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



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

For

Madhya Gujarat Vij Company Limited

Case No. 979/2009

**14 December 2009** 

1st Floor, Neptune Tower, Opp. Nehru Bridge, Ashram Road, Ahmedabad-380 009. (Gujarat) India Phone: +91-79-26580350 Fax: +91-79-26584542 email: <a href="mailto:gerc@gercin.org">gerc@gercin.org</a> Visit us: www.gercin.org



## GUJARAT ELECTRICITY REGULATORY COMMISSION (GERC)

#### **AHMEDABAD**

Annual Performance Review for FY 2008-09 &

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December 2009

#### **Contents**

1.	Backgro	ound and Brief History	13
	1.1.Ba	ckground	13
	1.2.Ma	dhya Gujarat Vij Company Limited (MGVCL)	13
	1.3.Co	mmission's order for the first control period	14
	1.4. Adı	mission of current petition and public hearing process	14
	1.5.Ap <sub>l</sub>	proach of this Order	15
	1.6. App	proach for APR for the FY 2008-09	16
	1.7. Ap <sub>l</sub>	proach for ARR for the FY 2009-10	17
2.	Brief O	utline of objections raised, response from Petitioner & Commiss	sion's
	Views.		18
	2.1.Ba	ckground	18
	2.2.De	lay in filing of the petition	18
	2.3.Re	venue gap for FY 2008-09	19
	2.4.FP	PPA mechanism	20
	2.5.Re	venue gap for FY 2009-10	21
	2.6.No	proposal for hike in Tariff for FY 2009-10	21
	2.7. Inc	rease in O&M expenses and Bad and doubtful debts	22
	2.8. Loading of GUVNL cost		
	2.9.Re	duction in cross-subsidy	23
	2.10.	Replacement of old meters	24
	2.11.	Distribution loss of JGY feeders (MGVCL)	25
	2.12.	High Charges for Excess demand of CPP consumers	
	2.13.	Opposition to change in tariff structure	26
	2.14.	Theft of electricity	26
	2.15.	Voltage Regulation and Bifurcation of Feeders	27
3.	Annual I	Performance Review for FY 2008-09	29
	3.1.Sal	les 29	
	3.2. Dis	tribution Loss	30
	3.3.En	ergy Balance	31
	3.4. Po	wer Purchase Cost	32
	3.5.0&	M Expenditure	35
	3.6.Ca	pital Expenditure and Capitalization	39
	3.7. De	preciation	42
	3.8. Inte	erest Expenses	43
	3.9. Inte	erest on Working Capital	46
	3.10.	Other Expenses	47



	3.11.	Return on Equity	50
	3.12.	Taxes	51
	3.13.	Non-Tariff Income	52
	3.14.	Aggregate Revenue Requirement for FY 2008-09	53
	3.15.	Sharing of Gains & Losses	54
	3.16.	Revenue for FY 2008-09	59
	3.17.	Other Consumer related Income for FY 2008-09	60
	3.18.	Subsidy for FY 2008-09	61
	3.19.	Revenue Gap / (Surplus) for FY 2008-09	63
	3.20.	Provisional Gap/Surplus for FY 2008-09	63
4.	Determin	nation of Aggregate Revenue Requirement for FY 2009-10	65
	4.1.Sale	es 65	
	4.2. Dist	ribution Losses and Energy Input Requirement	77
	4.3. Tota	al Power Purchase Cost	78
	4.4.0&	M Expenditure	90
	4.5. Cap	oital Expenditure and Capitalization	94
	4.6. Dep	preciation	97
	4.7. Inte	rest Expenses	98
	4.8. Inte	rest on Working Capital	101
	4.9. Pro	vision for Bad Debts	103
	4.10.	Other Expenses	103
	4.11.	Return on Equity	104
	4.12.	Taxes	105
	4.13.	Aggregate Revenue Requirement for FY 2009-10	106
	4.14.	Revenue from sale of power for FY 2009-10	107
	4.15.	Non-Tariff Income	108
	4.16.	Other Consumer related Income for FY 2009-10	109
	4.17.	Subsidy for FY 2009-10	110
	4.18.	Total Revenue for FY 2009-10	110
	4.19.	Estimated Revenue Gap for FY 2009-10	111
5.	Complia	nce of Directives	
	5.1.Con	npliance of Existing Directives	113
	5.2. Fres	sh Directives	121
6.		Power Purchase Cost Adjustment	
7.	Tariff Ph	ilosophy and Category-Wise Tariffs	128
		en Access- Transmission Charges, Wheeling Charges and	
	•	Subsidy Surcharge	
	7.2.lmp	act of Electricity Duty	
		posal of MGVCL for structural changes in tariff categories	
	J •		



#### **Tables**

Table 1 : MGVCL's Category wise Actual Sales	29
Table 2: Sales approved by Commission	30
Table 3: MGVCL - Distribution Losses approved by Commission	31
Table 4: Energy Requirement estimated by MGVCL	31
Table 5: Energy Requirement approved by Commission	32
Table 6: Power Purchase Cost FY 2008-09	33
Table 7: Break up of power purchase cost as approved in MYT order	33
Table 8: Break up of power purchase cost of FY 2008-09 submitted by MGVCL.	33
Table 9: Sharing of GUVNL surplus among Discoms	34
Table 10: Approved Power Purchase Cost FY 2008-09	34
Table 11: Employee Cost estimated by MGVCL	35
Table 12: Employee Cost as per Order dated Jan 17, 2009	36
Table 13: Employee expenses approved by Commission	
Table 14: R&M expenses approved by Commission	37
Table 15: A&G expenses approved by Commission	38
Table 16: Approved O& M Expenses by Commission	39
Table 17: Capital Expenditure as submitted by MGVCL	39
Table 18: Capitalization approved by Commission for FY 2008-09	41
Table 19: Depreciation Approved by Commission for FY 2008-09	42
Table 20: Funding of Capital Expenditure as submitted by Petitioner	43
Table 21: Interest and Finance Charges as submitted by MGVCL for FY 2008-0	944
Table 22: Loans considered for Interest and Finance Charges	45
Table 23: Interest and Finance Charges computed for FY 2008-09	45
Table 24: Interest and Finance Charges approved for FY 2008-09	46
Table 25: Interest on Working Capital estimated by MGVCL for FY 2008-09	46
Table 26: Interest on Working Capital approved for FY 2008-09	47
Table 27: Other Expenses estimated by as MGVCL	47
Table 28: Other Cost for FY 2008-09	
Table 29 : ROE estimated by MGVCL	50
Table 30: Capitalization considered during FY 2008-09	50
Table 31: ROE provisionally approved by Commission for FY 2008-09	51
Table 32: Tax estimated by MGVCL	51
Table 33: Tax considered by Commission for FY 2008-09	52
Table 34: Non-Tariff Income estimated by MGVCL	52
Table 35: Non-Tariff Income considered by Commission for FY 2008-09	53
Table 36 : ARR for FY 2008-09	53
Table 37: Provisional Sharing of Gains and Losses for FY 2008-09	57
Gujarat Electricity Regulatory Commission	Page



Table 38: Provisional Gains and Losses for Distribution Losses	58
Table 39: Provisional Gains and Losses for Interest on Working Capital	59
Table 40: Total Revenue considered for FY 2008-09	59
Table 41: Other Consumer Related Income estimated by MGVCL	60
Table 42: Other Consumer Related Income considered for FY 2008-09	
Table 43: Subsidy considered for FY 2008-09	61
Table 44: Subsidy considered for FY 2008-09	61
Table 45: Net Revenue Gap for FY 2008-09	63
Table 46: Historical Trend in Category-wise Units sold	65
Table 47: Category-wise Growth rates of Units Sold	66
Table 48: Category-wise No. of Consumers	66
Table 49: Growth rate of no. of Consumers	67
Table 50: Category-wise Connected Load	67
Table 51: Growth Rate for Connected Load	68
Table 52: Revised Approved Residential Sales for FY 2009-10	69
Table 53: Revised Approved Commercial Sales for FY 2009-10	70
Table 54: Revised Approved Industrial Sales for FY 2009-10	71
Table 55: Revised Approved Public Water Works for FY 2009-10	72
Table 56: Sales proposed for Agriculture FY 2009-10	72
Table 57: Metered and Unmetered Sales in FY 2008-09	73
Table 58: Sale estimation for FY 2009-10	73
Table 59: Total Revised Sales for Agriculture FY 2009-10	74
Table 60: Revised Approved Public Lighting Sales for FY 2009-10	75
Table 61: Revised Approved Industrial HT for FY 2009-10	
Table 62: Revised Approved Railway Traction for FY 2009-10	76
Table 63: Approved Sales for FY 2009-10	77
Table 64: Distribution Losses approved by Commission for FY 2009-10	78
Table 65: Energy Balance considered for FY 2009-10	
Table 66: Revised Power Purchase Cost submitted by MGVCL	79
Table 67: PPA Allocation for FY 2009-10	80
Table 68: Revised approved Cost of Energy (Plant wise) for FY 2009-10	81
Table 69: Revised approved Cost of Energy (Plant wise) for FY 2009-10	83
Table 70: Revised Transmission Charges as submitted by MGVCL	84
Table 71: Revised Approved Transmission Charges for FY 2009-10	84
Table 72 : Revised Cost of GUVNL as submitted by MGVCL	85
Table 73: Revised Approved GUVNL Operational Expenses	88
Table 74: Revised Approved Cost E-Urja for FY 2009-10	
Table 75: Sharing of GUVNL Cost /(Surplus)	
Table 76: Revised Total Power Purchase Cost for FY 2009-10	



Table 77: Employee Cost estimated by MGVCL for FY 2009-10	91
Table 78: Employee expenses approved by Commission for FY 2009-10	91
Table 79: R&M expenses estimated by MGVCL for FY 2009-10	92
Table 80: R&M expenses approved by Commission for FY 2009-10	93
Table 81: A&G Expenses estimated by MGVCL for FY 2009-10	93
Table 82: A&G Expenses approved by Commission for FY 2009-10	93
Table 83: Revised Approved O& M Expenses by Commission for FY 2009-10	94
Table 84: Capital Expenditure as submitted by MGVCL	94
Table 85: Estimated Capital Expenditure for FY 2009-10	96
Table 86: Approved Capitalization by Commission for FY 2009-10	96
Table 87: Depreciation for 2009-10 submitted by MGVCL	97
Table 88: Depreciation Approved by Commission for FY 2009-10	98
Table 89: Projected Interest Expenses for FY 2009-10	98
Table 90: Loan allocation based on Interest of Working Capital	100
Table 91: Interest & Financial Charges for FY 2009-10	100
Table 92: Interest on Working Capital submitted by MGVCL	101
Table 93: Interest on Working Capital for FY 2009-10	102
Table 94: Provision for Bad Debts	103
Table 95: Other expenses for FY 2009-10	
Table 96: ROE for FY 2009-10 as submitted by MGVCL	104
Table 97: ROE for FY 2009-10	105
Table 98: Taxes for FY 2009-10	105
Table 99: Aggregate Revenue Requirement for FY 2009-10	106
Table 100: Projected Revenue for FY 2009-10	108
Table 101: Non-Tariff Income for FY 2009-10	109
Table 102: Consumer Related Income for FY 2009-10	109
Table 103: Subsidy for FY 2009-10	110
Table 104: Total Revenue for FY 2009-10	110
Table 105: Estimated revenue gap during FY 2009-10	111
Table 106: Base Power Purchase Prices for Calculation of FPPPA for FY 20	009-10
	125
Table 107 : Revised Approved ARR for FY 2009-10	132



#### **Abbreviations**

1	APR	Annual Performance Review
2	ARR	Aggregate Revenue Requirement
3	CAGR	Compounded Annualized Growth Rate
4	CAPEX	Capital Expenditure
5	CERC	Central Electricity Regulatory Commission
6	Ckt-Km	Circuit Kilometer
7	Control Period	FY 2008-09, FY 2009-10, FY 2010-11
8	DD & DNH	Diu & Daman and Dadara Nagar Haveli
9	DGVCL	Dakshin Gujarat Vij Company Limited
10	FPPPA	Fuel Price and Power Purchase Adjustment
11	FY	Financial Year
12	GEB	Gujarat Electricity Board
13	GERC	Gujarat Electricity Regulatory Commission
14	GETCO	Gujarat Energy Transmission Corporation Limited
15	GoG	Government of Gujarat
16	GSECL	Gujarat State Electricity Corporation Limited
17	GUVNL	Gujarat Urja Vidyut Nigam Limited
18	HT	High Tension
19	HVDC	High Voltage Direct Current
20	IPTC	Independent Power Transmission Company
21	kWh	Kilo Watt Hour
22	MGVCL	Madhya Gujarat Vij Company Limited
23	MU	Million Units
24	MW	Mega Watt
25	MYT	Multi-Year Tariff
26	O&M	Operation & Maintenance
27	PAF	Plant Availability Factor
28	PGVCL	Paschim Gujarat Vij Company Limited
29	PGCIL	Power Grid Corporation of India
30	PLF	Plant Load Factor
31	RE	Revised Estimates
32	S/S	Sub Station
33	SLDC	State Load Dispatch Centre
34	T&C	GERC (Terms & Conditions of Tariff) Regulation, 2005
35	TPL-A	Torrent Power Limited -Ahmedabad
36	TPL-S	Torrent Power Limited -Surat
37	UGVCL	Uttar Gujarat Vij Company Limited



38	WRPC	Western Region Power Committee
39	YoY	Year on Year



### BEFORE THE GUJARAT ELECTRICITY REGULATORY COMMISSION AT AHMEDABAD

Case No. 979 / 2009

Date of Order 14.12.2009

#### **CORAM**

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

#### ORDER

#### 1. Background and Brief History

#### 1.1. Background

The Madhya Gujarat Vij Company Limited (herein after referred to as MGVCL or the petitioner) has filed its petition under Section 62 of the Electricity Act, 2003 read with Gujarat Electricity Regulatory Commission (Terms & Conditions of Tariff) Regulations, 2005 (hereinafter referred to as 'Terms & Conditions of Tariff') and Gujarat Electricity Regulatory Commission (Multi-Year Tariff Framework) Regulations, 2007 (hereinafter referred to as 'MYT Regulations') on 25<sup>th</sup> August 2009 for annual performance review (APR) of FY2008-09 and determination of tariff for FY2009-10 for distribution business, under MYT Control Period FY2008-09 to FY2010-11. Based on preliminary scrutiny and evaluation the Commission admitted the petition of MGVCL on 4<sup>th</sup> September 2009.

