinary Items. As discussed earlier all the controllable expenses are considered as approved in the tariff order dated 14 December, 2009. Accordingly, the approved amount in case of extraordinary Items is considered as Rs 33 Lakhs 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 302 Lakhs as expenses in Net Prior Period Expenses based on the H1 actual expenses of Rs 151 Lakhs. As discussed earlier,

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all the controllable expenses are considered as approved in the Tariff Order dated 14th 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.

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Commission's Analysis

The Commission has considered Other Expenses Capitalized at the same level as that approved in its Tariff Order dated 14th December, 2009, i.e Rs 5707 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

Particulars	Approved as per Order dated 14-12-2009	Revised Estimates submitted by UGVCL for FY 2009-10	Revised Estimates considered for APR
Other Debits	348	1582	348
Extraordinary Items	33	92	33
Net Prior Period Expenses / (Income)	0	302	0
Other Expenses Capitalised	(5707)	(3388)	(5707)
Total Other Costs	(5326)	(1412)	(5326)



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 8538 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 UGVCL

(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 UGVCL for FY 2009-10
Return on Equity	8475	4159	4379	8538

Commission's Analysis

The Commission has observed that against the approved RoE of Rs.8475 Lakhs in its Order dated 14th December 2009 by the Commission, the Petitioner has claimed RoE of Rs. 8538 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

Particulars	Approved as per Order dated 14-12- 2009	Revised Estimates submitted by UGVCL for FY 2009-10	Revised Estimates considered for APR
Opening Equity Capital	57864	58596	57864
Equity Additions during the Year	5347	4778	4778
Closing Equity	63210	63374	62642
Average Equity	60537	60985	60253
Rate of Return on the Equity	14.00%	14.00%	14.00%
Return on Equity	8475	8538	8435

3.12. Taxes

Petitioner's submission

The Petitioner has estimated that the income tax for FY 2009-10 is Rs 1320 Lakhs as against Rs 118 Lakhs as approved by the Commission in the MYT Order.

The Petitioner has calculated tax considering 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. Rs118 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

Particulars	Approved as per Order dated 14- 12-2009	Revised Estimates submitted by UGVCL for FY 2009-10	Revised Estimates considered for APR
Provision for Tax	118	1320	118

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 14th 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 UGVCL for FY 2009-10	Revised Estimates considered for APR
Cost of Power Purchase	360105	434109	385947
Operation & Maintenance Expenses	32197	39796	32197
Employee Cost	23508	30188	23508
Repair & Maintenance	5397	3846	5397
Administration & General Charges	3292	5762	3292
Depreciation	12633	12710	12749
Interest & Finance Charges	7082	6822	6614
Interest on Working Capital	2930	4846	3364
Other Debits	348	1582	348
Extraordinary Items	33	92	33
Provision for Bad Debts	288	386	330
Net Prior Period Expenses / (Income)	0	302	0
Other Expenses Capitalized	(5707)	(3388)	(5707)
Sub-Total	409909	497257	435875
Return on Equity	8475	8538	8435
Provision for Tax / Tax Paid	118	1320	118
Total Expenditure	418503	507115	444429
Less: Non-Tariff Income	7753	10827	10827
Aggregate Revenue Requirement	410749	496288	433602

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. 182986 Lakhs. The Petitioner has revised its revenue estimates for FY 2009-10 to Rs. 386277 Lakhs, as against Rs. 287755 Lakhs that was approved by the Commission in its Tariff Order dated 14th 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

Particulars	Approved as per Order dated 14-12-2009	H1 Actual FY 2009-10	H2 Estimated FY 2009-10	Revised Estimates submitted by UGVCL for FY 2009-10
LT Consumers				
Residential	31733	23506	18742	42248
Commercial	19827	12656	10193	22848
Industrial LT	31951	18304	17710	36014
Public Water Works	12018	8229	6915	15144
Agriculture	59797	49303	81169	130472
Public Lighting	1325	704	884	1588
LT Total (A)	156651	112702	135613	248315
HT Consumers				
Industrial HT	130456	69902	67307	137209
Railway Traction	648	382	370	753
HT Total (B)	131104	70284	67678	137962
Grand Total (A + B)	287755	182986	203291	386277

Commission's View

The Commission has estimated the Power purchase cost for H2 based on the estimated average realization (as per Order dated 14th 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
LT Consumers	MUs	Rs. Lakhs	Rs/kWh
	1150	01700	0.74
Residential	1156	31733	2.74
Commercial	403	19827	4.92
Industrial LT	653	31951	4.90
Public Water Works	425	12018	2.83
Agriculture	6108	59797	0.98
Street Light	39	1325	3.42
LT Total	8783	156651	
HT Consumers			
Industrial HT	2652	130456	4.92
Railway Traction	12	648	5.36
HT Total	2664	131104	
TOTAL	11447	287755	

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	524	2.74	14380
Commercial	182	4.92	8963
Industrial LT	325	4.90	15892
Public Water Works	198	2.83	5587
Agriculture	3703	0.98	36255
Public Lighting	22	3.42	752
LT Total (A)	4953		81828
HT Consumers			
Industrial HT	1322	4.92	65036
Railway Traction	6	5.36	322
HT Total (B)	1328		65358
Grand Total (A + B)	6281		147186



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 UGVCL for FY 2009-10	Revised Estimates considered for APR
LT Consumers			
Residential	31733	42248	37886
Commercial	19827	22848	21619
Industrial LT	31951	36014	34196
Public Water Works	12018	15144	13816
Agriculture	59797	130472	85558
Public Lighting	1325	1588	1456
LT Total (A)	156651	248315	194530
HT Consumers			
Industrial HT	130456	137209	134938
Railway Traction	648	753	704
HT Total (B)	131104	137962	135642
Grand Total (A + B)	287755	386277	330172

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.10807 as against Rs 7753 Lakhs approved by the Commission in its Tariff Order dated 14th 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

Particulars	Approved as per Order dated 14-12- 2009	Revised Estimates submitted by UGVCL for FY 2009-10	Revised Estimates considered for APR
Non-Tariff Income	7753	10827	10827

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 8271 Lakhs. Income from related income in H1 was Rs 3286 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

Particulars	Approved as per Order dated 14-12- 2009	Revised Estimates submitted by UGVCL for FY 2009-10	Revised Estimates considered for APR
Other Consumer related Income	8362	8271	8271



3.17. Subsidy for FY 2009-10

Petitioner's submission

The Petitioner has revised the amount of agricultural subsidy to Rs 57225 Lakhs from Rs 55525 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 UGVCL for FY 2009-10	Revised Estimates considered for APR
Agriculture Subsidy	55525	57225	57225
Other Subsidies	3084	0	0
Total Subsidy	58609	57225	57225

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 UGVCL for FY 2009-10	Revised Estimates considered for APR
Revenue with Existing Tariff	287755	386277	330172
Other Income (Consumer related)	8362	8271	8271
Total Revenue excluding subsidy	296117	394548	338443
Agriculture Subsidy	55525	57225	57225
Other Subsidies	3084	0	0
Total Revenue including subsidy	354726	451773	395668

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

Particulars	Approved as per Order dated 14-12- 2009	Revised Estimates submitted by UGVCL for FY 2009-10	Revised Estimates considered for APR
Revised ARR	410749	496288	433602
Total Revenue including Subsidy	354726	451773	395668
Revised Provisional Gap for FY 2009-10	56023	44515	37934



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 sections².