#### 1.2. Madhya Gujarat Vij Company Limited (MGVCL)

The Government of Gujarat (hereinafter referred to as "GoG") notified the Gujarat Electricity Industry (Reorganization and Regulation) Act 2003 (herein after referred to 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 their letter vide GO / 19th August



2003 had directed Gujarat Electricity Board (herein after 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 September 15th, 2003. MGVCL is one of the distribution companies engaged in distribution of electricity in the west zone of Gujarat.

MGVCL obtained its Certificate of Commencement of Business on the 15th October, 2003. However, the company could not commence its operations during the financial year ended 31st March 2004 and 31st March, 2005. The Company has started commercial function w.e.f. 1st April 2005.

#### 1.3. Commission's order for the first control period

MGVCL filed its petition under the Multi-Year Tariff framework for the FY 2008-09, FY 2009-10 and FY 2010-11 on 31<sup>st</sup> July 2008 in accordance with the Gujarat Electricity Regulatory Commission (Multi-Year Tariff Framework) Regulations, 2007 notified by Gujarat Electricity Regulatory Commission (GERC). The Gujarat Electricity Regulatory Commission (herein after referred to as 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 Multi-Year Tariff order on 17th January 2009 for the control period comprising FY 2008-09, FY 2009-10 and FY 2010-11

#### 1.4. Admission of 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 FY2008-09 and determination of tariff for FY2009-10 for distribution business (Case No 980 of 2009) on 4<sup>th</sup> September 2009.

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

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



- 1. Gujarat Samachar (In all editions of the State)
- 2. Divya Bhaskar (In all editions of the State)
- 3. 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.mgvcl.com) for inviting objections and suggestions on its petition.

The interested parties/stakeholders were asked to file their objections and suggestions on the petition on or before 12<sup>th</sup> October 2009. However, the Commission received several representations from stakeholders for extending the time for filing their objections / suggestions. The Commission, noting the fact that the whole process was already delayed because of late filing by the Petitioner, did not extend the date for filing of objections / suggestions. Instead the Commission allowed the stakeholders to record their objections / suggestions in the public hearing process itself.

The Commission received objections/suggestions from 21 respondents on petitions. The Commission thereafter fixed the date of public hearing on 29<sup>th</sup> October 2009 and 30<sup>th</sup> October 2009 and sent communication to the objectors inviting them to take part in the public hearing process for presenting their views on the petition before the Commission. 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 petitions are given in Annexure-1.1. The details of objectors who participated in the public hearing are given in Annexure-1.2.

#### 1.5. Approach of this Order

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

At the time of issue of this order, the first year of the Control Period i.e. FY 2008-09 has passed. However, the audited financial statements for the petitioner are not Gujarat Electricity Regulatory Commission

Page 15



available. The petitioner has submitted provisional financial statements. Considering this the Commission has considered a provisional annual performance review for FY 2008-09. Based on the provisional annual performance review the Commission has computed the gains / losses as required under the MYT Regulations. However, the effect of these gains / losses shall be passed on to next year based on its verification from the audited accounts of the petitioner. The Commission therefore directs the petitioner to submit the audited accounts for FY 2008-09 at the earliest.

In regard to the annual tariff determination for FY 2009-10, the Commission has observed that a major portion of the FY 2009-10 has already elapsed. Further, in the absence of audited accounts, the gains / losses computed for FY 2008-09, as a result of annual performance review, are provisional in nature. Therefore, the Commission has only reviewed the submission of the petitioner for FY 2009-10.

#### 1.6. Approach for APR for the FY 2008-09

Regulation 9.1 of the MYT Regulations provides that where the aggregate revenue requirement of a generating company or a licensee is covered under a multi-year tariff framework, such licensee shall be subject to 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 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.

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

For the purpose of APR for the FY 2008-09, the Commission has adopted the same approach as per the above mentioned regulation and has undertaken a comparison of the actual performance (based on provisional accounts) with the projections approved in the MYT Order. The Commission has thereafter classified the deviation on account of uncontrollable and controllable factors and has considered the treatment as provided in Regulation 10 and Regulation 11 of the MYT Regulations.



#### 1.7. Approach for ARR for the FY 2009-10

For FY 2009-10 which is the second control year of the control period, the petitioner has approached the Commission for revision of the Aggregate Revenue Requirement (ARR) and the determination of tariff based on the APR of FY 2008-09 and the revised estimates for the FY 2009-10.

The Commission has observed that a major portion of the FY 2009-10 has elapsed with less than four months left in the year. The Commission has also observed that the time for submission of the petition for FY 2010-11 (which includes performance review of FY 2009-10) is already due. Further, the gains / losses computed for FY 2008-09 based on the APR cannot be passed on to FY 2009-10 since the APR is based on provisional accounts. In regard to FY 2009-10, the Commission is of the opinion that it shall consider the gains / losses at the time of APR based on the audited accounts for the year. The impact of this gap/surplus shall be effected in the order for tariff determination of FY 2010-11.

In this regard the Commission has noted that the stipulated date for submission of petition for determination of tariff for FY 2010-11 was 30th November 2009 and it has already directed the petitioner to submit the petition for FY 2010-11 by 15<sup>th</sup> December, 2009 along with the audited accounts for FY 2008-09.



## 2. Brief Outline of objections raised, response from Petitioner & Commission's Views

#### 2.1. Background

In response to the public notice inviting objections / suggestions from stakeholders on the petition filed by MGVCL and other licensees for annual performance review (APR) of FY 2008-09 and determination of tariff for FY 2009-10 for distribution business, under MYT Control Period FY2008-09 to FY2010-11, twenty one consumers / consumer organizations have filed their objections / suggestions in writing. In the public hearings held on 29<sup>th</sup> and 30<sup>th</sup> October, 2009 jointly for GETCO, GSECL and the 4 government distribution utilities (DGVCL, MGVCL, PGVCL, UGVCL), a total of sixteen stakeholders have participated. 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. Delay in filing of the petition

#### Objections:

Some stakeholders have raised objections with regard to the delay in filing of the petition. They have further submitted that this delayed submission should not be entertained by the Commission. Further, it has been suggested that the tariff order be extended upto 31<sup>st</sup> March 2011 in order to regularize APR and ARR filings. MGVCL should file its APR petition for 2009-10 before 31<sup>st</sup> March 2010 and applications for APR for FY 2010-11 and ARR for FY 2011-12 before 30<sup>th</sup> November 2010.

#### MGVCL's response:

MGVCL submitted that the APR exercise was being undertaken for the first time under the MYT framework and majority staff of the Company was deputed on election duty for a long period during the General Elections. Further, the petitioner was required to consult the Government of Gujarat (GoG) on matters of subsidy and capital expenditure. GoG's comments were received in August 2009 which therefore resulted in delay in filing. The petitioner also drew reference to clause 85 of the



'Conduct of Business Regulations', 2004 which provides the Commission power to condone delay in filing the petition.

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

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

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

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

#### 2.3. Revenue gap for FY 2008-09

Gujarat Electricity Regulatory Commission

#### **Objections:**

Some stakeholders have highlighted the high gap of Rs.10213 Lakhs shown by MGVCL and asked the Commission to reject the same on grounds of inefficiencies of the petitioner. They have specifically highlighted the reasons of increases in distribution loss and power purchase cost and reduction in sales as the prime reasons for the high revenue gap which ought to be rejected. Further, the stakeholders have stated that no tariff hike should be allowed on account of controllable parameters such as distribution loss.

#### MGVCL's response:

MGVCL has replied that it has arrived at the gap for FY 2008-09 considering the revised estimate of expenditure and revenue and controllability / uncontrollability of



Page 19

various parameters. MGVCL has clarified that it has bifurcated the increase in power purchase cost due to controllable and uncontrollable parameters. The impact of distribution loss has been considered as controllable while any other impact is considered uncontrollable.

The petitioner has also explained the merit order dispatch process it follows for sourcing of power from the cheapest sources. The power purchase cost has primarily increased due to increase in fuel costs during FY 2008-09. On the issue of high distribution losses, the petitioner has highlighted the various steps it has taken to reduce the technical and commercial losses. On the issue of lower sales estimation for FY 2008-09, the petitioner has stated that the sales have reduced due to reduction in energy consumption on account of global recession.

Further, it has not asked for a tariff hike for FY 2009-10 considering that it would be able to absorb the gap by improving performance parameters and distribution loss.

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

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

#### 2.4. FPPPA mechanism

#### Clarification required:

Some stakeholders have asked for clarification whether the impact of T&D loss is included in FPPPA mechanism.

#### MGVCL's response:

MGVCL has stated that while calculating the FPPPA charges, the net energy available for sale is calculated based on approved T&D loss and not on actual T&D loss. Thus the existing FPPPA formula does not take into account the impact on actual power purchase cost paid by MGVCL due to variation in the quantum supplied by various generating stations as against that approved by the Commission. Hence the impact of increase in power purchase cost is not fully recovered under the FPPPA formula.



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

The Commission has taken note of the submission made by the petitioner.

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

#### **Objections:**

Some stakeholders have highlighted the huge gap of Rs. 16971 Lakhs for FY 2009-10 submitted by the petitioner. They have requested that the petitioner be directed to improve its performance and reduce the expenditure to narrow the gap.

#### MGVCL's response:

MGVCL has stated that the increase in ARR for FY 2009-10 is mainly on account of increase in power purchase cost, employee cost and carry forward of revenue gap of FY 2008-09. All other expense parameters are within the range of approved values. Further, MGVCL has not proposed any tariff increase since it believes it will be able to absorb the gap by improving performance parameters and distribution loss.

#### Commission's Analysis:

The Commission has taken note of the objections submitted by the Stakeholder. The Commission is also of the view that the petitioner should adopt measures to improve its performance.

#### 2.6. No proposal for hike in Tariff for FY 2009-10

#### **Objections:**

Some stakeholders have highlighted that in spite of the high gap estimated for FY 2009-10, the petitioner has not asked for a tariff hike.

#### MGVCL's response:

MGVCL has admitted that there is a revenue gap for FY 2009-10. However, the gap has reduced as compared to what was approved in the MYT order. Moreover, MGVCL is confident that it would be able to absorb the gap by improving performance parameters and distribution functionalities.

Gujarat Electricity Regulatory Commission

Page 21



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

The Commission is of the view that there are various methods for treating the gap of any particular year which may not always result in tariff hike. The Commission also recognizes that the gap of one year could be addressed through efficient operations of subsequent years. In this regard the Commission takes note of the submission of the petitioner.

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

#### Objections:

Some stakeholders have highlighted the high increase in O&M expenses for FY 2009-10 as against the approved values, especially employee expenses and A&G expenses which have increased by more than 30%. It has been suggested that the manpower ratio should be reduced through measures such as Voluntary Retirement Scheme (VRS). The stakeholders have also suggested that MGVCL should be directed to claim the bad and doubtful debts from defaulters rather than honest consumers.

#### MGVCL's response:

MGVCL has responded stating that the increase in O&M expenses has been explained in the petition and appropriate treatment is 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.



#### 2.8. Loading of GUVNL cost

#### **Objections:**

Some stakeholders have argued that the annual expenditure of GUVNL of almost Rs. 500 crores should not be loaded on the ARR of MGVCL. This is because PGVCL is well established now and does not need any support from GUVNL.

#### MGVCL's response:

In response to the above argument, MGVCL has stated that GUVNL is a holding company of its subsidiaries i.e. PGVCL, MGVCL, DGVCL and UGVCL. It carries out the activities of power planning, procurement and allocation and also undertakes the function of raising and managing the overall loan portfolio for these companies. The corporate structure model post unbundling of GEB and functional requirement of each company necessitates the presence of a holding company in the overall interest of the power sector in the state as a whole.

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

The corporate structure of GUVNL and its subsidiary companies has been approved as per the bifurcation / unbundling scheme and notified by the Government of Gujarat. The Commission notes the roles played and activities undertaken by GUVNL in the power sector of Gujarat. The Commission has also noted the approach adopted by GUVNL in allocation of its surplus / gap among the 4 distribution companies.

#### 2.9. Reduction in cross-subsidy

#### Objections:

Some stakeholders have highlighted the high amount of cross subsidy given to agricultural consumers in the state which burdens the industrial and commercial consumers. They have petitioned for a reduction in cross subsidy.

#### MGVCL's response:



In response to the above objection, the petitioner has highlighted that certain practical aspects make it difficult to implement the guidelines of National Tariff Policy (NTP) of aligning the tariffs of various consumer categories within a band of +/- 20% of average cost of supply. In order to supply good quality, uninterrupted power to industrial and commercial consumers, the petitioner has to buy costly short-term power. On the other hand, agricultural consumers are supplied cheaper power available during off-peak hours. Thus the existing tariffs broadly reflect the actual cost of supply to these categories. Moreover, the agricultural consumers have to be charged less considering their socio-economic situation.

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

The Commission has not taken a view on tariffs in this order but it will review the tariffs in the ARR of FY 2010-11.

#### 2.10. Replacement of old meters

#### **Objections:**

Some stakeholders have expressed concerns with regards to the age of the installed meters. It has been submitted that the petitioner collects unnecessary charges on the pretext of old and burnt/faulty meters. Hence it has been submitted that the petitioner should undertake replacement of the old meters at the earliest.

#### MGVCL's response:

MGVCL has replied that it has submitted the capital expenditure plan to replace old meters to the Commission.

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

The Commission has taken a serious view of the objections raised by the stakeholders. It directs MGVCL to follow the Electricity Supply Code Regulations, 2005 notified by the Commission while levying and collecting any charge related to meters. Further, the Commission notes the capital expenditure plan to replace old meters submitted by MGVCL. The Commission now issues a directive to MGVCL in this regard:



#### **Directive:**

MGVCL is directed to submit (in advance) its target, in terms of number of old meters it plans to replace in its petition. Subsequently, it shall also submit the details of actual meters replaced vis-à-vis the target set by it.

#### 2.11. Distribution loss of JGY feeders (MGVCL)

#### **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 reduces the loss in JGY feeders.

#### MGVCL's response:

MGVCL has replied that in order to reduce losses due to JGY feeders, specific officers have been assigned to high loss feeders for close monitoring. It has stated that the loss has been reduced to 59.7% in FY 2008-09 from 65.84% in FY 2007-08. MGVCL has also highlighted the various activities carried out to reduce the T&D loss including removal of 11 kV crossing and provision of coated conductor in LT line.

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

The Commission has taken a serious view of the high distribution loss in JGY feeders. The Commission is of the view that reduction in loss stated by the petitioner in FY 2008-09 is not enough and more needs to be done. The Commission now issues a directive to MGVCL in this regard:

#### **Directive:**

The Commission hereby directs the petitioner to submit a long-term plan along with timelines to reduce distribution loss in JGY feeders.

#### 2.12. High Charges for Excess demand of CPP consumers

#### **Objections:**



Some stakeholders have raised the objection that the CPP consumers are charged with excessive demand charges

#### MGVCL's response:

MGVCL has replied that the demand charges have been levied on CPP consumers to maintain grid discipline. Captive users often draw power in excess of their contracted demand from grid. This results in the petitioner needing to draw power from costly sources or resort to load shedding since the overdrawal by captive consumers is usually large. To avoid this and to maintain the grid discipline, the petitioner has proposed higher charges for excess drawal from CPP consumers.

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

The Commission has not taken a view on tariffs in this order but it will review the tariffs in the ARR of FY 2010-11.

#### 2.13. Opposition to change in tariff structure

#### **Objections:**

Some stakeholders have objected to the introduction of new tariff categories such as LFD-II (b), LTP V.

#### MGVCL's response:

MGVCL has replied that it has suggested only minor modifications in current tariff structure. The new categories such as LFD-II (b), LTP - V are for rationalization of consumer category as step towards Demand Side Management (DSM) and to ensure grid discipline.

#### Commission's analysis:

The Commission has not changed the existing tariff structure except a new tariff category Rate LTP-V (for LT Lift Irrigation Schemes Only).

#### 2.14. Theft of electricity

#### **Objections:**



Some stakeholders have raised the objection that the petitioner is applying Section 126 and 135 of the Electricity Act 2003, related to theft of electricity, only selectively. In most of the instances, cases of theft are settled mutually even when the theft is proved beyond doubt. Such a practice will impact the financial health of the distribution company negatively.

#### MGVCL's response:

MGVCL has replied that cases of theft and unauthorized use of electricity are dealt with according to provisions under the Electricity Act 2003 and as per the regulations notified by the Commission in this regard.

#### Commission's analysis:

The Commission has noted the submission of MGVCL. The Commission is of the view that the petitioner should undertake measures to contain the incidence of theft of electricity. The Commission further issues the following directive in this regard:

#### **Directive:**

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

#### 2.15. Voltage Regulation and Bifurcation of Feeders

An objection was raised with respect to length of 11 kv feeders. It was pointed out that length of 11 kv feeders is in some cases as long as 94 kms which leads to high line losses. It was further mentioned that petitioner has made long-term plans to establish new EHV sub-stations and bifurcation of the feedes, but has not been able to achieve its target. It was suggested that the feeders must be bifurcated immediately.

#### MGVCL's response:

MGVCL has replied that during FY 2007-08, twenty five new 66 kv sub-stations and two hundred eight 11kv feeder were commissioned to reduce the feeder length and



in FY 2008-09, thirty five 66 kv substations and two hundred thirty 11kv feeder were commissioned. The petitioner is actively implementing its long-term plan.

#### Commission's analysis:

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



#### 3. Annual Performance Review for FY 2008-09

MGVCL, in its Petition for Annual Performance Review for FY 2008-09 and tariff Determination for FY 2009-10 has elaborated on expenditure and revenue for FY 2008-09 based on actual expenditure and revenue for FY 2008-09 as per provisional accounts. The petitioner has provided the comparison of revenue (as per provisional accounts) and expenditure against each head with the revenue and expenditure approved by the Commission along with the reasons for deviations. In this Section, the Commission has analysed the components of actual revenue and expenses for FY 2008-09, and has estimated gains / losses in line with the regulations.

#### 3.1. Sales

MGVCL submitted category-wise sales in the APR petition and stated that the revised estimated sales for FY 2008-09 are approx 61MUs higher than the sales approved by the Hon'ble Commission. The consumer categories whose consumption has been higher than the approved consumption include Commercial, Agriculture, Public Water Works Industrial HT and & Railway traction. Consumption in other categories has been marginally different than that approved by the Commission.

Table 1 : MGVCL's Category wise Actual Sales

(MUs)

	Sales (MUs)			
S.No.	Particulars	Approved as per MYT order for FY 2008-09	Revised Estimates submitted by MGVCL for FY 2008- 09	
Α	LT Consumers			
1	Residential	1329	1304	
2	Commercial	452	465	
3	Industrial LT	467	457	
4	Public Water Works	125	135	
5	Agriculture	761	817	
6	Public Lighting	56	57	
	LT Total (A)	3190	3235	
В	HT Consumers			
7	Industrial HT	1823	1826	
8	Railway Traction	315	328	
	HT Total (B)	2138	2154	

Gujarat Electricity Regulatory Commission

Page 29



Grand Total (A +	B) 533	28 5389	
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The Commission has considered the projected sales for FY 2008-09 for the annual performance review.

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

Since, Sale is an uncontrollable parameter as per the MYT regulation, the sales as per actual are approved by the Commission as shown below:

Table 2: Sales approved by Commission

(MUs)

		Sales (MUs)			
S.No.	Particulars	Approved as per MYT order for FY 2008-09	Revised Estimates submitted by MGVCL for FY 2008-09	Considered for APR	
Α	LT Consumers				
1	Residential	1329	1304	1304	
2	Commercial	452	465	465	
3	Industrial LT	467	457	457	
4	Public Water Works	125	135	135	
5	Agriculture	761	817	817	
6	Public Lighting	56	57	57	
	LT Total (A)	3190	3235	3235	
В	HT Consumers				
7	Industrial HT	1823	1826	1826	
8	Railway Traction	315	328	328	
	HT Total (B)	2138	2154	2154	
	Grand Total (A + B)	5328	5389	5389	

#### 3.2. Distribution Loss

#### Petitioner's submission

In the APR petition, petitioner has submitted that it has been able to bring down the distribution loss to 14.52% from the MYT Order approved loss level of 15%.

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

Gujarat Electricity Regulatory Commission

Page 30



The Commission, in its MYT order, had approved a distribution loss of 15% for FY 2008-09 considering the actual loss achieved in FY 2007-08 of 15.86%. The, petitioner has therefore been able to reduce the loss to a greater extent than that of the level approved by the Commission in its MYT order.

Table 3: MGVCL - Distribution Losses approved by Commission

Particulars	Approved as per MYT order for FY 2008-09	Revised Estimates submitted by MGVCL for FY 2008-09	Considered for sharing of Gains and Loss
FY 2008-09	15.00%	14.52%	14.52%

At the time of MYT Order, the Commission had approved a distribution loss of 15% for FY 2008-09. Further, since distribution loss is controllable in nature, the MYT approved distribution loss is considered for gains / loss calculation. Further, the gains / loss have been shared between the petitioner and consumers in accordance with Regulation no.10 & 11 of MYT Regulation 2007, as explained later in this Section.

#### 3.3. Energy Balance

#### Petitioner's submission

MGVCL has submitted the energy requirement for FY 2008-09 based on actual sales, distribution losses and transmission losses on account of the GETCO and PGCIL transmission systems and accordingly calculated energy requirement.

Table 4: Energy Requirement estimated by MGVCL

S.No.	Particulars	Unit	Approved as per MYT order for FY 2008-09	Revised Estimates submitted by MGVCL for FY 2008-09
1	Energy Sales	MUs	5328	5389
2	Distribution Losses	MUs	940	915
	Distribution Losses	%	15.00	14.52
3	Energy Requirement	MUs	6268	6304
4	Transmission Losses	MUs	267	283
4		%	4.09	4.30
5	Total Energy to be input to Transmission System	MUs	6535	6587
6	Pooled Losses in PGCIL System	MUs	134	91
7	Total Energy	MUs	6669	6678



Requirement				ı
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#### **Commission's Analysis**

The Commission has computed the energy requirement for MGVCL for FY 2008-09, by considering the approved transmission losses of GETCO for FY 2008-09, and the pooled loss (Regional Power Loss) as determined by RLDC/WRPC. It must be noted here that for the purpose of energy balance the Commission has considered the actual energy requirement of FY 2008-09 and the impact of the distribution losses is given by sharing of gains / loss as explained in the previous section of Distribution loss.

Table 5: Energy Requirement approved by Commission

S.No.	Particulars	<u>Unit</u>	Approved as per MYT order for FY 2008-09	Revised Estimates submitted by MGVCL for FY 2008-09	Considered for APR
1	Energy Sales	MUs	5328	5389	5389
2	2 Distribution Losses	MUs	940	915	915
	Distribution Losses	%	15.00	14.52	14.52
3	Energy Requirement	MUs	6268	6304	6304
4	Transmission Losses	MUs	267	283	283
4		%	4.09	4.30	4.30
5	Total Energy to be input to Transmission System	MUs	6535	6587	6587
6	Pooled Losses in PGCIL System	MUs	134	91	91
7	Total Energy Requirement	MUs	6669	6678	6678

#### 3.4. Power Purchase Cost

#### Petitioner's submission

The total power purchase cost for the MGVCL consists of the basic power purchase cost, transmission charges payable to GETCO & PGCIL and the Discom's share of GUVNL cost & E-Urja charges. The power purchase cost submitted by the petitioner is based on actuals as per the provisional accounts.



Table 6: Power Purchase Cost FY 2008-09

(Rs. In Lakhs)

Particulars	Approved as per MYT order for FY 2008-09	Revised Estimates submitted by MGVCL for FY 2008-09
Total Power Purchase Cost	179385	225368

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

The Commission, in its MYT Order dated Jan 17, 2009 (Case No. 948 of 2008) had allowed total power purchase expenses of Rs. 179385 Lakhs for FY 2008-09, including transmission charges payable to PGCIL & GETCO, GUVNL Cost (including E-Urja Cost) as shown in the table below.

Table 7: Break up of power purchase cost as approved in MYT order

(Rs. In Lakhs)

Particulars	Approved as per MYT order for FY 2008-09
Power Purchase Cost through Merit Order	165912
Transmission Costs to PGCIL & GETCO &SLDC Fees	12153
GUVNL	603
E-Urja Cost	717
Total Power Purchase Cost	179385

Commission has observed that the petitioner has not submitted any break up of the power purchase cost. Accordingly, Commission asked the petitioner (vide its query dated November 3, 2009) to submit the actual power purchase cost classified into various sub head as approved in the MYT Order. Consequently, the petitioner has provided the break up of power purchase cost (November 4 2009) as shown below:

Table 8: Break up of power purchase cost of FY 2008-09 submitted by MGVCL

(Rs. in Lakhs)

Power Purchase Cost	Power purchase cost as per Provisional Accounts		
	Units (MU)	Cost (Rs. Lakhs)	
GSECL	1812	65432	
IPP	1532	75487	
Central	3042	60877	
Others	292	10140	
Power Purchase Cost		211936	
Transmission Cost		2890	

Gujarat Electricity Regulatory Commission

Page 33



Power Purchase Cost	Power purchase cost as per Provisional Accounts		
	Units (MU) Cost (Rs. Lak		
PGCIL Cost		10503	
Wheeling Charges		27	
Total Power Purchase Cost	6678	225356	

The Commission verified the break up of cost submitted by the petitioner with the provisional accounts of FY 2008-09 and approved the same for FY 2008-09. For the purpose of APR for FY 2008-09, the Commission has considered the same amount since power purchase cost is an uncontrollable expense.

Further, the Commission has verified GUVNL Costs from the provisional accounts of GUVNL. It is observed by the Commission that GUVNL has generated a net surplus of Rs 501 Lakhs for FY 2008-09. The same has been shared with MGVCL in the ratio of the Units purchased during FY 2008-09 as shown in the table below:

Table 9: Sharing of GUVNL surplus among Discoms

GUVNL Cost Allocation	PGVCL	UGVCL	MGVCL	DGVCL	Total
MUs Purchased	19230	13524	6678	10330	49761
% of Allocation	38.64%	27.18%	13.42%	20.76%	100%
GUVNL Surplus Allocated to Discoms (Rs Lakhs)	(194)	(136)	(67)	(104)	(501)

The net power purchase cost approved for FY 2008-09 is shown below:

Table 10: Approved Power Purchase Cost FY 2008-09

(Rs.in Lakhs)

Particulars	Approved as per MYT order for FY 2008-09	Revised Estimates as per provisional accounts for FY 2008-09	Considered for APR
Power Purchase Cost through Merit Order	165912	211936	211936
Transmission Costs to PGCIL & GETCO	12153	13420	13420
E-Urja Cost	603	-	-
GUVNL cost	717	-	(67)
Total Power Purchase Cost	179385	225356	225289

#### 3.5. O&M Expenditure

Operations and Maintenance (O&M) expenditure comprises employee related expenditure, Administrative and General (A&G) expenditure, and Repair and Maintenance (R&M) expenditure. The petitioner's submissions on each of these expenditure heads, and the Commission's view on the same are given below:

#### 3.5.1. Employee Expenses

Employee expenses comprise salaries, dearness allowance, bonus, terminal benefits in the form of pension & gratuity, leave encashment and staff welfare expenses.

#### Petitioner's submission

MGVCL has submitted that during FY 2008-09, it has incurred Rs. 20,289 Lakhs towards employee expenses.

Table 11: Employee Cost estimated by MGVCL

(Rs. Lakhs)

Particulars Particulars	Approved as per MYT order for FY 2008-09	Revised Estimates submitted by MGVCL for FY 2008-09
Employee Cost excluding treatment of Sixth Pay		
Commission	17840	14138
60% of component of Sixth Pay Commission for FY		
2007-08 approved for payment in 2008-09	3847	2193
Employee Cost on account of provisions for Sixth pay		
commission for FY 2008-09	0	3959
Total Employee Cost Considered	21687	20289

The petitioner has submitted that the employee expenditure being incurred by the company is purely on the basis of the guidelines issued by competent authorities like the state government. Hence, the entire expenditure incurred by the company is a legitimate expenditure and any variation is beyond its control. Further, the 6% hike approved by the Commission in the previous MYT order does not compensate the company on account of increases due to salary related aspects including hikes, DA increase/mergers, etc. The petitioner has further provided Rs 3959 lakh on account of provision for Sixth pay commission for FY 2008-09.