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)

UGVCL	FY04-05	FY05-06	FY06-07	FY07-08	FY08-09	FY09-10 (Projection)
LT Consumers						
Residential	662	744	828	936	1026	1156
Commercial	194	225	247	296	350	403
Industrial LT	521	556	588	620	615	653
Public Water Works	308	343	365	376	404	425
Agriculture	5017	5444	5707	5837	6085	6108 ³
Street Light	28	31	32	34	37	39
Temporary Supply at LT	0	0	0	0	0	0
LT Total	6730	7343	7769	8099	8517	8784

 $^{^2}$ 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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³ Revised agriculture sales as considered by the Commission for FY 2009-10

UGVCL	FY04-05	FY05-06	FY06-07	FY07-08	FY08-09	FY09-10 (Projection)
LT Consumers						
Industrial HT	1617	1498	1810	2130	2381	2652
Railway Traction	12	11	11	11	12	12
HT Total	1629	1509	1821	2141	2393	2664
TOTAL	8359	8852	9590	10240	10910	11448

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	11.58%	11.32%	13.04%	9.62%	12.67%
Commercial	15.90%	19.04%	19.84%	18.24%	15.14%
Industrial LT	4.23%	2.23%	5.35%	-0.81%	6.18%
Public Water Works	7.02%	5.14%	2.88%	7.45%	5.20%
Agriculture	4.94%	3.25%	2.27%	4.25%	0.38%
Street Light	7.22%	6.72%	4.65%	8.82%	5.41%
Temporary Supply at LT	0.00%	0.00%	0.00%	0.00%	0.00%
LT Total	6.06%	4.70%	4.25%	5.16%	3.13%
High Tension Consumers					
Industrial HT	10.16%	14.69%	17.68%	11.78%	11.38%
Railway Traction	0.00%	4.45%	0.00%	9.09%	0.00%
HT Total	10.09%	14.63%	17.57%	11.77%	11.32%
TOTAL	6.89%	6.66%	6.78%	6.54%	4.93%

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

UGVCL	FY04-05	FY05-06	FY06-07	FY07-08	FY08-09	FY09-10 (Projection)
LT Consumers						
Residential	1445926	1504935	1569817	1723720	1859775	1990331
Commercial	180698	189352	199433	211078	222666	235091
Industrial LT	25047	26396	27836	29279	30849	32490
Public Water Works	9432	9901	10419	11020	11633	12273
Agriculture	201752	205289	207577	213559	217221	218901
Street Light	5825	6059	6509	6967	7506	8049
Temporary Supply at LT	0	0	0	0	0	0

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LT Total	1868680	1941932	2021591	2195623	2349650	2497135
LT Consumers						
Industrial HT	1211	1296	1440	1622	1750	1955
Railway Traction	1	1	1	1	1	1
HT Total	1212	1297	1441	1623	1751	1956
TOTAL	1869892	1943229	2023032	2197246	2351401	2499091

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	6.49%	8.84%	9.80%	7.89%	7.02%
Commercial	5.36%	5.66%	5.84%	5.49%	5.58%
Industrial LT	5.35%	5.27%	5.18%	5.36%	5.32%
Public Water Works	5.38%	5.67%	5.77%	5.56%	5.50%
Agriculture	1.86%	2.30%	2.88%	1.71%	0.77%
Street Light	6.54%	7.39%	7.04%	7.74%	7.23%
Temporary Supply at LT	0.00%	0.00%	0.00%	0.00%	0.00%
LT Total	5.89%	7.81%	8.61%	7.02%	6.28%
LT Consumers					
Industrial HT	9.64%	10.24%	12.64%	7.89%	11.71%
Railway Traction	0.00%	0.00%	0.00%	0.00%	0.00%
HT Total	9.63%	10.23%	12.63%	7.89%	11.71%
TOTAL	5.90%	7.81%	8.61%	7.02%	6.28%

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)

UGVCL	FY04-05	FY05-06	FY06-07	FY07-08	FY08-09	FY09-10 (Projection)
LT Consumers						
Residential	763	821	925	1044	1127	1271
Commercial	186	197	260	277	292	315
Industrial LT	523	531	544	579	613	640
Public Water Works	159	151	152	177	181	196
Agriculture	2884	2895	2878	2962	3104	3350
Street Light	15	16	17	19	20	22
Temporary Supply at LT	0	0	0	0	0	0
LT Total	4529	4611	4776	5057	5337	5794
LT Consumers						
Industrial HT	582	567	643	709	814	877

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Railway Traction	5	5	5	4	4	4
HT Total	587	572	648	713	819	881
TOTAL	5116	5183	5424	5770	6156	6675

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	10.23%	10.36%	12.86%	7.91%	12.82%
Commercial	11.93%	5.97%	6.45%	5.49%	7.89%
Industrial LT	4.07%	6.19%	6.34%	6.04%	4.33%
Public Water Works	3.28%	9.10%	16.40%	2.26%	8.34%
Agriculture	1.86%	3.84%	2.91%	4.79%	7.94%
Street Light	9.03%	9.79%	11.88%	7.73%	7.37%
Temporary Supply at LT	0.00%	0.00%	0.00%	0.00%	0.00%
LT Total	4.19%	5.71%	5.88%	5.54%	8.56%
LT Consumers					
Industrial HT	8.76%	12.54%	10.28%	14.84%	7.69%
Railway Traction	-3.42%	-6.73%	-13.00%	0.00%	-8.05%
HT Total	8.67%	12.40%	10.10%	14.75%	7.61%
TOTAL	4.73%	6.53%	6.39%	6.68%	8.44%

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 2006-07 and FY 2008-09) of 11.32% p.a.

The number of consumers added in this category has witnessed a three-year CAGR of 8.84% p.a. (between 2006-07 and FY 2008-09). The Petitioner expects the above trend to continue.

The connected load has been growing at a three-year CAGR of 10.36% p.a. (between 2006-07 and FY 2008-09). The Petitioner expects the above trend to continue.

Commission's View

The sales to this category constitute about 11% to 12% of total energy sales of the company. The Commission in its Multi-Year Tariff Order approved 1347 MUs for FY 2010-11. The revised sales based on CAGR as discussed in the above paragraph works out to be 1287 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 UGVCL for FY 2010- 11	Revised Approved for FY 2010-11
Residential	1347	1287	1287



b. Commercial Category

Petitioner's submission

The Petitioner has submitted that commercial category had witnessed a double digit growth. Three-year CAGR of sales to commercial consumers between FY 2006-07 and FY 2008-09 was 19.04% p.a.

Further, last three-year CAGR recorded for the growth in consumers between FY 2006-07 and FY 2008-09 was 5.66% p.a. The Petitioner expects the same trend to continue for FY 2010-11.

Three-year CAGR recorded between FY 2006-07 and FY 2008-09 for growth in the connected load was 5.97 % p.a. the Petitioner believes that this is on a lower side and accordingly it has estimated 8.00% growth rate for the FY 2010-11.

Commission's View

The sales to this category constitute about 4% to 5% of total energy sales of the company. Commission in its Multi-Year Tariff Order dated Jan 17, 2009 approved 405 MUs. The revised sales assumption based on the CAGR as projected in the above paragraph works out to be 480 MUs. For FY 2010-11, the Commission has analyzed the sales projections on the basis of CAGR as projected by Petitioner and also considered the recent trend. Based on the analysis it has approved the sales as projected by the Petitioner for FY 2010-11.

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

Consumer Category	Approved as per MYT Order for FY 2010-11	Revised Estimates submitted by UGVCL for FY 2010-11	Revised Approved for FY 2010-11
Commercial	405	480	480



c. Industrial LT Category

Petitioner's Submission

The Petitioner has submitted that Industrial LT had recorded a CAGR of 2.23 % p.a. during FY 2006-07 and FY 2008- 09. Further, last three years i.e. between FY 2006-07 and FY 2008- 09, CAGR growth in consumers and connected load were .5.27% p.a. and 6.19% 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 6% of total energy sales of the company. Commission in its Multi-Year Tariff Order dated Jan 17, 2009 approved 741 MUs. The revised sales based on the CAGR as projected in the above paragraph work out to be 668 MUs.

For FY 2010-11, the Commission has analyzed the sales projections on the basis of CAGR as projected by the Petitioner and 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

Consumer Category	Approved as per MYT Order for FY 2010-11	Revised Estimates submitted by UGVCL for FY 2010-11	Revised Approved for FY 2010-11
Industrial LT	741	668	668



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 5.14.% p.a.

The number of consumers added in the category has witnessed a CAGR of 5.67% p.a. between FY 2006-07 and FY 2008-09. The Petitioner expects the above trend to continue.

The connected load has been growing at a CAGR of 9.10% p.a. between FY 2006-07 and FY 2008-09 and the Petitioner expects the above trend to continue.

Commission's View

The sales to this category constitute about 4% of total energy sales of the company. The Commission in its Multi-Year Tariff Order dated Jan 17, 2009 approved 451 MUs. The revised sales based on the CAGR assumed as projected in the above paragraph works out to be 447 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. Based on the analyses the Commission has approved the sales projected by Petitioner for FY 2010-11.

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

Consumer Category	Approved as per MYT Order for FY 2010-11	Revised Estimates submitted by UGVCL for FY 2010-11	Revised Approved for FY 2010-11
Public Water Works	451	447	447



e. Agriculture Category

Petitioner's submission

The sales to this category constitute about 51% 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 1750 new connections under this category. The Petitioner has estimated an additional connected load of 22MW, based on their current norm of 17 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 HP/ connections. the Petitioner has proposed 1200 kWH/ Annum ((700+1700)/2=1200). This would translate into an additional consumption of around 36 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.	1750
Total Additional Load in MW	MW	22
Additional Load Added in HP	HP	29750
Additional Demand on Account of New Agriculture Connections	MU	36

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 (65345+1750=67095). 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	707	67095	812	1088338
Unmetered	5832	153556	2559	3430400
Total	6539	220651	3371	4518738

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

Consumer Category	Approved as per MYT Order for FY 2010-11	ler for FY UGVCL for FY	
Agriculture metered	1353	983	707
Agriculture unmetered	4957	5600	5832
Total	6006	6583	6539



Street (Public) Lighting

Petitioner's submission

The Petitioner has submitted that three-year CAGR between FY 2006-07 and FY 2008-09 for sales under this category was 6.72% p.a.

Three-year CAGR for the growth in the number of consumers between FY 2006-07 and FY 2008- 09 was 7.39% p.a. The Petitioner expects the same trend to continue for FY 2010-11.

Three-year CAGR between FY 2006-07 and FY 2008-09 witnessed for the connected load was 9.79% p.a. The Petitioner expects the same trend to continue 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 Jan 17, 2009 approved 42 MUs. The revised sales based on the CAGR as discussed in the above paragraph works out to be 42 MUs.

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

Consumer Category	Approved as per MYT Order for FY 2010-11	Revised Estimates submitted by UGVCL for FY 2010-11	Revised Approved for FY 2010-11
Public Lighting	42	42	42



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 14.69% p.a., 5-year CAGR between FY 2004-05 and FY 2008-09 was 10.16% 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 11.28% has been assumed as the growth rate for the FY 2010-11.

Three-year CAGR for the growth in the number of consumers between FY 2006-07 and FY 2008-09 was 10.24% p.a. Company expects the same trend to continue for FY 2010-11.

Three-year CAGR recorded between FY 2006-07 and FY 2008-09 for in the connected load was 12.54 % p.a. the Petitioner believes that this is on a higher side and accordingly it has estimated 8.76% growth rate for the FY 2010-11.

Commission's View

The sales to this category constitute about 25-26% of total energy sales of the company. The Commission in its Multi-Year Tariff Order dated Jan 17, 2009 approved 2954MUs. The revised sales based on CAGR as discussed in the above paragraph works out to be 2954 MUs. Accordingly; the Commission has approved the sales as given in the table below:

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

Consumer Category	Approved as per MYT Order for FY 2010-11	Revised Estimates submitted by UGVCL for FY 2010-11	Revised Approved for FY 2010-11
Industrial HT	2954	2951	2951



h. Railway Traction Category

The petitioner has estimated no growth in sales, number of consumers and connected load. The Commission has noted the submission by the Petitioner and has approved the sales of 12 MUs as proposed by the Petitioner.

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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

Consumer Category	Approved as per MYT Order for FY 2010-11 Revised Estimates submitted by UGVCL for FY 2010-11		Revised Approved for FY 2010-11
Low Tension Consumers			
Residential	1,347	1,287	1287
Commercial	405	480	480
Industrial LT	741	668	668
Public Water Works	451	447	447
Agriculture - Metered	6,006	983	707
Agriculture - Un-Metered	0,000	5,600	5832
Street Light	42	42	42
Temporary Supply at LT	-	-	-
LT Total	8,993	9,505	9462
High Tension Consumers			0
Industrial HT	2,954	2,954 2,951	
Railway Traction	11 12		12
HT Total	2,965 2,963		2963
TOTAL	11,958	12,468	12425



4.2. Distribution Losses and Energy Input Requirement

Petitioner's submission

The Petitioner has submitted 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 15.00% and improvement will be made on that level. In view of this, it has assumed that the distribution losses would be 15.00% in the 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 14%.

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 UGVCL for FY 2010-11	Considered for Energy Requirement for FY 2010-11
Distribution Loss	14.00	15.00	15.00

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



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 UGVCL for FY 2010-11	Revised Approved for FY 2010-11
Energy Sales	MUs	11958	12468	12425
Distribution Losses	MUs	1947	2200	2193
Distribution Losses	%	14.00%	15.00%	15.00%
Energy Requirement	MUs	13905	14668	14618
Transmission Losses	MUs	578	788	641
Transmission Losses	%	3.99%	5.10%	4.20%
Total Energy to be input to Transmission System	MUs	14483	15456	15259
Pooled Losses in PGCIL System	MUs	183	151	151
Total Energy Requirement	MUs	14666	15608	15410

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 UGVCL

(Rs. Lakhs)

S.No.	Particulars	Approved as per MYT Order for FY 2010-11	Revised Estimates submitted by UGVCL for FY 2010-11
1	Power Purchase Cost through Merit Order	327488	372264
2	Transmission Costs to PGCIL & GETCO	31364	43689
3	E-Urja Cost	1046	1046
4	GUVNL	0	0
5	SLDC Fees & Charges	0	198
6	Total Power Purchase Cost	359898	417197

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.



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Table 61: PPA Allocation for FY 2010-11

(MW)

	(IVIVV)
Generating Stations	Allocated Capacity
Ukai TPS	298
Ukai Hydro	76
Gandhinagar I to IV	0
Gandhinagar V	63
Wanakbori I to VI	315
Wanakbori VII	157
Sikka TPS	0
Kutch Lignite I to III	129
Kutch Lignite IV	8
Dhuvaran oil	0
Kadana Hydro	24
Utran Gas Based	0
Dhuvaran Gas Based - Stage-I	21
Dhuvaran Gas Based - Stage-II	0
Utran Extension	0
Sikka Extension	0
ESSAR	0
GPEC	77
GIPCL II (160)	48
GIPCL-SLPP	125
GSEG	36
GIPCL - I (145)	0
GMDC - Akrimota	125
GSEG Expansion	105
GIPCL, Expansion	63
GSPC-Pipavav	175
NPC - Tarapur- 1&2	32
NPC - Kakrapar	52
NPC - Tarapur- 3&4	0
NTPC - KORBA	77
NTPC - VINDHYACHAL - I	62
NTPC - VINDHYACHAL - II	63
NTPC - VINDHYACHAL - III	70
NTPC - KAWAS	0
NTPC - JHANOR	0

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Generating Stations	Allocated Capacity
NTPC - Kahalgoan	0
NTPC - Sipat Stage - II	0
SSNNL - Hydro	58
NTPC Kahalgaon (New)	12
NTPC North Karanpura	0
Sipat Stage-I	108
Wind Farms (Old Policy)	7
Wind Farms (New Policy)	264
Tarini Infrastructure Limited	1
APPL	300
Aryan	20