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



Commission in its MYT Order dated Jan 17, 2009 approved Rs.21687 Lakhs as the employee cost of FY 2008-09 which included a 6% increase over the cost of FY 2007-08 without making provision for payment of arrears of Sixth Pay Commission.

At the time of MYT order, the Commission has calculated the employee cost as follows: as per annual accounts the employee cost for FY 2007-08 was Rs. 16830 Lakhs. For the estimation of employee cost of FY 2008-09, the Commission assumed that the payment of entire arrears may not materialize during FY 2008-09. Hence it directed to provide 60% of the amount during FY 2008-09 (Rs. 3847 Lakhs) and balance 40% (Rs. 2565 Lakhs) during FY 2009-10. The summary of the employee expenses as approved by the Commission is presented in the table below.

Table 12: Employee Cost as per Order dated Jan 17, 2009

(Rs in Lakhs)

Financial Year	Approved	Calculations	
2008-09	21687	(16830x1.06= 17840+3847)	
2009-10	21475	(17840X1.06=18910 +2565)	
2010-11	20046	(18910X1.06)	

The Commission, during verification of the employee expenses from the annual/provisional accounts of FY 2008-09, observed that the total employee expenses as per P&L Account are Rs 18755 Lakhs. Further, capitalization of employee expenses as per schedule 24 (i.e. other expenses capitalized) is Rs 4580 Lakhs. Thus, net actual employee expenses after deducting the employee expenses which are to be capitalized for FY 2008-09, are Rs 14,174 Lakhs.

The summary of the employee expenses considered by the Commission for the purpose of APR has been shown in the following Table:

Table 13: Employee expenses approved by Commission

(Rs. Lakhs)

Particulars	Approved as per MYT order for FY 2008-09	Revised Estimates submitted by MGVCL for FY 2008-09	Considered for APR
Total Employee Cost Considered	21687	20289	14174



The difference between the approved employee expenses and the actual employee expenses allowed for FY 2008-09 is considered as controllable (however, the impact of Sixth Pay Commission, is considered as uncontrollable) and the same has been passed through in accordance with Regulation no.10 & 11 of MYT Regulation 2007, as explained later in this Section.

#### 3.5.2. R&M Expenses

Repairs and Maintenance Expenses include expenses towards the day-to-day upkeep of the distribution network of the company and form an integral part of the company's efforts towards reliable and quality power supply as also in the reduction of losses in the system

#### Petitioner's submission

MGVCL has submitted that during FY 2008-09 the actual expenditure incurred has been Rs 3917 lakh i.e 3% less than the amount as approved by the Commission.

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

Commission in its MYT Order dated Jan 17, 2009 pointed out that the major part of the expenses is R&M of lines, cable Network etc and the balance is on maintenance of plant and machinery etc and it is a probability that the major part of the expenditure might be one time expenditure. Hence, in view of the actual expenditure of Rs. 3846 Lakhs during FY 2007-08, the Commission approved Rs 4038 Lakhs towards the R&M expenditure at 5% annual increase (3846x1.05) during the control period.

The Commission observed that the petitioner has stated that for FY 2008-09 the actual expenditure has been Rs 3917 i.e 3% lower than the approved amount. The Commission further analyzed the provisional accounts and noted that as per the accounts the expenditure incurred towards R & M is Rs 3298 Lakhs only. Commission's analysis of the R & M expenses for FY 2008-09 is given in the table below.

Table 14: R&M expenses approved by Commission

(Rs in Lakhs)

Particulars	Approved as per MYT order for FY	Revised Estimates	Considered for APR
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Gujarat Electricity Regulatory Commission



	2008-09	submitted by MGVCL for FY 2008-09	
Repair & Maintenance Costs	4038	3917	3298

The Commission has considered the difference between the allowed R&M expenses and approved R&M expenses under the sharing of gains and losses due to controllable factors and has allocated it between the petitioner and consumers in accordance with Regulation no. 10 & 11 of MYT Regulation 2007, as explained later in this Section.

#### 3.5.3. Administrative and General (A&G) Expenses

A & G expenses mainly comprise of rents, telephone and other communication expenses, professional charges, conveyance and travelling allowances, other debits.

#### Petitioner's submission

MGVCL has submitted that during FY 2008-09, MGVCL has incurred Rs. 3474 Lakhs towards A&G expense.

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

Commission in its MYT Order dated Jan 17, 2009 approved Rs 3420 Lakhs considering 6% increase over the actual A&G expenses of Rs 3219 Lakhs for FY 2007-08. The actual A&G expense as per provisional account as against the approved A&G expense is Rs 3411 Lakhs The petitioner has not provided any specific reason which led to this increase in A&G expense.

Commission during verification of the A&G expenses from the provisional accounts of FY 2008-09 observed that the total A&G expenses as per P&L Account is Rs 3411 Lakhs. Further, capitalization of A&G expenses as per schedule 24 (i.e. Other expenses capitalized) is Rs 832 Lakhs. Thus, net actual A&G expenses after deducting the capitalized expenses for FY 2008-09 are Rs 2579 Lakhs.

Commission's analysis of the A & G expenses is given below:

Gujarat Electricity Regulatory Commission

Table 15: A&G expenses approved by Commission

(Rs in Lakhs)

Particulars	Approved as per	Revised	Considered



	MYT order for FY 2008-09	Estimates submitted by MGVCL for FY 2008-09	for APR
Administration & General Charges	3420	3474	2579

The Commission has considered the difference between the allowed A&G expenses and approved A&G expenses under the sharing of gains and losses due to controllable factors and has allocated it between the petitioner and consumers in accordance with Regulation no. 10 & 11 of MYT Regulation 2007, as explained later in this Section.

#### Summing up

The Commission has considered following O & M expenses for the APR.

Table 16: Approved O& M Expenses by Commission

(Rs in Lakhs)

Particulars	Approved as per MYT order for FY 2008-09	Revised Estimates submitted by MGVCL for FY 2008-09	Considered for APR
Employee Expenses	21687	20289	14174
Repair & Maintenance Costs	4038	3917	3298
Administration & General Charges	3420	3474	2579
Total O&M Expenses	29145	27680	20051

#### 3.6. Capital Expenditure and Capitalization

#### Petitioner's submission

The petitioner has submitted that it has incurred total capital expenditure of Rs. 23547 Lakhs during FY 2008-09 as against the capital expenditure of Rs. 44763 Lakhs approved by the Commission. Scheme-wise capital expenditure incurred against that approved by the Commission is as shown below:

Table 17: Capital Expenditure as submitted by MGVCL

(Rs in Lakhs)



Sr. No.	Schemes	Approved as per MYT order for FY 2008-09	Revised Estimates submitted by MGVCL for FY 2008- 09
Α	Distribution Schemes		
	Normal Development Scheme	5542	3442
	System Improvement Scheme	850	1142
	Electrification of hutments/harijan basti	2257	2024
	Kutir Jyoti Scheme	1120	976
	Sagarkhedu Scheme	0	205
	Scheme of Meters	4400	3736
	Total	14169	11525
В	Rural Electrification Schemes		
	TASP( Wells&Petapara)	4263	4249
	Special Component Plan	214	40
	Normal RE Works	260	354
	Total	4737	4643
С	Others		
	Energy Conservation	75	25
	Total	75	25
D	Non Plan Schemes		
	RE Non Plan (Tatkal)	0	9
	Other Wells		146
	APDRP	480	63
	RGGVY	4785	2493
	DRUM	404	328
	Total	5669	3039
Е	Other New Schemes		
	Automatic PF control panels	1425	122
	Aerial Bunch Conductors	1200	269
	HVDS in selected sub-division	6100	956
	Hand Held Machines		13
	Automatic Meter Reading	1440	70
	GIS in cities other than Baroda	225	52
	Automation and Computerisation	280	77
	Underground Cables	500	431
	Replacement of Conductor	280	214
	Misc. Civil work	450	563
	Other New Schemes	1942	727
	Total	13842	3494
F	Other Schemes		
	Urban Development	300	



Sr. No.	Schemes	Approved as per MYT order for FY 2008-09	Revised Estimates submitted by MGVCL for FY 2008- 09
	(Govt. Schools / Pre-paid Meters)		0
	New Gujarat Pattern	880	821
	Total	1180	821
G	Golden Goal Scheme		
	Pending Agriculture Connections*	5091	0
I	Capital Expenditure Total	44763	23547

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

The Commission observed that as against total capital expenditure of Rs 44763 Lakhs approved in the MYT Order dated Jan 17, 2009, actual capital expenditure during FY 2008-09 amounted to Rs 23547 Lakhs only

The Commission observes that against the approved capital expenditure of Rs 5542 Lakhs under Normal Development Scheme, the actual capital expenditure is Rs 3442 Lakhs. Further, for the distribution scheme of meters the approved expenditure was Rs 4400 Lakhs against which the actual expenditure incurred was Rs 3736 Lakhs. The Commission has further observed that under the non-plan schemes, the capital expenditure approved for RGGVY was Rs 4785 Lakhs as against the actual expenditure incurred was Rs 2493 Lakhs. Further, for the other new schemes, the total capital expenditure approved by the Commission was Rs 13842 Lakhs, as against which the actual capital expenditure incurred was Rs 3494 Lakhs. The petitioner has also not incurred any capital expenditure under Pending Agriculture Connections.

Further, the Commission has analyzed the capital expenditure from the provisional accounts submitted by the petitioner and noted that the amount capitalized is Rs. 28761 Lakhs. Accordingly, the Commission has considered the capitalisation of Rs. 28761 Lakhs for FY 2008-09 for the purpose of APR and relevant gain / loss sharing. Further, debt equity ratio considered (70% debt; 30% equity) for funding the Capital expenditure is as proposed by the petitioner.

Table 18: Capitalization approved by Commission for FY 2008-09

(Rs Lakhs)

Particulars	Approved as per MYT order for FY 2008-09	Revised Estimates submitted by MGVCL for FY	Considered for APR
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		2008-09	
Capital Expenditure	44763	23547	
Capitalization			28761
Less : Consumer Contribution	5201	3119	3119
Grants	13730	10493	10493
Balance CAPEX	25832	9935	15149
Debt	17064	6954	10604
Equity	8768	2980	4545

#### 3.7. Depreciation

#### Petitioner's submission

The petitioner has submitted that the Opening Gross Block of Fixed Assets for FY 2008-09 has been revised from Rs. 141,904 Lakhs to Rs. 139,152 Lakhs. This is because the petitioner has achieved lesser capitalisation of assets in FY 2007-08 as against that approved by the Commission, resulting in the lower opening balance of the Gross Fixed Assets in FY 2008-09.

MGVCL has calculated depreciation based on the average rate of depreciation by applying rates specified by CERC (3.61%). Further, in FY 2008-09, addition to the fixed assets as per provisional accounts is less than the addition approved by the Commission, therefore the amount of depreciation for FY 2008-09 is less than approved by the Commission.

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

During verification of depreciation with the provisional accounts of FY 2008-09, the Commission observed that the depreciation claimed by the petitioner and actual depreciation as per the provisional accounts do not tally. The petitioner clarified that depreciation for the regulatory purpose has been calculated taking into consideration the opening balance of assets in the beginning of the year and the provisional capitalisation whereas depreciation in the books of account has been calculated as per the rates prescribed under the Companies Act.

The Commission has considered the depreciation for FY 2008-09 as prescribed under the Terms and Condition of Tariff as shown below in table;

Table 19: Depreciation Approved by Commission for FY 2008-09

(Rs Lakhs)

Gujarat Electricity Regulatory Commission



Particulars	Approved as per MYT order for FY 2008-09	Revised Estimates submitted by MGVCL for FY 2008-09	Considered for APR
Gross Block in Beginning of the year	141904	139152	139152
Additions during the Year (Net)	44763	23547	28761
Depreciation for the Year	5923	5448	5543
Average Rate of Depreciation	3.61%	3.61%	3.61%

# 3.8. Interest Expenses

#### Petitioner's submission

The total capital expenditure during FY 2008-09 submitted by MGVCL amounts to Rs 23547 Lakhs. The same is funded by way of contributions from consumers (Rs 3119 Lakhs), grant from Government (Rs 10493 Lakhs), additional equity capital at 30% (Rs 2980 Lakhs) and debt component at 70% (Rs 6954 Lakhs) as shown in the table below:

Table 20: Funding of Capital Expenditure as submitted by Petitioner

(Rs Lakhs)

Sr. No.	Particulars	Approved as per MYT order for FY 2008-09	Revised Estimates submitted by MGVCL for FY 2008-09
1	Capital Expenditure	44763	23547
2	Less : Consumer Contribution	5201	3119
3	Grants	13730	10493
4	Balance CAPEX	25832	9935
5	Debt	17064	6954
6	Equity	8768	2980

The petitioner has submitted that for estimation of Interest on Loans in FY 2008-09, it has considered closing balance of loans as in the audited Balance Sheet of FY 2007-08 as the basis. The opening loan for FY 2008-09 amounts to Rs. 56202 Lakhs as against Rs.55323 Lakhs approved by the Commission, thus there is a variation of approx. Rs. 879 Lakhs. The difference is due to lower capital expenditure as mentioned in the paragraph above. The repayment has been considered based on the actual repayments done during the year.

The petitioner has submitted that it has taken the Interest on Security Deposit and Guarantee Charges based on the provisional accounts. The petitioner has submitted

Gujarat Electricity Regulatory Commission



that it has been allocated (as a part of sector restructuring) some loans which have been guaranteed by Govt. of Gujarat and where guarantee charges are required to be paid.

The total Interest & Financial charges for FY 2008-09 computed by MGVCL against approved by the Commission is as shown below:

Table 21: Interest and Finance Charges as submitted by MGVCL for FY 2008-09

(Rs Lakhs)

Sr. No.	Particulars	Approved as per MYT order for FY 2008-09	Revised Estimates submitted by MGVCL for FY 2008- 09
1	Opening Loans	55323	56202
2	Loan Additions during the Year	11383	18422
3	Repayment during the Year	5532	18701
4	Closing Loans	61174	55923
5	Average Loans	58249	56063
6	Interest on Loan	5825	5378
7	Interest in Security Deposit	1133	1571
7	Guarantee Charges	158	123
8	Total Interest & Financial Charges	7116	7072

Petitioner has submitted that the Interest amount of Rs 7072 Lakhs includes Interest on working capital which is approx. Rs 2282 Lakhs which needs to be deducted from the same to avoid the double counting. Accordingly the interest and finance charges being claimed by the petitioner for FY 2008-09 is Rs. 4790 Lakhs.