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

UGVCL	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	1753	1753	9554	1.43	25068	0	34622	1.97
Ukai Hydro	159	159	775	0.00	0	0	775	0.49
Gandhinagar I to IV	0	0	0	0.00	0	0	0	0.00
Gandhinagar V	462	462	3329	1.48	6838	151	10318	2.23
Wanakbori I to VI	2134	2134	10614	1.69	36071	314	46999	2.20
Wanakbori VII	1151	1151	7418	1.63	18768	375	26562	2.31
Sikka TPS	0	0	0	0.00	0	0	0	0.00
Kutch Lignite I to III	716	716	11171	1.05	7518	0	18689	2.61
Kutch Lignite IV	46	46	1008	0.96	444	0	1452	3.14
Dhuvaran oil	0	0	0	0.00	0	0	0	0.00
Kadana Hydro	19	19	749	0.00	0	0	749	3.97
Utran Gas Based	0	0	0	0.00	0	0	0	0.00
Dhuvaran Gas -I	163	49	1078	2.21	1081	45	2205	4.51
Dhuvaran Gas -II	0	0	0	0.00	0	0	0	0.00
Utran Extension	0	0	0	0.00	0	0	0	0.00
Sikka Extension	0	0	0	0.00	0	0	0	0.00
ESSAR	0	0	0	0.00	0	0	0	0.00
GPEC	459	138	5409	2.47	3404	0	8814	6.39
GIPCL II (160)	327	327	1541	1.72	5618	0	7159	2.19
GIPCL-SLPP	739	739	9036	0.95	7022	0	16057	2.17
GSEG	244	244	2650	1.48	3616	0	6266	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	490	444	287	2.12	9422	0	9709	2.18
GIPCL, Expansion	380	380	4380	1.75	6647	0	11027	2.90
GSPC-Pipavav	292	88	479	2.12	1856	0	2335	2.67
NPC - Tarapur- 1&2	202	202	0	0.94	1897	0	1897	0.94
NPC - Kakrapar	321	321	0	2.03	6523	0	6523	2.03
NPC - Tarapur- 3&4	0	0	0	0.00	0	0	0	0.00
NTPC - KORBA	497	497	1929	0.57	2833	0	4762	0.96
VINDHYACHAL - I	395	395	2013	1.03	4074	0	6086	1.54
VINDHYACHAL - II	411	411	2846	0.98	4026	0	6872	1.67
VINDHYACHAL - III	455	455	3161	0.94	4275	0	7436	1.63
NTPC - KAWAS	0	0	0	0.00	0	0	0	0.00

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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	0	0	0	0.00	0	0	0	0.00
SSNNL - Hydro	72	72	0	2.05	1471	0	1471	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	0.00
Sipat Stage-I	700	700	7569	1.70	11902	0	19470	2.78
Captive Power Plant	10	10	0	2.34	245	0	245	2.34
Wind (Old Policy)	14	14	0	1.75	249	0	249	1.75
Wind (New Policy)	533	533	0	3.37	17956	0	17956	3.37
Tarini Inds Limited	9	9	0	3.00	275	0	275	3.00
APPL	2102	2102	27985	1.48	31092	0	59077	2.81
Aryan	23	23	353	0.21	47	0	401	1.77
Total	16096	15410	128077	1.47	226043	885	355006	2.30

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 UGVCL for FY 2010-11	Revised Approved for FY 2010-11
Cost of Power through Merit Order	327488	372264	355006

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 UGVCL

(Rs. Lakhs)

Transmission Charges of Utilities	Approved as per MYT Order for FY 2010-11	Revised Estimates submitted by UGVCL for FY 2010-11	
GETCO Charges	28849	37498	
PGCIL Charges	2515	6192	
Total Transmission Charges	31364	43689	

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 UGVCL for FY 2010- 11	Revised Approved for FY 2010-11
GETCO Charges	28849	37498	27775
PGCIL Charges	2515	6192	6192
Total Transmission Charges	31364	43689	33967

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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 / Month respectively. The Petitioner has applied these charges on net capacity at 2796 MW. Total SLDC fees and charges for the Petitioner are estimated at Rs. 198 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 195 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 UGVCL

(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	186933	0

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GUVNL Cost Allocation	Approved as per MYT Order for FY 2010-11	Revised Estimates submitted by DGVCL for FY 2010-11
Revenue from sale of power to KPT		911
Revenue from sale of power to Others		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
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

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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 2009-10 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.

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 UGVCL 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.



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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 UGVCL for FY 2010-	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	17.66%	17.66%	17.66%
Allocation to the Company	1046	1046	1046

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 UGVCL 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

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GUVNL Cost Allocation	Approved as per MYT Order for FY 2010-11	Revised Estimates submitted by UGVCL for FY 2010-11	Revised Approved for FY 2010-11
Employee Cost	1846	2440	2440
Admin and General Expenses	1141	851	851
Depreciation	862	128	128
Interest and Financial Charges	13123	20322	20322
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		2	010-11		
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 summarised 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 UGVCL for FY 2010-11	Revised Approved for FY 2010-11
Power purchase cost from Merit Order	327488	372264	355006
Transmission Costs PGCIL & GETCO	31364	43689	33967
E-Urja Charge	1046	1046	1046
GUVNL Cost	0	0	(14658)
SLDC Fees & Charges	0	198	195
Total	359898	417197	375556

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. 26408 Lakhs as compared to the approved expenses of Rs. 22270 Lakhs for FY 2010-11 in the MYT Order.

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

(Rs. Lakhs)

Particulars	Approved as per MYT Order for FY 2010-11	Revised Estimates submitted by UGVCL for FY 2010-11
Employee Cost	22270	26408

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.

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The Petitioner has proposed an increase of 8% in Employee Cost on FY 2009-10 after excluding gratuity fund provision of Rs. 3238 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 UGVCL for FY 2010-11	Revised Approved for FY 2010-11
Employee Cost	22270	26408	22270

b. R&M Expenses

Petitioner's submission

The Petitioner has revised the R&M expenses for FY 2010-11 to Rs. 4230 Lakhs as compared to the approved expenses of Rs. 5720 Lakhs for FY 2010-11 in the MYT Order.

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

(Rs. Lakhs)

Particulars	Approved as per MYT Order for FY 2010-11	Revised Estimates submitted by UGVCL for FY 2010-11
Repair & Maintenance	5720	4230

Commission's View

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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 UGVCL for FY 2010-11

(Rs. Lakhs)

Particulars	Approved as per MYT Order for FY 2010-11	Revised Estimates submitted by UGVCL for FY 2010-11	Revised Approved for FY 2010-11
Repair & Maintenance	5720	4230	5720

c. Administration & General (A&G) Expenses

Petitioner's submission

The Petitioner has revised the A&G expenses for FY 2010-11 to Rs. 6223 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. 3490 Lakhs.

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

(Rs. Lakhs)

Particulars	Approved as per MYT Order for FY 2010-11	Revised Estimates submitted by UGVCL for FY 2010-11
Administration & General Charges	3490	6223

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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 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 UGVCL for FY 2010-11

(Rs. Lakhs)

Particulars	Approved as per MYT Order for FY 2010-11	Revised Estimates submitted by UGVCL for FY 2010-11	Revised Approved for FY 2010-11
Administration & General Charges	3490	6223	3490

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 UGVCL for FY 2010-11	Revised Approved for FY 2010-11
Employee Expenses	22270	26408	22270
Repair & Maintenance Costs	5720	4230	5720

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Particulars	Approved as per MYT Order for FY 2010-11	Revised Estimates submitted by UGVCL for FY 2010-11	Revised Approved for FY 2010-11
Administration & General Charges	3490	6223	3490
Total O&M Expenses	31480	36860	31480

4.5. Capital Expenditure and Capitalization

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

Table 79: Proposed Capital Expenditure for FY 2010-11

(Rs. Lakhs)

Sr. No.	Schemes	Approved as per Order dated 14-12- 2009	Revised Estimates submitted by UGVCL for FY 2010-11
Α	Re-plan		
1	Tasp [well] & peta para	1795	1795
2	Scp [hb]	215	215
3	Rec wells	245	245
	A -Total	2255	2255
В	Re-non plan		
1	Tatkal	0	0
2	Badp	45	45
3	Rggvy	4064	4064
4	Zoopad patti	590	590
5	Rapdrp		0
6	Urbun development scheme	1000	0
7	Energy conservation	500	500
8	Independent certification agency	15	15
9	Vds / hvds	1400	1400
10	Adivasi area scheme	0	0
	B Total	7614	6614

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Sr. No.	Schemes	Approved as per Order dated 14-12- 2009	Revised Estimates submitted by UGVCL for FY 2010-11
С	Dist. Scheme		
1	Kutir jyoti	225	225
2	Si scheme	4400	4400
3	Si scheme (meter)	2200	2200
4	Load sheding transformer	500	500
5	Nd scheme	6600	6600
6	Jyotigram	325	325
7	Automatic p.f. control panel	1000	1000
8	Other Renovation work	0	0
9	Nirmal gujarat	100	100
10	Replacement of assets	0	0
11	GE 14.91 to 14.96	0	0
12	Vivekadhin	0	0
13	Others	500	500
14	Hand held instruments	100	100
	C Total	15950	15950
D	Other new Schemes		
1	Arial bunch conductor/u.g. cable	1620	1620
2	Automatic meter reading	40	40
3	GIS	660	660
4	Automation & Computerisation	320	320
5	Other Renovation work	1500	1500
6	Pending ag connections (golden goal)	4454	0
7	Misc civil work	300	300
	D total	8894	4440
	Grand Total a+b+c+d	34713	29259

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 RE Plan schemes under which it has estimated capital expenditure of Rs 2255 Lakhs. The revised capital expenditure for FY 2009-10 as submitted by the Petitioner is Rs 29259 Lakhs.

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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 UGVCL for FY 2010-11
Capital Expenditure	34713	29259

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)

Particulars	2006-07	2007-08	2008-09	Average
Proposed Capital Expenditure	30106	29985	33889	93980
Actual Capital Expenditure incurred	21231	24439	22401	68071
Actual Capitalization	21231	24439	22401	68071
Ratio	71%	82%	66%	72%

The average actual capitalization achieved by the Petitioner is 73% hence the Commission has considered that the Petitioner will be able to capitalize 73% 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 UGVCL for FY 2010-11	Revised Approved for FY 2010-11
Capital Expenditure	34713	29259	-
Capitalization	-	-	21193
Less : Consumer Contribution	5841	5852	5852
Grants	7943	7035	7035
Balance CAPEX	20929	16372	8306
Debt @ 70%	10692	11461	5814
Equity @ 30%	10237	4912	2492

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 UGVCL for FY 2010-11
Gross Block in the beginning of the Year	275141	253749
Additions during the Year (Net)	34713	29259
Depreciation for the Year	10604	14251
Average Rate of Depreciation	3.63%	5.31%

Commission's View

The Commission, in its MYT Order, had considered depreciation expenditure of Rs 10604 Lakhs for FY 2010-11, which amounts to 3.63% 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 2010-11.

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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. 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 UGVCL for FY 2010-11	Revised Approved for FY 2010- 11
Gross Block in Beginning of the year	275141	253749	255201
Additions during the Year (Net)	34713	29259	21193
Depreciation for the Year	10604	14251	14114
Average Rate of Depreciation	3.63%	5.31%	5.31%

4.7. Interest Expenses

Petitioner's submission

The Petitioner has projected revised interest expenses of Rs. 11424 Lakhs for FY 2010-11 as compared to the approved expenses of Rs. 111295 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 UGVCL for FY 2010-11
Opening Loans	88702	96258
Loan Additions during the Year	9270	11461
Repayment during the Year	8870	9626
Closing Loans	89102	98093

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Particulars	Approved as per MYT Order for FY 2010-11	Revised Estimates submitted by UGVCL for FY 2010-11
Average Loans	88902	97175
Interest on Loan	8890	8746
Interest in Security Deposit	2109	2446
Guarantee Charges	296	232
Total Interest & Financial Charges	11295	11424
Less: Interest on Working Capital	-	4278
Net Interest & Financial Charges		7146

The Opening balance of Loan for FY 2010-11 is revised to Rs. 96258 Lakhs as against Rs. 88702 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. 11461 Lakhs as per the Capex funding plan discussed above. Repayment of loan has been computed assuming that 1/10th portion would be repaid in every Financial Year. The total repayment of existing and new loan during the year is computed at Rs. 9626 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 9.00 % 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 repayment for the year is estimated to be 10% of the opening balance of loan. 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 UGVCL for FY 2010-11	Revised Approved for FY 2010-11
Opening Loans	88702	96258 ⁴	42094
Loan Additions during the Year	9270	11461	5814
Repayment during the Year	8870	9626	4209
Closing Loans	89102	98093	43698
Average Loans	88902	97175	42896
Interest on Loan	8890	8746	3861
Interest in Security Deposit	2109	2446	2446
Guarantee Charges	296	232	232
Total Interest & Financial Charges	11295	11424	6539

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. 4711 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.

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⁴ Opening Loans include loan taken for financing working capital

Table 87: 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 UGVCL for FY 2010-11
O & M expenses	2623	3072
Maintenance Spares	1934	3056
Receivables	34790	39832
Total Working Capital	39347	45959
Rate of Interest on Working Capital	10.25%	10.25%
Interest on Working Capital	4033	4711

The Petitioner has further submitted that interest on working capital has been calculated based on the normative working methodology as specified by the Hon'ble 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 the 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 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 Jan 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



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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 have 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 UGVCL for FY 2010-11	Revised Approved for FY 2010-11
O & M expenses	2623	3072	2623
Maintenance Spares	1934	3056	2991
Receivables	34790	39832	26913
Total Working Capital	39347	45959	32527
Rate of Interest on Working Capital	10.25%	10.25%	10.25%
Interest on Working Capital	4033	4711	3334

4.9. Provision for Bad Debts

The Petitioner has estimated the provisioning for write-off of bad debts at 0.10% of the revenue from sale of power i.e Rs. 364Lakhs. The Commission has recomputed the bad debts at 0.10% 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 UGVCL for FY 2010-11	Revised Approved for FY 2010-11	
Provision for Bad Debts	357	364	323	



4.10. Other Expenses

Other Debits

For FY 2010-11, the Petitioner has projected Rs 1582 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

For FY 2010-11, the Petitioner has projected Rs 92 Lakh under the head Extraordinary Items. The Commission has approved Rs 33 Lakhs in MYT Order. Accordingly, the approved amount in case of extraordinary Items is considered as Rs 33 Lakhs for FY 2010-11.

Prior period expenses

For FY 2010-11, the Petitioner has not projected any amount under the head of 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 UGVCL for FY 2010-11	Revised Approved for FY 2010- 11
Other Debits	366	1582	366
Extraordinary Items	33	92	33
Net Prior Period Expenses / (Income)	0	0	0
Other Expenses Capitalized	(6049)	(3388)	(6049)
Total Other Costs	(5650)	(1714)	(5650)

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4.11. Return on Equity

Petitioner's submission

The Petitioner has submitted the revised estimate of Return on Equity for FY 2010-11 as Rs 9216 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 UGVCL

(Rs. Lakhs)

Particulars	Approved as per MYT Order for FY 2009-10	Revised Estimates submitted by UGVCL for FY 2009-10
Opening Equity Capital	67608	63374
Equity Additions during the Year	6279	4912
Closing Equity	73887	68286
Average Equity	70748	65830
Rate of Return on the Equity	14%	14%
Return on Equity	9905	9216

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 UGVCL for FY 2009-10	Revised Approved for FY 2009-10
Opening Equity Capital	67608	63374	62642
Equity Additions during the Year	6279	4912	2492
Closing Equity	73887	68286	65134
Average Equity	70748	65830	63888
Rate of Return on the Equity	14%	14%	14%
Return on Equity	9905	9216	8944

4.12. Taxes

Petitioner's submission

The Petitioner has estimated that the income tax for FY 2010-11 is Rs 1424 Lakhs as against Rs 111 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 111 Lakhs for the FY 2010-11.