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

Commission during verification of the Interest expenses from the provisional accounts of FY 2008-09 observed that the total Interest expenses as per P&L Account is Rs 7263 Lakhs. Capitalization of Interest expenses as per schedule 24 (i.e. Other expenses capitalized) is Rs 21 Lakhs and Interest on working capital (cash credit) for FY 2008-09 is Rs 3032 Lakhs. Since the Commission has separately approved Interest on working capital, the same has been reduced from the interest cost as per the provisional accounts.

Since interest on loan capital will have to be provided corresponding to the assets put to use (capitalised) and not on the capital expenditure (Regulation No. 66), interest



on capital expenditure will have to be treated as interest during construction (IDC) and the same should be capitalized in accordance with regulation of GERC Terms and Conditions of Tariff for the purpose of allowable capital cost of the project scheme; whereas, the interest expenditure towards such capitalized schemes after the date of capitalization will have to be treated as interest expenditure chargeable to revenue account. Accordingly, the Commission has revised the loan to be considered for the purpose of calculating Interest and Finance Charges.

Table 22: Loans considered for Interest and Finance Charges

(Rs Lakhs)

Particulars	Approved as per MYT order for FY 2008-09	Revised Estimates submitted by MGVCL for FY 2008-09	Considered for APR
Opening Loans	55323	56202	56202
Loan Additions during the Year	11383	18422	10604
Repayment during the Year	5532	18701	18701
Closing Loans	61174	55923	48105
Average Loans	58249	56063	52154

In order to calculate the Interest and Finance Charges the Commission has recomputed the net interest expenses after deducting Interest on Working Capital, Interest capitalized during FY 2008-09 and Guarantee Charges (which is considered separately) as shown below:

Table 23: Interest and Finance Charges computed for FY 2008-09

(Rs Lakhs)

SI. No	Particulars	FY 2008-09
1	Interest as per Provisional Accounts	7263
	Less:	
2	Guarantee Charges	124
3	Interest in Security Deposit	1683
4	Actual Interest on Working Capital	3032
5	Interest Capitalized	21
	Net Interest on Loans	2403

The Commission has analysed from the Provisional Accounts that there is no interest on security deposit which is paid for FY 2008-09 hence it has been considered as nil. Total Interest and Finance Charges after considering net Interest on loan, Interest on Security Deposit and Guarantee Charges is shown below:

Gujarat Electricity Regulatory Commission



Table 24: Interest and Finance Charges approved for FY 2008-09

(Rs Lakhs)

Particulars	Approved as per MYT order for FY 2008-09	Revised Estimates submitted by MGVCL for FY 2008-09	Considered for APR
Opening Loans	55323	56202	56202
Loan Additions during the Year	11383	18422	10604
Repayment during the Year	5532	18701	18701
Closing Loans	61174	55923	48105
Average Loans	58249	56063	52154
Interest on Loan	5825	5378	2403
Interest in Security Deposit	1133	1571	1683
Guarantee Charges	158	123	124
Total Interest & Financial Charges	7116	7072	4210

#### 3.9. Interest on Working Capital

#### Petitioner's submission

The petitioner has submitted interest on working capital for FY 2008-09 as Rs. 2623 Lakhs based on norms specified in GERC Terms and Conditions of Tariff Regulations. However, instead of considering revenues equivalent to two months, only one month's revenue has been considered for estimating the total working capital during the financial year. Interest on working capital is computed at 10.25% as approved by the Commission.

Table 25: Interest on Working Capital estimated by MGVCL for FY 2008-09

(Rs Lakhs)

Particulars	Approved as per MYT order for FY 2008-09	Revised Estimates submitted by MGVCL for FY 2008-09
Interest on Working Capital	2246	2623

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

During analysis of the calculation of Interest on Working Capital it was observed that the petitioner has made an error in calculating the Interest. Instead of taking 1/12th of the revenue, it has taken 1/12th of Aggregate Revenue Requirement. Commission while calculating the interest on working capital has corrected this error and has accepted one month's revenue as proposed by the petitioner.



Table 26: Interest on Working Capital approved for FY 2008-09

(Rs in Lakhs)

Particulars	Approved as per MYT order for FY 2008-09	Revised Estimates submitted by MGVCL for FY 2008-09	Considered for APR
O & M expenses	2429	2307	1671
Maintenance Spares	892	1077	1077
Receivables	18596	22207	20181
Total Working Capital	21917	25591	22999
Rate of Interest on Working Capital	10.25%	10.25%	10.25%
Interest on Working Capital	2246	2623	2350

# 3.10. Other Expenses

In addition to the above mentioned expenses, petitioner has included certain other expenses for the purpose of approval in the petition which are shown in the table below.

Table 27: Other Expenses estimated by as MGVCL

(Rs Lakhs)

Particulars	Approved as per MYT order for FY 2008-09	Revised Estimates submitted by MGVCL for FY 2008-09
Other Debits	113	1044
Extraordinary Items	4	3
Provision for Bad Debts	221	242
Net Prior Period Expenses / (Income)	0	(101)
Other Expenses Capitalized	(4259)	(4074)
Total Other Costs	(3921)	(2886)

#### a. Other Debits:

Other Debits comprised 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 & Gov't Bodies etc., deferred revenue expenses written off etc. The petitioner has claimed an amount of Rs 1044 Lakhs as expenditure incurred towards other debits for FY 2008-09.

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

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For FY 2008-09 as per the provisional accounts, the expenditure incurred on account of other debits excluding bad debts was Rs 936 Lakhs as against the approved amount of Rs 113 Lakhs. The Commission has noted that the petitioner has not provided any reason or justification for the increase in the expenditure towards bad debits. Therein the Commission has not permitted the increases in bad debits and approves the amount as per the MYT order.

#### **b. Extraordinary Items:**

#### Petitioner's submission

Generally this includes expenses incurred due to Flood Fire, Cyclone, earth quake and other natural calamities. The petitioner has claimed extra ordinary item expenses at Rs 3 Lakhs for FY 2008-09.

#### Commission's Analysis of Extraordinary Items

For FY 2008-09, Rs 4 Lakhs was approved by the Commission for expenses towards extraordinary items. The Commission has also reviewed the provisional accounts and has noted that no expenditure has been incurred by the petitioner during FY 2008-09 towards extraordinary items. The Commission has therefore not considered any amount of expenditure towards extraordinary items.

#### c. Provision for Bad Debts

#### Petitioner's submission

For FY 2008-09, MGVCL has provided for writing off of Rs 242 Lakhs towards bad debts. Since revenue for FY 2008-09 is Rs 246,868 Lakhs and corresponding bad debts calculated at 0.10% of revenue is computed as Rs 24687 Lakhs, MGVCL has revised the provision to Rs 242 Lakhs.

#### Commission's Analysis

The Commission in its MYT Order approved Rs 221 Lakhs for FY 2008-09 as provision for bad debts calculated at 0.10% of the estimated revenue of FY 2008-09. Commission during verification of provision with provisional accounts of FY 2008-09 observed that the provision of bad debts as per P&L Account is Rs 148 Lakhs. Hence Commission has considered Rs 148 Lakhs as provision towards bad debts for FY 2008-09.

# d. Net prior Period Expenses Petitioner's Submission



These expenses are pertaining to earlier accounting years, which are paid during the year but no provision has been made in earlier years. The petitioner has submitted Rs 101 Lakhs as income earned as net prior period income for FY 2008-09.

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

The Commission has analyzed the provisional accounts and has noted that the petitioner has incurred expenses of Rs 62 Lakhs as net period expenses. The Commission had however noted that for FY 2008-09, no mount for Net prior period expenses was estimated by the petitioner in the MYT. The Commission has therefore not considered any expense incurred under net period expenses for FY 2008-09.

# e. Other Expenses Capitalized

#### Petitioner's Submission

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

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

As covered in the sections above for FY 2008-09 all the expenses which are capitalized have been deducted from respective expenses and hence other expenses capitalized are not considered here to avoid duplication.

#### Summing up

The total other cost for FY 2008-09 considered for APR is shown in the table below:

Table 28: Other Cost for FY 2008-09

(Rs in Lakhs)

Particulars	Approved as per MYT order for FY 2008-09	Revised Estimates submitted by MGVCL for FY 2008-09	Considered for APR
Other Debits	113	1044	113
Extraordinary Items	4	3	0
Provision for Bad Debts	221	242	148
Net Prior Period Expenses / (Income)	0	(101)	0
Other Expenses Capitalized	(4259)	(4074)	0
Total Other Costs	(3921)	(2886)	261



#### 3.11. Return on Equity

#### Petitioner's submission

MGVCL has submitted that it has computed the Return on Equity considering a rate of return at 14% based upon the opening balance of equity and additions during the year. The return on equity for FY 2008-09 as computed by MGVCL is shown below:

Table 29: ROE estimated by MGVCL

(Rs Lakhs)

Particulars	Approved as per MYT order for FY 2008-09	Revised Estimates submitted by MGVCL for FY 2008-09
Return on Equity	6103	5756

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

The Commission has observed that against the approved RoE by the Commission, the petitioner has claimed RoE of Rs 5756 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' submission. Balance capital expenditure is assumed to be funded in the ratio as proposed by petitioner (70%:30%).

The Commission's analysis of the RoE is as given below:

Table 30: Capitalization considered during FY 2008-09

(Rs Lakhs)

Particulars	Approved as per MYT order for FY 2008-09	Revised Estimates submitted by MGVCL for FY 2008-09	Considered for APR
Capital Expenditure	44763	23547	
Capitalization			28761
Less : Consumer Contribution	5201	3119	3119
Grants	13730	10493	10493
Balance CAPEX	25832	9935	15149

Gujarat Electricity Regulatory Commission



Particulars	Approved as per MYT order for FY 2008-09	Revised Estimates submitted by MGVCL for FY 2008-09	Considered for APR
Debt	17064	6954	10604
Equity	8768	2980	4545

Table 31: ROE provisionally approved by Commission for FY 2008-09

(Rs in Lakhs)

Particulars	Approved as per MYT order for FY 2008-09	Revised Estimates submitted by MGVCL for FY 2008-09	Considered for APR
Opening Equity Capital	39717	39625	39625
Equity Additions during the Year	7750	2980	4545
Closing Equity	47467	42606	44170
Average Equity	43592	41115	41897
Rate of Return on the Equity	14%	14%	14%
Return on Equity	6103	5756	5866

#### 3.12. Taxes

#### Petitioner's submission

The tax claimed by the petitioner in FY 2008-09 based on the provisional Annual Accounts is Rs. 174 Lakhs against the amount of Rs.108 Lakhs approved by the Commission.

Table 32: Tax estimated by MGVCL

(Rs in Lakhs)

Particulars	Approved as per MYT order for FY 2008-09	Revised Estimates submitted by MGVCL for FY 2008-09
Provision for Tax / Tax Paid	108	174

# **Commission's Analysis**

Since taxes are pass through once actually paid, the Commission has asked the petitioner to submit tax *challans* for the verification of the actual tax paid by petitioner in FY 2008-09. The same were submitted by the petitioner. Based on the income tax

Gujarat Electricity Regulatory Commission



challans submitted to GERC the actual tax paid by the petitioner for FY 2008-09 is Rs 58 Lakhs. The Commission has also reviewed the provisional accounts and has noted that for FY 2008-09, the tax expense incurred is Rs 144 Lakhs. However, the Commission would approve the tax amount as per the tax challans only and therefore approves Rs 58 Lakhs as expense towards taxes for FY 2008-09.

Table 33: Tax considered by Commission for FY 2008-09

(Rs in Lakhs)

Particulars	Approved as per MYT order for FY 2008-09	Revised Estimates submitted by MGVCL for FY 2008-09	Considered for APR
Provision for Tax / Tax Paid	108	174	58

#### 3.13. Non-Tariff Income

#### Petitioner's submission

The non-tariff income comprises of interest on loans and advances to employees / contractors, income from investments with banks, delayed payment surcharges from consumers etc. For FY 2008-09 the projected the non-tariff income submitted by MGVCL is Rs 2471 Lakhs.

Table 34: Non-Tariff Income estimated by MGVCL

(Rs in Lakhs)

Particulars	Approved as per MYT order for FY 2008-09	Revised Estimates submitted by MGVCL for FY 2008-09
Non-Tariff Income	2948	2471

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

Commission in its Order dated Jan 17, 2009 approved Rs 2948 Lakh as non-tariff income considering the actual of FY 2007-08 as base and applying 6% annual increase.

During verification of non-tariff income from the provisional accounts of FY 2008-09, the Commission observed that the non-tariff income as per P&L Account is Rs 3992 Lakhs. In view of this, the Commission has considered for APR, non-tariff income for FY 2008-09 at Rs 3992 Lakhs as shown in the Table:

Gujarat Electricity Regulatory Commission



Table 35: Non-Tariff Income considered by Commission for FY 2008-09

(Rs in Lakhs)

Particulars	Approved as per MYT order for FY 2008-09	Revised Estimates submitted by MGVCL for FY 2008-09	Considered for APR	
Non-Tariff Income	2948	2471	3992	

# 3.14. Aggregate Revenue Requirement for FY 2008-09

The table below summarizes Aggregate Revenue Requirement for FY 2008-09 for MGVCL in comparison with values considered for APR by the Commission.