Table 93: Approved Taxes for FY 2010-11

(Rs. Lakhs)

Particulars	Approved as per MYT Order for FY 2010-11	Revised Estimates submitted by UGVCL for FY 2010-11	Revised Approved for FY 2010-11
Provision for Tax	111	1424	111

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

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 UGVCL for FY 2010-11	Revised Approved for FY 2010- 11
Cost of Power Purchase	359898	417197	375556
Operation & Maintenance Expenses	31480	36860	31480
Employee Cost	22270	26408	22270
Repair & Maintenance	5720	4230	5720
Administration & General Charges	3490	6223	3490
Depreciation	10604	14251	14114
Interest & Finance Charges	11295	7146	6539
Interest on Working Capital	4033	4711	3334
Other Debits	366	1582	366
Extraordinary Items	33	92	33
Provision for Bad Debts	357	364	323
Net Prior Period Expenses / (Income)	0	0	0
Other Expenses Capitalised	(6049)	(3388)	(6049)

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Particulars	Approved as per MYT Order for FY 2010-11	Revised Estimates submitted by UGVCL for FY 2010-11	Revised Approved for FY 2010- 11
Sub-Total	412017	478815	425696
Return on Equity	9905	9216	8944
Provision for Tax / Tax Paid	111	1424	111
Total Expenditure	422033	489456	434751
Less: Non-Tariff Income	4545	11476	11476
Aggregate Revenue Requirement	417488	477979	423275

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. 364397 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)

	Re	Revenue FY 2010-11			
	Approved as per MYT Order for FY 2010-11	Revised Estimates submitted by UGVCL for FY 2010-11	Revised Approved for FY 2010-11		
LT Consumers					
Residential	38659	41339	37699		
Commercial	19562	26702	23691		
Industrial LT	32752	36573	32233		
Public Water Works	12493	15484	12580		
Agriculture	63063	78572	70560		
Street Light	1436	1694	1423		
LT Total	167965	200363	178187		
HT Consumers					
Industrial HT	138838	163318	144135		
Railway Traction	604	715	637		
HT Total	139442	164033	144773		
TOTAL	307407	364397	322960		

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.



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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 UGVCL for FY 2010-11	Revised Approved for FY 2010-11
Non Tariff Income	4545	11476	11476

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

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 UGVCL for FY 2010-11	Revised Approved for FY 2010-11
Other Income	9056	8914	8914

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 1st 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 2010-11

(Rs. Lakhs)

Particulars	Approved as per MYT Order for FY 2010-11	Revised Estimates submitted by UGVCL for FY 2010-11	Revised Approved for FY 2010-11
% Share in Unmetered Agriculture Sales	43.27%	50.59%	50.59%
Share of Agriculture Subsidy	47594	55651	55651
Other Subsidies (Write back of C.C. / Grants)	3359	0	0
Total	50953	55651	55651



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 UGVCL for FY 2010-11	Revised Approved for FY 2010-11
Revenue from sale of power at Current Tariff	307407	364397	322960
Other Income (Consumer related)	9056	8914	8914
Agriculture Subsidy	47594	55651	55651
Other Subsidies	3359	0	0
Total Revenue including Subsidy	367416	428961	387525

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:

Table 100: Estimated revenue gap during FY 2010-11

Lakhs)

Particulars	Approved as per MYT Order for FY 2010-11	Revised Estimates submitted by UGVCL for FY 2010-11	Revised Approved for FY 2010-11
Revised ARR	417488	518805	423275
Revenue from Sale of Power	307407	364397	322960
Other Income (Consumer-related)	9056	8914	8914
Total Revenue before Subsidy	316463	373310	331874
Agriculture Subsidy	47594	55651	55651
Other Subsidies	3359	0	0
Total Revenue After Subsidy	367416	428961	387525
Gap/(Surplus)	50072	89843 (#)	35750

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 14th 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 31475 transformers are metered out of the target of 83359 transformers. The metering of distribution transformers should be expedited.

Wherever meters are provided at the distribution transformers, the 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 FY 2008-09 may be furnished by May 2009.

Compliance:

The systematic planning has been made for providing meters on DTC of agriculture dominate feeders to have a realistic consumption by overcoming difficulties in the scattered interior area. This is a political sensitive issue, and the guide lines of Government of Gujarat have asked to achieve 100 % target. However, progress report up to September 2009 is as under.

Table 101: Table showing metered transformers

Year	Number of Agriculture dominated feeders	Number of transformers on Agriculture dominated feeders	Number of meters provided on transformers
2007-08	2002	83359	31475
2008-09	2126	87795	64801
2009-10	2182	89070	68868

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(Up to Sept09)

As reported earlier, the work of providing meters on DTC is all most completed in all circles, except Palanpur circle; however sincere efforts are being made for providing meters on DTC in the scattered area of Palanpur circle by convincing /explaining purpose of providing meters to consumers so that safe custody of meters can be maintained. However, study of 35 different agriculture dominate feeders regarding consumption of agriculture pump set, it is to state that due to poor rain fall in the jurisdiction of the Petitioner, power supply was given more than 8 hours to save crop. As a result of which, consumption per HP per Year is found 1577 from April 2009 to Dec.2009 and there is remarkable increase in % losses in agriculture sector. Details are as per format below.

Table 102: Details of Feeders under study

Sr. No	Particular	Unit	FY 2008-09	FY 2009-10 up to December 2009
1	Number of feeders under study	number	35	35
2	Transformers on feeders	number	1193	1193
3	Consumers connected on transformers	number	3080	3080
4	Study carried out for the year	year	FY 2008-09	6 Months.
5	Contracted HP of Agriculture metered & unmetered consumers	HP	68954	63429
6	Total sent out as per panel meter reading of all feeders	MUs	110.59	92.23
7	Total sold out as per reading of transformer meters	MUs	89.85	75.08
8	Unit loss	MUs	20.73	17.15
9	% loss	%	18.75	18.60
10	Per HP per day consumption	Units	3.85	4.29
11	Per HP per year consumption for metered & unmetered consumers	Units	1406	1577

It may also be noted that the actual consumption in unmetered agriculture depends on many parameters such as the amount of rainfall during a particular season,

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geographical disparities, type of crop, number of hours of supply etc. So the actual consumption would vary within a range of values, season to season, year to year.

It is reported that the feeders feeding agriculture pump sets are now separated and are now metered. By studying the metered agriculture services, both under normal & tatkal scheme and the feeders feeding agriculture loads exclusively, it is possible to have more realistic assessment of un metered pump sets. Such studies for last three years are depicted as under.

Table 103: Table showing un metered agriculture consumption

Particular	Unit	2007-08	2008-09	2009-10 upto Nov.'09
Sent out as per Agriculture Dom feeders panel meter readings.	Mus	7301.97	7377.90	5747.45
Theoretical loss	Mus	837.86	753.21	567.78
Ag. Normal & Tatkal billed units	Mus	803.46	897.54	683.05
Other than Agriculture Billed units	Mus	23.60	35.56	22.00
Consumption of Ag. Un metered Connections=1-2-3-4	Mus	5637.04	5691.57	4174.60
Agriculture Un metered consumption connected other than Agriculture Dom feeder as per GERC norms	Mus	1.66	1.53	0.435
Total Ag. Un metered Units=5+6	Mus	5638.71	5693.10	4175.035
Average Contracted HP of un metered Agriculture consumers	HP	2957141	3062785	3219862
Consumption of Agriculture un metered per HP per year	Units	1906.81	1858.79	1296.64

From above figures we can see that this year up to November 2009 Consumption recorded is @ 1300 units. December, January & February being peak Agriculture season the year end unit consumption will be about 2000 units which will be higher than GERC approved figures of 1700 units.

Commission's comments

The Commission notes that the Petitioner has been able to meter a substantial number of agricultural transformers. In order to achieve consumer buy-in for metering, the Petitioner should communicate with consumers, especially agriculture



and interior regions' consumers, highlighting the long term benefits of metering. Further, the Petitioner should explore installing tamper proof meters in interior areas.

Directive 2

Distribution loss

The Commission had directed that UGVCL shall prepare a road map for reduction of losses for the next 5 years (FY 2007-08 to FY 2011-12). The technical and non-technical losses should be segregated and investments required for system improvements, metering, etc. should be estimated. UGVCL should effectively utilize the APDRP funds for reduction of losses in urban areas.

Compliance:

The planning & road map for reducing T&D losses is as below.

As per MYT petition UGVCL's approved losses for FY 2008-09 & for FY 2009-10 were 16% & 15% respectively. In year 2008-09 UGVCL achieved a loss figure of 14.71% which was less than the approved figure of 16%. During the FY 2009-10 due to 36% less rainfall extra power supply more than eight Hrs.(scheduled) was required to be given in agriculture for protection of farming. This has resulted in losses for FY 2009-10 upto September 2009 as 23.95% & projected losses for FY 2009-10 are 18% as per APR. UGVCL is determined to control its losses & reduction of 1% every year in a phased manner by following measures.

Technical Loss reduction Activities are planned as under:

- Proper maintenance & replacement of conductor & cables with proper size.
- Providing amorphous transformers & balancing load on each phase along with bringing transformer in load centre.
- Providing proper earthing to HT poles and transformers & minimize current on neutral of transformers.
- Improving power factor of feeder by HT capacitor.
- Improving power factor of feeder by APFC panels & LT capacitors.
- Bifurcating all required feeders along with review of allowable norms of bifurcation for AG feeders & minimize all joints in lines etc.



Commercial Loss reduction Activities are planned as under:

- Energy audit of DTC losses considering commercial/theft parameters.
- Providing Arial bunch conductor/insulated conductor/XLPE cable & armored services.
- Replacing services having joints, provide meters outside the entrance of premises.
- Replacing meters by static meters.
- Replacing all faulty/burnt meters & making all installation pilferage proof.
- Providing XLPE coated conductor at all crossing of rural feeders etc

Road Map for reducing % T & D loss year by year is as under

Target of % T & D loss reduction for the year 2009-10 to 2011-12 will be achieved by:

- Performance based incentive scheme is finalised & will be made operational soon.
- DTC wise micro analysis for energy audit.
- Energy efficient pumpset scheme (EEPS) which is started in few talukas presently will be made operational in whole of UGVCL in a phased manner.
- Franchise for high loss making pockets & high loss feeders are planned.
- Through CMS (Consumer monitoring system) Consumer wise rise in consumption is being studied.
- Utilization of advanced technology & up gradation.
- Planned Checking based on CMS study & identification of theft prone areas.

UGVCL has carried out various activities for loss reduction in year 2009-10 as below Table 104: Activities carried out for loss reduction in FY 2009-10 (upto December 2009)

Sr. No.	Description	UNIT	2009-10 (up to Dec-09)
1	Maintenance		
	HT line	KM	54317
	LT line	KM	31398
	Transformer	No.	49249
	Village	No.	2594
	XLPE conductor	KM	123.2

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	Arial Bunch Conductor	KM	162.4
	Insulated conductor	KM	40.11
2	Installation Checking		
	Nos	No.	625318
	Detection	No.	10110
	Assessment	Rs. In Lacs	1605
3	Meter Replacement		
	1 Ph.	No.	91392
	3Ph	No.	7655
4	Installation Sealing		
	1Ph	No.	170594
	3Ph	No.	12158
5	Installation of Meter Boxes.		
	1Ph	No.	97466
	3Ph	No.	7508
6	Feeder Bifurcation	No.	102
7	Panel Meter testing	No.	2562
8	Amorphous X'mer replacement	No.	1686
9	HVDS (X'mer) installation	No.	1210
10	HP rise of AG HP based consumers	HP	180511
11	Installation of Energy efficient pump sets	Nos.	5853

Table 105: Distribution losses of UGVCL in last three years

Sr. No.	Year	Dist. Losses without AG	Overall Losses including EHT	Remarks
1	2006-07	10.85%	12.75%	
2	2007-08	12.49%	16.81%	Rise due to segregation of AG load (JGY scheme)
3	2008-09	10.89%	14.31%	
4	2009-10 (Upto Nov.'09)	10.68%	21.50%	More in AG due to excess Power supply.

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In the year 2009-10 there is 36% less & scattered rainfall recorded in areas of UGVCL. Due to this fact to save the standing crop more than 8 hours(Scheduled) power supply was required to be given in agriculture sector resulting in rise of agriculture & overall losses.

The details of extra power supply are as below.

Table 106: Comparison of extra power supply from April to Nov, for 2008-09 & 2009-10

	FY 2008 - 09 FY 2009 - 10									
Sr. No.	Month	Sent out in Mus	Ag Sent Out in Mus	Non- Ag Mus	Av.Ag supply in Hrs.	Month	Sent out in Mus	Ag Sent Out in Mus	Non- Ag Mus	Av.Ag supply in Hrs.
1	April'08	1098	617	481	7:30	April'09	1284	778	506	7:55
2	May'08	1261	758	502	8:00	May'09	1308	767	541	7:58
3	June'08	994	512	482	7:40	June'09	1154	631	524	8:00
4	July'08	861	367	494	7:36	July'09	792	275	517	12:42
5	Aug'08	664	185	479	8:03	Aug'09	1175	644	532	13:18
6	Sep'08	878	394	484	7:53	Sep'09	1255	688	567	10:57
7	Oct'08	1204	706	498	7:53	Oct'09	1336	811	525	8:00
8	Nov'08	1206	765	441	7:47	Nov'09	1352	832	520	8:03
	Total	8166	4304	3862	7:48	Total	9657	5426	4231	9:36

As can be seen from above average Power Supply hours in agriculture sector has increased from 7.48 hrs. in 2008-09 to 9.36 hrs. in 2009-10 upto Nov.'2009. This energy catered to agriculture consumers for extra hours is converted into losses for want of methodology for calculating energy for power supplied beyond 8 hours. Due to this overall losses of the Petitioner have increased in 2009-10. Excluding agriculture, the distribution losses of the Petitioner are 10.68% which is probably best amongst all discoms of Gujarat.

Table 107: Planned Capital expenditure for reduction of T&C losses







Sr. No.	Year	Rs Cr
1	2009-10	66
2	2010-11	73.50
3	2011-12	91.50

Above expenditure will be incurred in various System Improvement activities along with Meter replacement scheme, Providing of Aerial Bunch Conductor, Purchase of Hand held equipments, AMR, HVDS etc. Regarding APDRP utilization it is to state that APDRP scheme is already closed. Presently in R-APDRP scheme for the FY 2009-10, 19.78 crores & for FY 2010-11 13.19 crores are projected to be spent for various loss reductions, Energy Audit & GIS activities.

Commission's comments

The compliance by the Petitioner on this directive is noted.

Directive 3

Cent percent metering

Consumers may be convinced on the need for energy accounting by the utility and providing metering for balance un-metered services may be expedited.

Compliance

The difficulties regarding providing meters at installation of the consumers were reported earlier along with offensive approach of existing flat tariff consumers to the higher authority for amicable solution and smooth process. It was also requested to GoG to intervene in the matter. Government should intervene in the matter to achieve 100% progress. UGVCL is arranging meetings with bearers of various kisan sanghs on various subjects & specifically, matter of providing meters at installation of flat tariff is stressed. The progress of providing meters on consumer's installation is as under

Table 108: Table showing number of metered consumers

As on date	Numbers of Agriculture consumers	Number of metered consumers	% of metered consumers
31.03.06	205289	50547	24.62
31.03.07	207577	54778	26.29
31.03.08	213599	57593	26.96
31.03.09	217221	61105	28.13

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31.09.09	219305	63305	28.87

Commission's comments

The metering on Agriculture dominated feeders shall be accorded priority and expedited. The Petitioner shall strengthen communication efforts to convince consumers on the importance of installing meters.