Table 36: ARR for FY 2008-09

(Rs Lakhs)

Particulars	Approved as per MYT order for FY 2008-09	Revised Estimates submitted by MGVCL for FY 2008-09	Considered for APR
Cost of Power Purchase	179385	225368	225289
Operation & Maintenance Expenses	29145	27680	20051
Employee Cost	21687	20289	14174
Repair & Maintenance	4038	3917	3298
Administration & General Charges	3420	3474	2579
Depreciation	5923	5448	5543
Interest & Finance Charges	7116	4790	4210
Interest on Working Capital	2246	2623	2350
Other Debits	113	1044	113
Extraordinary Items	4	3	0
Provision for Bad Debts	221	242	148
Net Prior Period Expenses / (Income)	0	(101)	0
Other Expenses Capitalized	(4259)	(4074)	0



Sub-Total	219894	263023	257704
Oub-10tal			
Return on Equity	6103	5756	5866
Provision for Tax / Tax Paid	108	174	58
Total Expenditure	226105	268953	263627
Less: Non-Tariff Income	2948	2471	3992
Aggregate Revenue Requirement	223157	266483	259635

#### 3.15. Sharing of Gains & Losses

The Commission has categorized the various heads of expenditure as controllable and uncontrollable and computed the gains and losses for the controllable expenditure. The same has been shared with the consumers in accordance with the GERC MYT Regulations. The relevant provisions under the GERC MYT Tariff Regulations stipulating sharing of gains/losses due to controllable factors are reproduced below:

- "9.6.2 Some illustrative variations or expected variations in the performance of the applicant which may be attributed by the Commission to controllable factors include, but are not limited to, the following:
- (a) Variations in capital expenditure on account of time and/ or cost overruns / efficiencies in the implementation of a capital expenditure project not attributable to an approved change in scope of such project, change in statutory levies or force majeure events;
- (b) Variations in technical and commercial losses, including bad debts;



- (c) Variations in the number or mix of consumers or quantities of electricity supplied to consumers as specified in the first and second proviso to clause (b) of Regulation 9.6.1;
- (d) Variations in working capital requirements;
- (e) Variation in expenses like: (i) Operation & Maintenance expanses, (ii) Employee Cost, (iii) Admn. & General expenses, (iv) Interest & Finance Charges, (v) Return on Equity, Depreciation, (vi) Non-tariff income; However, expenses at (i), (ii) & (iii) are relatable to relevant Inflation Indices and/or any pay revision agreement in the economy and expenses like (iv) & (v) are relatable to applicable interest rates;
- (f) Failure to meet the standards specified in the Standards of Performance Regulations, except where exempted in accordance with those Regulations;
- (g) Variations in labour productivity;
- (h) Variations in any variable other than those stipulated by the Commission under Regulation 9.6 above.

. . . . . .

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



- (a) One-third of the amount of such loss may be passed on as an additional charge in tariffs over such period as may be specified in the Order of the Commission under Regulation 9.7; and
- (b) The balance amount of loss shall be absorbed by the Generating Company or Licensee."

The treatment (controllable or uncontrollable) proposed by MGVCL for variation in various heads of expenditure is given in the Table below:

Sr.	Particular	Category	Remarks
No.			
1.	Capital Expenditure	Controllable	<u>Uncontrollable</u> to extent of delay
			in funding.
2.	Operations and	Controllable	<u>Uncontrollable</u> to an extent of
	Maintenance		employee cost which is payable as
	Expenses		per the government notifications
			and is beyond control of the
			licensee, increase in dearness
			allowance and increments, force majeure, increase in R&M due to
			emergency repairs on account of
			aging of equipments and
			inflationary impact on the overall
			cost.
3.	Depreciation	Uncontrollable	It is charged on the basis of CERC
			rates as per GERC Regulations.
			Further, it is charged on the assets
			created and takes care of the
			repayment obligations of the
			company. Hence, the depreciation
			due to the company based on the
			accounting standards or regulatory
			norms should be completely
			allowable and any variation should be treated as uncontrollable
4.	Interest on Loan &	Controllable	Uncontrollable to the extent
4.	Finance Charges	Contionable	variation in the applicable interest
	i ilalioo ollalgoo		rates.
5.	Interest on Working	Uncontrollable	It is computed on a normative



Sr. No.	Particular	Category	Remarks
	Capital		basis and is dependent on other components. It is also uncontrollable to the extent of changes in the applicable interest rates.
6.	Return on Equity	Controllable	As per GERC Regulations.
7.	Non-Tariff Income	Controllable	As per GERC Regulations.

However, the Commission has considered the various expenses for computing the sharing of gains/losses in accordance with the GERC MYT Regulations, as elaborated below:

#### Approach of Sharing of Gains and Losses

In order to calculate gains and losses the actual numbers as per provisional accounts (forth column) are compared from the numbers approved in MYT Order (second column). The deviation is further classified into Controllable and Uncontrollable factors based on the nature of the item.

Table 37: Provisional Sharing of Gains and Losses for FY 2008-09

(Rs Lakhs)

Particulars	Approved as per MYT order for FY 2008- 09	Considered for APR	Considered for Gains and Losses	Deviation	Gain/(Loss) due to Controllable Factors	Gain/(Loss) due to Uncontrollable Factors
Power Purchase Cost (Note 1)	179385	225289	225289	(45904)	1282	(47186)
O&M	29145	20051	20051	9094	9094	0
Employee Cost	21687	14174	14174	7513	7513	0
R&M Expenses	4038	3298	3298	740	740	0
A&G Expenses	3420	2579	2579	841	841	0
Depreciation	5923	5543	5543	380	0	380
Int. and Finance Charges	7116	4210	4210	2906	0	2906
Int. on Working Capital (Note 2)	2246	2350	3032	(682)	(682)	0
Other Debits	113	113	936	(823)	(823)	0



Extraordinary Items (Note 3)	4	0	0	4	0	4
Provision for Bad Debts	221	148	148	73	73	0
Net Prior Period Expenses	0	0	62	(62)	(62)	0
Return on Equity	6103	5866	5866	237	0	237
Provision for Tax / Tax Paid	108	58	58	50	0	50
Other Expenses Capitalized	(4259)	0	0	(4259)	0	(4259)
ARR	226105	263627	265194	(38985)	8882	(47867)
Non - Tariff Income	2948	3992	3992	(1044)	0	(1044)
Total ARR	223157	259635	261202	(37941)	8882	(46823)

Note 1: Sharing of gains / losses on Distribution Losses

MGVCL's actual distribution loss for FY 2008-09 is 14.52% as against the approved loss level of 15 %. The Commission has computed the efficiency loss on this account as under:

Table 38: Provisional Gains and Losses for Distribution Losses

(Rs Lakhs)

S.No.	Particulars	Unit	FY 2008-09 (With approved Distribution Losses)	FY 2008-09 (With actual Distribution Losses)
1	Energy Sales	MUs	5389	5389
2	Distribution Losses	MUs	951	915
		%	15.0%	14.5%
3	Energy Requirement	MUs	6340	6304
4	Transmission Losses	MUs	285	283
		%	4.30%	4.30%
5	Total Energy to be input to Transmission System	MUs	6625	6587
6	Pooled Losses in PGCIL System	MUs	91	91
7	Total Energy Requirement	MUs	6716	6678
8	Saving / (Excess Purchase) due to Distribution Losses	MUs		38
9	Average Power Purchase Cost	Rs./Unit		3



S.No.	Particulars	Unit	FY 2008-09 (With approved Distribution Losses)	FY 2008-09 (With actual Distribution Losses)
10	Gain/(Loss) on account of Distribution loss	Rs. Lacs		1282

#### Note 2: Sharing of gains / losses on Interest on Working Capital

The actual interest on working capital incurred by the petitioner during FY 2008-09 as verified from Provisional Accounts is Rs 3032 Lakhs and normative interest on working capital works out to Rs.2350 Lakhs. The difference of Rs 682 Lakhs is shared as a controllable gain/loss.

Table 39: Provisional Gains and Losses for Interest on Working Capital

(Rs Lakhs)

Particulars	Approved as per MYT order for FY 2008-09	Actual as per Provisional Accounts	Considered for APR	Gain/(Loss) due to Controllable Factor
Interest on Working Capital	2246	2350	3032	(682)

#### Note 3: Sharing of gains / losses on extraordinary item

In case of other expenses, extraordinary item is considered as an uncontrollable item as it includes expenses on account of floods cyclones etc. Further, other expense capitalized is already considered in the O&M expenses thus it is taken as nil to avoid double counting.

#### 3.16. Revenue for FY 2008-09

During the FY 2008-09, the petitioner has stated that a revenue of Rs. 258736 Lakhs as against Rs. 215742 Lakhs as approved by the Commission. The Commission has verified the same from provisional accounts of FY 2008-09. Accordingly, total revenue as per provisional accounts is considered for the purpose of finding out the revenue gap for FY 2008-09 to be passed on to the consumers.

Table 40: Total Revenue considered for FY 2008-09

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Gujarat Electricity Regulatory Commission

(Rs in Lakhs)

Sr. No.	Particulars	Approved as per MYT order for FY 2008-09	Revised Estimates submitted by MGVCL for FY 2008- 09	Considered for APR
1	Revenue with Existing Tariff	198863	242227	242176
2	Other Income (Consumer related)	6777	4664	4692
3	Total Revenue before Subsidy (1 + 2)	205640	246891	246868
4	Agriculture Subsidy	7323	7601	7601
5	Other Subsidies	2779	4245	2924
6	Total Revenue After Subsidy (3 + 4 + 5)	215742	258736	257393

#### 3.17. Other Consumer related Income for FY 2008-09

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

For FY 2008-09 the actual/projected other consumer related income submitted by MGVCL is Rs 4664 Lakhs.

Table 41: Other Consumer Related Income estimated by MGVCL

(Rs Lakhs)

Particulars	Approved as per MYT order for FY 2008-09	Revised Estimates submitted by MGVCL for FY 2008-09
Other Consumer related Income	6777	4664

# **Commission's Analysis**

Gujarat Electricity Regulatory Commission

The Commission in its Order dated Jan 17, 2009 approved Rs 6777 Lakhs as other consumer related income which was based on the average increase in number of consumers.



During verification of other consumer related income from the provisional accounts of FY 2008-09, the Commission observed that the other income as per P&L Account is Rs 4692 Lakhs. Thus, the Commission has considered the other income for FY 2008-09 at Rs 4692 Lakhs as shown in the Table:

Table 42: Other Consumer Related Income considered for FY 2008-09

(Rs Lakhs)

Particulars	Approved as per MYT order for FY 2008-09	Revised Estimates submitted by MGVCL for FY 2008-09	Considered for APR
Other Consumer related Income	6777	4664	4692

#### 3.18. Subsidy for FY 2008-09

#### Petitioner's submission

For FY 2008-09 the actual/projected subsidy as submitted by MGVCL is Rs 11845 Lakhs

Table 43: Subsidy considered for FY 2008-09

(Rs in Lakhs)

Particulars Particulars	Approved as per MYT order for FY 2008-09	Revised Estimates submitted by MGVCL for FY 2008-09
Share of Agriculture Subsidy	7323	7601
Other Subsidies	2779	4245
Total	10102	11845

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

Commission in its Order dated Jan 17, 2009 approved Rs 10,102 Lakhs as subsidy for FY 2008-09. During verification from the provisional accounts of FY 2008-09 Commission observed that actual other subsidy as per P&L Account is Rs. 2424 Lakhs. Accordingly, the Commission has considered the subsidy for FY 2009-10 as submitted by the petitioner.

Table 44: Subsidy considered for FY 2008-09

(Rs in Lakhs)



Particulars	Approved as per MYT order for FY 2008-09	Revised Estimates submitted by MGVCL for FY 2008-09	Considered for APR
Share of Agriculture Subsidy	7323	7601	7601
Other Subsidies	2779	4245	2924
Total	10102	11845	10525



# 3.19. Revenue Gap / (Surplus) for FY 2008-09

Table 45: Net Revenue Gap for FY 2008-09

(Rs. Lakhs)

Sr. No.	Particulars	Estimated by the Petitioner for FY 2008-09	Estimated by the Commission for FY 2008- 09
1	Aggregate Revenue Requirement originally approved for FY 2008-09	223157	223157
2	Gain / (Loss) on account of Uncontrollable factor to be passed on to Consumer	(47024)	(46823)
3	Gain / (Loss) on account of Controllable factor to be passed on to Consumer (1/3rd of Total Gain / Loss)	1233	2961
4	Revised ARR for FY 2008-09 (1 - 2 - 3)	268949	267020
5	Revenue with Existing Tariff	242227	242176
6	Other Income (Consumer related)	4664	4692
7	Total Revenue before Subsidy (5+6)	246891	246868
8	Agriculture Subsidy	7601	7601
9	Other Subsidies	4245	2924
10	Total Revenue After Subsidy (7 + 8 + 9)	258736	257393
11	Revised Gap/ (Surplus) after treating gains/losses due to Controllable/ Uncontrollable factors (4 - 10)	10213	9627

# 3.20. Provisional Gap/Surplus for FY 2008-09

The net revised ARR of MGVCL for FY 2008-09 works out to Rs. 267020 Lakhs. Total revenue from retail tariff including subsidy amounts to Rs 257393 Lakhs. Accordingly, there is a revenue gap of Rs 9627 Lakhs FY 2008-09 as shown in the Table above. This gap shall be included in the ARR of FY 2009-10, while determining



the tariffs for FY 2009- 10.

However, the Commission clarifies that it will undertake the final truing up once the audited accounts of DGVCL for FY 2008-09 are available, i.e., and will consider the final gap during Annual Performance Review for the FY 2009-10.



# 4. Determination of Aggregate Revenue Requirement for FY 2009-10

#### 4.1. Sales

#### Petitioner's Approach to Sales Projections

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

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 (5-year, 3-year and year on year) as discussed in the subsequent sections<sup>1</sup>.

Category-wise break up of Sales and the CAGR for different periods (5-year, 3-year and year on year) as submitted by MGVCL are as follows:

Table 46: Historical Trend in Category-wise Units sold

(MUs)

MGVCL	FY03-04	FY04-05	FY05-06	FY06-07	FY07- 08	FY08-09 (Prov.)
Low Tension Consumers						
Residential	836	896	973	1078	1185	1304
Commercial	254	283	310	348	407	465
Industrial LT	307	335	357	388	432	457
Public Water Works	90	97	102	107	119	135
Agriculture	766	745	743	723	746	817
Street Light	42	44	46	50	53	57
Temporary Supply at LT	0	0	0	0	0	0
LT Total	2295	2400	2531	2693	2942	3235
High Tension Consumers						

<sup>&</sup>lt;sup>1</sup> The 5-year CAGR is for the period from FY 2003-04 to FY 2007-08. The 3-year CAGR is for the period from FY 2005-06 to FY 2007-08.



Industrial HT	1342	1325	1327	1553	1618	1826
Railway Traction	246	255	266	280	305	328
HT Total	1588	1580	1593	1833	1923	2154
TOTAL	3883	3980	4124	4527	4865	5389

Table 47: Category-wise Growth rates of Units Sold

Sales	CAGR (5 year) FY 08 over 04	CAGR (3 year) FY 08 over 06	FY 07 over FY 06	FY 08 over FY 07	FY 09 over FY 08
Low Tension Consumers					
Residential	9.11%	10.36%	10.8%	9.96%	10.04%
Commercial	12.52%	14.61%	12.19%	17.07%	14.08%
Industrial LT	8.91%	10.00%	8.7%	11.34%	5.81%
Public Water Works	7.17%	7.89%	4.9%	10.97%	14.08%
Agriculture	-0.65%	0.22%	-2.7%	3.23%	9.47%
Street Light	5.92%	7.21%	8.7%	5.74%	6.99%
Temporary Supply at LT	0.00%	0.00%	0.0%	0.00%	0.00%
LT Total	6.41%	7.82%	6.4%	9.23%	9.94%
High Tension Consumers					
Industrial HT	4.79%	10.42%	17.0%	4.17%	12.86%
Railway Traction	5.51%	7.05%	5.3%	8.87%	7.71%
HT Total	4.90%	9.86%	15.1%	4.89%	12.05%
TOTAL	5.80%	8.61%	9.76%	7.47%	10.77%

Category-wise break-up of number of Consumers and the CAGR for different periods (5-year, 3-year and year on year) as submitted by MGVCL are as follows:

Table 48: Category-wise No. of Consumers

MGVCL	FY03-04	FY04-05	FY05-06	FY06-07	FY07-08	FY08-09 Prov.
LT Consumers						
Residential	1468540	1522662	1576731	1636477	1746777	1946349
Commercial	194952	200506	205384	211997	219495	228619
Industrial LT	21202	21457	21979	22859	23811	24712
Public Water Works	5694	5958	6345	6703	7085	7358
Agriculture	54905	56041	57327	57987	59684	62939
Street Light	4408	4428	4486	4603	4796	5018

Gujarat Electricity Regulatory Commission



Temporary Supply at LT	0	0	0	0	0	0
LT Total	1749701	1811052	1872252	1940626	2061648	2274995
HT Consumers						
Industrial HT	839	856	875	928	994	1111
Railway Traction	6	6	6	6	6	6
HT Total	845	862	881	934	1000	1117
TOTAL	1750546	1811914	1873133	1941560	2062648	2276112

Table 49: Growth rate of no. of Consumers

No. of Consumers	CAGR (5 year) FY 08 over 04	CAGR (3 year) FY 08 over 06	FY 07 over FY 06	FY 08 over FY 07	FY 09 over FY 08
<b>Low Tension Consumers</b>					
Residential	4.43%	5.25%	3.79%	6.74%	11.43%
Commercial	3.01%	3.38%	3.22%	3.54%	4.16%
Industrial LT	2.94%	4.08%	4.00%	4.16%	3.78%
Public Water Works	5.62%	5.67%	5.64%	5.70%	3.85%
Agriculture	2.11%	2.04%	1.15%	2.93%	5.45%
Street Light	2.13%	3.40%	2.61%	4.19%	4.63%
Temporary Supply at LT	0.00%	0.00%	0.00%	0.00%	0.00%
LT Total	4.19%	4.94%	3.65%	6.24%	10.35%
<b>High Tension Consumers</b>					
Industrial HT	4.33%	6.58%	6.06%	7.11%	11.77%
Railway Traction	0.00%	0.00%	0.00%	0.00%	0.00%
HT Total	4.30%	6.54%	6.02%	7.07%	11.70%
TOTAL	4.19%	4.94%	3.65%	6.24%	10.35%

Break-up of the Connected Load and CAGR for different periods (5-year, 3-year and year on year) as submitted by the petitioner is as follows:

Table 50: Category-wise Connected Load

(MW)

MGVCL	FY03-04	FY04-05	FY05-06	FY06-07	FY07-08	FY08-09
Low Tension Consumers						
Residential	1044	1132	1192	1357	1520	1551
Commercial	235	284	258	290	390	481
Industrial LT	371	355	367	391	408	423
Public Water Works	61	58	66	83	73	69

Gujarat Electricity Regulatory Commission



Agriculture	417	450	460	499	510	511
Street Light	15	19	16	20	25	29
Temporary Supply at LT	0	0	0	0	0	0
LT Total	2143	2296	2358	2639	2927	3063
High Tension Consumers						
Industrial HT	522	536	539	538	606	651
Railway Traction	75	74	77	76	78	78
HT Total	597	610	616	614	684	730
TOTAL	2740	2906	2974	3253	3611	3793

Table 51: Growth Rate for Connected Load

Load	CAGR (5 year) FY 08 over 04	CAGR (3 year) FY 08 over 06	FY 07 over FY 06	FY 08 over FY 07	FY 09 over FY 08
Low Tension					
Consumers					
Residential	9.85%	12.96%	13.85%	12.07%	2.00%
Commercial	13.53%	23.01%	12.40%	34.63%	23.31%
Industrial LT	2.41%	5.44%	6.54%	4.35%	3.60%
Public Water Works	4.68%	5.35%	25.76%	-11.75%	-6.12%
Agriculture	5.15%	5.33%	8.49%	2.26%	0.30%
Street Light	13.47%	24.67%	25.00%	24.35%	14.64%
Temporary Supply at LT	0.00%	0.00%	0.00%	0.00%	0.00%
LT Total	8.10%	11.41%	11.92%	10.90%	4.67%
High Tension					
Consumers					
Industrial HT	3.83%	6.05%	-0.19%	12.67%	7.46%
Railway Traction	1.08%	0.76%	-1.30%	2.87%	0.37%
HT Total	3.50%	5.40%	-0.32%	11.46%	6.65%
TOTAL	7.15%	10.19%	9.38%	11.00%	5.05%

# Commission's Approach for Sales Projections for FY 2009-10

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, Commission has examined the assumptions on category- wise CAGR vis a vis outlook of the growth in each category and accordingly approved the same.

The petitioner's submission and the Commission's view for each consumer category is given below:

Gujarat Electricity Regulatory Commission



#### a. Residential Category

#### Petitioner's submission

The petitioner has submitted that it had witnessed a double digit growth in the units sold in the last few years with the three-year CAGR (between FY 2005-06 and FY 2007-08) of 10.14% p.a.

The number of consumers added in this category has witnessed a three-year CAGR of 5.25% p.a. (between FY 2005-06 and FY 2007-08). The petitioner expects the above trend to continue.

The connected load has been growing at a three-year CAGR of 2.00% p.a. (between FY FY 2007- 08 and 2008-09). The petitioner projects the same trend to continue for FY 2009-10.

#### Commission's View

The sales to this category constitute about 24% of total energy sales of the company. Commission in its Multi-Year Tariff Order dated Jan 17, 2009 approved 1488 MUs for Y 2009-10. The revised sales based on CAGR as discussed in the above paragraph works out to be 1435 MUs.

For FY 2009-10, the Commission has analyzed the sales projections on the basis of CAGR as projected by MGVCL and has also considered the recent trend. Since there was no significant difference between the sales projected by MGVCL and that projected by the Commission, the Commission has approved the sales projected by MGVCL for FY 2009-10.

Table 52: Revised Approved Residential Sales for FY 2009-10

(MUs)

Consumer Category	Approved as per MYT order for FY 2009-10	Revised Estimates submitted by MGVCL for FY 2009-10	Revised Approved for FY 2009-10
Residential	1488	1435	1435

#### b. Commercial Category

#### Petitioner's submission

Gujarat Electricity Regulatory Commission



MGVCL has submitted that commercial category had also witnessed a double digit growth. Three-year CAGR of sales to commercial consumers between FY 2005-06 and FY 2007-08 was 14.61% p.a.

Further, last three-year CAGR recorded for the growth in consumers between FY 2005-06 and FY 2007-08 was 3.38% p.a. The Company expects the growth to be at 4.16% for FY 2009-10, which is the same as the growth of the previous year.

The three-year CAGR recorded between FY 2005-06 and FY 2007-08 for in the connected load was 23.01% p.a. The petitioner has stated that the growth pattern in the previous years have seen high fluctuations. However, the petitioner expects the growth rate to be 8% for FY 2009-10.

#### Commission's View

The sales to this category constitute about 9% of total energy sales of the company. Commission in its Multi-Year Tariff Order dated Jan 17, 2009 approved 506 MUs. The revised sales assumption based on the CAGR as projected in the above paragraph works out to be 520 MUs.

For FY 2009-10, the Commission has analyzed the sales projections on the basis of CAGR as projected by petitioner and also considered the recent trend. Since there was no significant difference between the sales projected by MGVCL and that projected by the Commission, the Commission has approved the sales projected by MGVCL for FY 2009-10.

Table 53: Revised Approved Commercial Sales for FY 2009-10

(MUs)

Consumer Category	Approved as per MYT order for FY 2009-10	Revised Estimates submitted by MGVCL for FY 2009- 10	Revised Approved for FY 2009-10
Commercial	506	520	520

#### c. Industrial LT Category

#### Petitioner's submission

Gujarat Electricity Regulatory Commission



MGVCL has submitted that Industrial LT has recorded a CAGR of 5.81% p.a. between FY 2005-06 and FY 2007-08. Further, last three years i.e. between FY 2005-06 and FY 2007-08, CAGR for the growth in consumers was 4.08% p.a. and the growth year-on –year growth between FY 2007-08 and FY 2009-10 was 3.60%. The Company expects the same trend to continue for FY 2009-10. for growth in the connected load was

#### Commission's View

The sales to this category constitute about 8% of total energy sales of the company. The Commission in its Multi-Year Tariff Order dated Jan 17, 2009 approved 507 MUs. The revised sales based on the CAGR as projected in the above paragraph work out to be 484 MUs.

For FY 2009-10, the Commission has analyzed the sales projections on the basis of CAGR as projected by MGVCL and also considered the recent trend. Based on the analysis the Commission has approved the sales as projected by MGVCL for FY 2009- 10.

Table 54: Revised Approved Industrial Sales for FY 2009-10

(MUs)

Consumer Category	Approved as per MYT order for FY 2009-10	Revised Estimates submitted by MGVCL for FY 2009-10	Revised Approved for FY 2009-10
Industrial LT	507	484	484

#### d. Public Water Works

#### Petitioner's submission

MGVCL has submitted that the three-year CAGR for sales between FY 2005-06 and FY 2007-08 was 7.89% p.a. The petitioner expects the same growth rate to continue for FY 2009-10.

The number of consumers added in the category has witnessed a CAGR of 5.62% p.a. between FY 2005-06 and FY 2007-08. The Company expects the above trend to continue.

The connected load has been growing at a CAGR of 5.35% p.a. between FY 2005-06 and FY 2007-08. The company expects the same growth rate for this category in FY 2009-10.



#### Commission's View

The sales to this category constitute about 2 % of total energy sales of the company. The Commission in its Multi-Year Tariff Order dated Jan 17, 2009 approved 133 MUs. The actual sales from Apr 09 to Aug 09 in this category are MUs. The revised sales based on the CAGR assumed as projected in the above paragraph works out to be 146 MUs.

For FY 2009-10, the Commission has analyzed sales projections on the basis of CAGR as assumed by MGVCL and has also considered the recent trend. Since there was no significant difference between the sales projected by MGVCL and that projected by the Commission, the Commission has approved the sales projected by MGVCL for FY 2009-10.

Table 55: Revised Approved Public Water Works for FY 2009-10

(MUs)

Consumer Category	Approved as per MYT order for FY 2009-10	Revised Estimates submitted by MGVCL for FY 2009-10	Revised Approved for FY 2009-10
Public Water Works	133	146	146

#### e. Agriculture Category

#### Petitioner's submission

The sales to this category constitute about 15% of total energy sales of the company. The consumption of electricity by irrigation pump-sets are not metered except connections released during recent years. MGVCL has submitted that it plans to release around 5300 new connections under this category. The petitioner has estimated that an additional connected load of 64 MW based on their current norm of 10 HP per connection. The average consumption of metered connections is proposed at 700 kWH / HP / Annum and consumption of unmetered consumer is 1700 kWH/HP/Annum. For projection of sales for additional connections. MGVCL has proposed 1200 kWH/HP/Annum ((700+1700)/2=1200). This would translate into an additional consumption of around 255 MU (1200 kWH/HP/Annum) as shown below:

Table 56: Sales proposed for Agriculture FY 2009-10

(MUs)

Page 72



Release of Pending Agriculture Connections		FY 2009-10
Number of New Agriculture Connections	Nos.	5300
Total Additional Load in MW	MW	64
Additional Load Added in HP	HP	53000
Additional demand on account of New Agriculture Connections	MU	40

#### Commission's View

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

The total sales in agriculture for FY 2009-10 is the summation of unmetered consumption (which is taken as approved in MYT Order), metered consumption of FY 2008-09 (which is difference between the total sales in FY 2008-09 and unmetered consumption) and estimated consumption of the new agriculture connections.

Table 57: Metered and Unmetered Sales in FY 2008-09

(MUs)

Agriculture	Sales (MU's)	No. of Consumers	Load in MW	НР
FY 2008-09 (Provisional)	817	62939	511	685362
Unmetered from FY 2008-09	477	26542	209	280684
Metered for FY 2008-09	340	36397	302	404678

In order to estimate the estimated sales of new agriculture connections average consumption of 650units/HP/year is considered – as all the connections have to be metered connections. The total sale estimated in the agriculture category is as shown below:

Table 58: Sale estimation for FY 2009-10

(MUs)

Agriculture	Sales (MU's)	No. of Consumers	Load in MW	HP
Metered	340	36397	302	404678

Gujarat Electricity Regulatory Commission



New Metered	34	5,300	40	53000
Total Metered	375	41697	341	457678
Total Unmetered	477	26542	209	280684
Total	852	68239	551	738362

Table 59: Total Revised Sales for Agriculture FY 2009-10

(MUs)

Consumer Category	Approved as per MYT order for FY 2009-10	Revised Estimates submitted by MGVCL for FY 2009-10	Revised Approved for FY 2009-10
Agriculture metered	340	408	375
Agriculture unmetered	477	473	477
Total	817	881	852

# f. Street (Public) Lighting

#### Petitioner's submission

MGVCL has submitted that three-year CAGR between FY 2005-06 and FY 2007- 08 for sales under this category was 6.99% p.a. The petitioner expects the same growth rate to continue for FY 2009-10.

Three-year CAGR for the growth in the number of consumers between FY 2005-06 and FY 2007-08 was 4.63% p.a. Company expects the same trend to continue for FY 2009-10.