Directive 4

Allocation of PPAs

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

Compliance

On behalf of all DISCOMs including the Petitioner, GUVNL is authorized to execute the PPA allocations from time to time. GUVNL will take further needful actions for periodical reallocation of PPA's.

Commission's comments

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

Directive 13: Distribution Transformer Failures

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

Compliance

For reduction in failure rate of distribution transformers, the company has taken various remedial measures which are as under.

- Balancing of load of transformers and to shift transformers in the load center.
- Effective pre and post monsoon maintenance work.



- Providing Amorphous transformers against failed CRGO transformer in Urban/JGY feeders which will not only reduce losses but also help to reduce transformer failure.
- Up graded condition in repairing order for improving quality of repaired transformers are planned.
- In a phased manner old (above 15 years or technically un economical) transformers are being replaced, looking to availability of fresh transformers.

Transformer failure rate are in decreasing trend for UGVCL as depicted here under.

Table 109: Transformer failure rate of last three years

Particulars	FY 06-07	FY 07-08	FY 08-09	FY 09-10 (Upto Dec.'09)
Transformer failure %	14.75%	12.62%	10.07%	8.04%

The Petitioner is confident of achieving failure rate in single digit by year end.

Commission's comments

The compliance by the Petitioner on this directive is noted.

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 to submit compliance of the fresh directives during next APR exercise.

Directive 1

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

Directive 2

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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 3

The Petitioner is directed to submit details of 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 4

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

Directive 5

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

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

Directive 6

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 2010-11.

Directive 7

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

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_{og} Adjustment on account of variations in delivered cost of Fuel at GEB's

(now GSECL) Thermal Power Stations Rs. Millions

PPP₁ Adjustment on account of variable cost of power purchased in Rs.

Millions

PPP₂ 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

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GSECL owned stations in the FPPPA formula. It has therefore requested the 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 110: Base Power Purchase cost 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
	Total of GSECL Plants	5,216	30417	18447	
	IPPs				

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Sr. No.	Power Stations	Capacity (MW)	Fixed Cost (Rs. Lakhs)	Energy Purchase (MU)	Variable Cost (Rs/Kwh)
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	

OTHERS	Capacity (MW)	MU	Energy Purchase (MU)	Variable Cost (Rs/Kwh)
Reliance Industries LTD. Naroda	23	161	23	2.34

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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 (MW)	Fixed Cost (Rs.	Energy Purchase	Variable Cost (Rs/Kwh)
		Lakhs)	(MU)	
Wind Farms (Old Policy)	24	Lakhs) 24	(MO) 48	1.75
Wind Farms (Old Policy) Wind Farms (New Policy)	24 701	<u> </u>		1.75 3.37
` ''		24	48	
Wind Farms (New Policy)		24	48	
Wind Farms (New Policy) Bagasse Plants Bagasse Competitive Bidding	701	24 0 15.9	48 1411 97	3.37
Wind Farms (New Policy) Bagasse Plants Bagasse	701	0	48 1411	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)	=	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

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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 111: Net Gap for FY 2010-11

(Rs Lakhs)

Particulars	Approved as per MYT Order for FY 2010- 11	Revised Estimates submitted by UGVCL for FY 2010- 11	Revised Approved for FY 2010-11	Estimated Gap for FY 2010-11 with Revised Tariff
Revised ARR	417488	518805	423275	423275
Revenue with Existing Tariff	307407	364397	322960	334564
Other Income (Consumer related)	9056	8914	8914	8914
Total Revenue excluding subsidy	316463	373310	331874	343477
Agriculture Subsidy	47594	55651	55651	55651
Other Subsidies	3359	0	0	0
Total Revenue including subsidy	367416	428961	387525	399129
Gap / (Surplus)	50072	89843	35750	24146

The total revenue based on the existing tariff for FY 2010-11 was Rs 35750 Lakhs. The net gap calculated with the revised tariff is Rs 24146 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 Uttar Gujarat Vij Company Limited (UGVCL) for FY 2010-11 as shown in the following table:

Table 112: Revised Approved ARR for FY 2010-11

(Rs. Lakhs)

Particulars	Revised Approved ARR for FY 2010-11	
Cost of Power Purchase	375556	
Operations & Maintenance Expenses	31480	
Employee Cost	22270	
Repair & Maintenance	5720	
Administration & General Charges	3490	
Depreciation	14114	
Interest & Finance Charges	6539	
Interest on Working Capital	3334	
Other Debits	366	
Extraordinary Items	33	
Provision for Bad Debts	323	
Net Prior Period Expenses / (Income)	0	
Other Expenses Capitalized	(6049)	
Sub-Total	425696	
Return on Equity	8944	
Provision for Tax / Tax Paid	111	
Total Expenditure	434751	
Less: Non-Tariff Income	11476	
Aggregate Revenue Requirement	423275	

Gujarat Electricity Regulatory Commission



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 1st April 2010.

Sd/- Sd/-

DR. P K MISHRA Chairman SHRI PRAVINBHAI PATEL
Member

Place: Ahmedabad Date: 31st 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.
- 2. These tariffs are exclusive of Electricity Duty, tax on sale of electricity, taxes and other charges levied by the Government or other competent authorities from time to time which are payable by the consumers, in addition to the charges levied as per the tariff.
- 3. All these tariffs for power supply are applicable to only one point of supply.
- **4.** The charges specified are on monthly basis. Distribution Licensee may decide the period of billing and adjust the tariff rate accordingly.
- 5. The energy supplied under these tariffs can be utilized only within the compact area of the premises not intervened by any area/road belonging to any person or authority other than the consumer.
- **6.** Except in cases where the supply is used for 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



- 9. 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	·

PLUS

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

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(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

^{**}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
(b)	For remaining units	Rate as per LFD-I (Rural)

^{**}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 **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.)

5.4.1 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 Pa	ise per Unit
For entire consumption during the month 200 Pa	ise per Unit

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)

Gujarat Electricity Regulatory Commission



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.

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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	701 alse per offic 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.

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- 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	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

Gujarat Electricity Regulatory Commission



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,



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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

Foi	billing	demand	in	excess	over	the	Rs.335 per kVA per month
cor	tract der	mand					Tio.ooo per kv/kpor month

PLUS

11.2 Energy Charges:

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	73 Taise per Offic

- 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
--

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 Paise 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		
)	

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

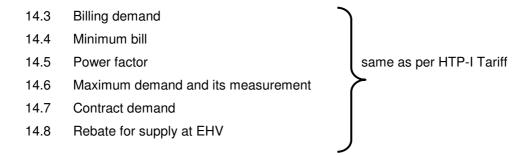
PLUS

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	Billing demand	_)		
15.4	Minimum bill				
15.5	Power factor		sam	e as per HTP-I Tariff	
15.6	Maximum demand and its measurement		>		
15.7	Contract demand				
15.8	Rebate for supply at EHV				
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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 113: Table showing the Final ARR of FY 2008-09

Particulars	Approved as per MYT Order for FY 2008-09	Revised Estimates submitted by UGVCL for FY 2008-09	Approved as per Order dated 14- 12-2009	FY 2008- 09 (Audited)
Cost of Power Purchase	298069	374199	371897	372033
Operation & Maintenance Expenses	31766	32792	29672	34638
Employee Cost	23569	23436	21744	25807
Repair & Maintenance	5091	5993	5091	3496
Administration & General Charges	3106	3363	2837	5335
Depreciation	8123	7835	7824	7781
Interest & Finance Charges	10987	7392	7581	7581
Interest on Working Capital	3435	4091	3443	4114
Other Debits	332	1391	332	1582
Extraordinary Items	33	33	33	33
Provision for Bad Debts	293	352	351	0
Net Prior Period Expenses / (Income)	0	(141)	0	(386)
Return on Equity	8215	7926	7965	7965
Provision for Tax / Tax Paid	118	101	111	154
Less: Other Expenses Capitalised	(5384)	(4712)	0	(4723)
ARR	355987	431260	429209	430771
Non - Tariff Income	4045	7314	6649	10214
Total ARR	351942	423946	422560	420557