Three-year CAGR between FY 2005-06 and FY 2007-08 witnessed for the connected load was 5% p.a. The petitioner expects the same trend to continue into FY 2009-10.

# Commission's View

The sales to this category constitute about 1% of the total energy sales. The Commission in its Multi-Year Tariff Order dated Jan 17, 2009 approved 60 MUs. The revised sales based on the CAGR as discussed in the above paragraph works out to be 61 MUs.

For FY 2009-10, the Commission has analyzed the sales projections on the basis of CAGR as projected by MGVCL and also considered the recent trend. Since there was no



Gujarat Electricity Regulatory Commission

significant difference between the sales projected by MGVCL and that projected by the Commission, the Commission has approved the sales projected by MGVCL for FY 2009-10.

Table 60: Revised Approved Public Lighting Sales for FY 2009-10

(MUs)

Consumer Category	Approved as per MYT order for FY 2009-10	Revised Estimates submitted by MGVCL for FY 2009-10	Revised Approved for FY 2009-10
Public Lighting	60	61	61

# g. Industrial HT Category

#### Petitioner's submission

The petitioner has submitted that the three-year CAGR between FY 2005-06 and FY 2007-08 for units sold to this category was 10.42% p.a., 5-year CAGR between FY 2003-04 and FY 2007-08 was 4.74% p.a. and the year on year growth from FY 2007-08 to FY 2008-09 was 4.17%. The petitioner has assumed the growth rate of 10.42% to continue for FY 2009-10.

Further, petitioner has submitted that three-year CAGR for the growth in number of consumers and connected load between FY 2005-06 and FY 2007-08 was 6.58% p.a. and 6.05% p.a. respectively and the same growth rates have been assumed for the FY 2009-10.

# Commission's View

The sales to this category constitute about 34% of total energy sales of the company.

The Commission in its Multi-Year Tariff Order dated Jan 17, 2009 approved 1974 MUs. The revised sales based on CAGR as discussed in the above paragraph works out to be 2016 MUs.

For FY 2009-10, the Commission has analyzed the sales projections on the basis of CAGR as projected by MGVCL and has also considered the recent trend. Since there was no significant difference between the sales projected by MGVCL and that projected by the



Gujarat Electricity Regulatory Commission

Commission, the Commission has approved the sales projected by MGVCL for FY 2009-10.

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

Table 61: Revised Approved Industrial HT for FY 2009-10

(MUs)

Consumer Category	Approved as per MYT order for FY 2009-10	Revised Estimates submitted by MGVCL for FY 2009-10	Revised Approved for FY 2009-10
Industrial HT	1974	2016	2016

# h. Railway Traction Category

#### Petitioner's submission

The petitioner has submitted that the five -year CAGR between FY 2005-06 and FY 2007-08 for units sold to this category was 5.51 % p.a. The petitioner expects the same trend to continue for FY 2009-10.

# Commission's analysis

The sales to this category constitute about 6% of total energy sales of the company.

The Commission in its Multi-Year Tariff Order dated Jan 17, 2009 approved 332 MUs. The revised sales based on CAGR as discussed in the above paragraph works out to be 346 MUs.

For FY 2009-10, the Commission has analyzed the sales projections on the basis of CAGR as projected by MGVCL and has also considered the recent trend. Since there was no significant difference between the sales projected by MGVCL and that projected by the Commission, the Commission has approved the sales projected by MGVCL for FY 2009-10.

Table 62: Revised Approved Railway Traction for FY 2009-10

(MUs)

			, ,
	Approved as per	Revised Estimates	Revised
Consumer Category	MYT order for FY	submitted by	Approved for
	2009-10	MGVCL for FY	FY 2009-10

Gujarat Electricity Regulatory Commission



		2009-10	
Railway Traction	332	346	346

# **Total Energy Sales**

Based on above discussions, total energy sales as projected by the petitioner and as approved by the Commission for FY 2009-10 are shown below:

Table 63: Approved Sales for FY 2009-10

(MUs)

Consumer Category	Approved as per MYT order for FY 2009-10	Revised Estimates submitted by DGVCL for FY 2009-10	Revised Approved for FY 2009-10
Low Tension Consumers			
Residential	1488	1,435	1,435
Commercial	506	520	520
Industrial LT	507	484	484
Public Water Works	133	146	146
Agriculture - Metered	340	408	375
Agriculture - Un-Metered	477	473	477
Street Light	60	61	61
Temporary Supply at LT	-	-	-
LT Total	3491	3,526	3,497
High Tension Consumers			
Industrial HT	1974	2,016	2,016
Railway Traction	332	346	346
HT Total	2306	2,363	2,363
TOTAL	5797	5,889	5,860

# 4.2. Distribution Losses and Energy Input Requirement

# Petitioner's submission

The petitioner has submitted that it would be able to achieve distribution losses of 14% for the FY 2009-10 as against the same level of 14% approved by the Commission

Gujarat Electricity Regulatory Commission



#### Commission's view

The Commission has noted that there are no specific reasons stated by the petitioner for non-achievement of reduction in distribution loss. Further, distribution loss is a controllable parameter. In view of this, the Commission has continued with the MYT approved distribution losses of 14% and has accordingly estimated the energy requirement.

Table 64: Distribution Losses approved by Commission for FY 2009-10

(%)

Particulars	Approved as per MYT order for FY 2009-10	Revised Estimates by MGVCL for FY 2009-10	Revised Approved for FY 2009-10
Distribution Loss	14.00	14.00	14.00

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

Table 65: Energy Balance considered for FY 2009-10

(MUs)

Particulars	Unit	Approved as per MYT order for FY 2009-10	Revised Estimates by MGVCL for FY 2009-10	Revised Approved for FY 2009-10
Energy Sales	MUs	5797	5889	5860
Distribution Losses	MUs	944	959	954
Distribution Losses	%	14.00	14.00%	14.00
Energy Requirement	MUs	6741	6848	6814
Transmission Losses	MUs	283	323	302
Transmission Losses	%	4.04	4.50%	4.25
Total Energy to be input to	MUs	7024	7171	7116
Transmission System	IVIOS	7024	7171	7110
Pooled Losses in PGCIL System	MUs	123	171.79	171.79
Total Energy Requirement	MUs	7147	7343	7288

#### 4.3. Total Power Purchase Cost

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

Gujarat Electricity Regulatory Commission



- 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

MGVCL has submitted revised power purchase cost for FY 2009-10 as shown below:

Table 66: Revised Power Purchase Cost submitted by MGVCL

(Rs Lakhs)

Particulars	Approved as per MYT order for FY 2009-10	Revised Estimates by MGVCL for FY 2009-10
Power Purchase Cost through Merit Order	197,009	217,437
Transmission Costs to PGCIL & GETCO	13,467	27,036
GUVNL	699	-
E-Urja Cost	717	663
SLDC Fees & Charges	-	108
Total Power Purchase Cost	211,892	245,244

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, allocation of capacities / PPAs and the principles & 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 67. The petitioner has also stated that while most of the stations are existing, some are expected to come online during the FY 2009-10. Further, GUVNL has discontinued supply of power to Torrent Power Limited (TPL) from August, 2009 pursuant to commissioning of Sugen CCPP. In view of this, capacity retained by GUVNL for supply of

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**Gujarat Electricity Regulatory Commission** 

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 with effect from August, 2009.

Table 67: PPA Allocation for FY 2009-10

(MW)

Generating Stations	Allocated Capacity from April 2009 to July 2009	Allocated Capacity from Aug 2009 to March 2010
Ukai TPS	85	85
Ukai Hydro	-	-
Gandhinagar I to IV	-	66
Gandhinagar V	42	42
Wanakbori I to VI	-	-
Wanakbori VII	-	-
Sikka TPS	60	60
Kutch Lignite I to III	-	-
Kutch Lignite IV	-	19
Dhuvaran oil	50	50
Kadana Hydro	121	121
Utran Gas Based	30	30
Dhuvaran Gas Based - Stage-I	-	-
Dhuvaran Gas Based - Stage-II	28	28
Utran Extension	-	94
Sikka Extension	-	-
ESSAR	-	-
GPEC	131	164
GIPCL II (160)	-	-
GIPCL-SLPP	-	-
GSEG	16	47
GIPCL - I (145)	-	21
GMDC - Akrimota	-	-
GSEG Expansion	-	-
GIPCL, Expansion	-	63
GSPC-Pipavav	-	-
NPC - Tarapur- 1&2	-	-
NPC - Kakrapar	52	52
NPC - Tarapur- 3&4	73	73
NTPC - KORBA	-	-

Gujarat Electricity Regulatory Commission



NTPC - VINDHYACHAL - I	-	-
NTPC - VINDHYACHAL - II	-	-
NTPC - VINDHYACHAL - III	140	140
NTPC - KAWAS	-	-
NTPC - JHANOR	99	62
NTPC - Kahalgoan	56	56
NTPC - Sipat Stage - II	215	215
SSNNL - Hydro	-	-
NTPC Kahalgaon (New)	-	-
NTPC North Karanpura	-	-
Sipat Stage-I	-	36
Wind Farms	105	105
Tarini Infrastructure Limited	-	1
APPL	-	150
Aryan	-	-

# 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 Nuclear Power Corporation (NPC) power plants and hydro power plants viz., SSNL hydro, NPC Tarapore and Kakrapar and Ukai hydro have been considered as must run power plants, and excluded from merit order dispatch and the dispatch from individual generating stations is worked out following the merit order based on the variable cost of each generating unit / station.

#### Commission's View on Purchase Cost for FY 2009-10

The Commission has considered energy requirement of MGVCL for FY 2009-10 as given in the Table 65 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 considers the allocation of PPAs as submitted by MGVCL for FY 2009-10.

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 2009-10. 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 Tables below:

Table 68: Revised approved Cost of Energy (Plant wise) for FY 2009-10

Gujarat Electricity Regulatory Commission



Power Purchase for FY 2009-10	Units Availabl e (MU)	Units Dispat ched (MU)	Fixed Cost (Rs. Lacs)	Variab le Cost (Rs./ Unit)	Variable Cost (Rs. Lacs)	Incent ive (Rs. Lacs)	Total Cost (Rs. Lacs)	Per Unit Cost (Rs./ Unit)
Ukai TPS	501	501	2,697	1.50	7,521	-	10,219	2.04
Ukai Hydro	-	-	-	-	-	-	-	-
Gandhinagar I to IV	240	240	1,863	1.75	4,197	-	6,060	2.53
Gandhinagar V	308	308	1,926	1.47	4,528	100	6,555	2.13
Wanakbori I to VI	-	-	-	-	-	-	-	-
Wanakbori VII	-	-	-	-	-	-	-	-
Sikka TPS	352	188	2,920	1.99	3,736	-	6,656	3.55
Kutch Lignite I to III	-	-	-	-	-	-	-	-
Kutch Lignite IV	78	78	1,052	0.98	763	-	1,815	2.33
Dhuvaran oil	299	120	1,772	3.76	4,495	-	6,267	5.24
Kadana Hydro	94	94	3,432	0.00	0	-	3,432	3.64
Utran Gas Based	232	124	1,309	2.16	2,674	76	4,058	3.28
Dhuvaran Gas Based - Stage-I	-	-	-	-	-	-	-	-
Dhuvaran Gas Based - Stage-II	215	115	1,978	2.22	2,545	60	4,583	4.00
Utran Extension	367	110	2,373	1.86	2,048	-	4,421	4.02
Sikka Extension	-	-	-	-	-	-	-	-
ESSAR	-	-	-	-	-	-	-	-
GPEC	1,040	520	10,432	2.47	12,844	325	23,601	4.54
GIPCL II (160)	-	-	-	-	-	-	-	-
GIPCL-SLPP	-	-	-	-	-	-	-	-
GSEG	248	248	2,740	1.48	3,668	-	6,408	2.59
GIPCL - I (145)	95	28	831	2.17	615	-	1,446	5.10
GMDC - Akrimota	-	-	-	-	-	-	-	-
GSEG Expansion	-	-	-	-	-	-	-	-
GIPCL, Expansion	203	168	1,460	1.75	2,938	-	4,398	2.62
GSPC-Pipavav	-	-	-	-	-	-	-	-
NPC - Tarapur- 1&2	-	-	-	-	-	-	-	-
NPC - Kakrapar	321	321	-	2.03	6,523	115	6,639	2.07
NPC - Tarapur- 3&4	459	459	-	2.73	12,519	165	12,684	2.77
NTPC - KORBA	-	-	-	-	-	-	-	-
NTPC - VINDHYACHAL - I	-	-	-	-	-	-	-	-
NTPC - VINDHYACHAL - II	-	-	-	-	-	-	-	-

Gujarat Electricity Regulatory Commission



NTPC - VINDHYACHAL - III	910	910	5,991	0.94	8,551	-	14,542	1.60
NTPC - KAWAS	-	-	-	-	-	-	-	-
NTPC - JHANOR	503	503	3,590	1.73	8,701	181	12,471	2.48
NTPC - Kahalgoan	366	366	6,003	1.21	4,424	-	10,427	2.85
NTPC - Sipat Stage - II	1,397	1,397	-	0.54	7,542	-	7,542	0.54
SSNNL - Hydro	-	-	-	-	-	-	-	-
NTPC Kahalgaon (New)	-	-	-	-	-	-	-	-
NTPC North Karanpura	-	-	899	-	-	-	899	
Sipat Stage-I	58	58	2,523	1.70	992	-	3,515	6.02
RELIANCE INDUSTRIES LTD.NARODA	37	37	-	2.34	861	-	861	2.34
UNITED PHOSPHOROUS LTD. JHAGADIA	-	-	-	-	-	-	-	-
GUJARAT ALKALIS & CHEMI. LTD. BARUCH	12	12	-	1.97	242	-	242	1.97
ONGC Anlkeshwar	12	12	-	1.90	233	-	233	1.90
ONGC, Hazira	12	12	-	1.90	233	-	233	1.90
M/S ADANI EXPORT (PHILIPS CARBON)	-	-	-	-	-	-	-	-
M/S Arvind Mills LTD	-	-	-	-	-	-	-	-
Wind Farms (Old Policy)	7	7	-	1.75	123	-	123	1.75
Wind Farms (New Policy)	205	205	-	3.37	6,901	-	6,901	3.37
Tarini Infrastructure Limited	2	2	-	3.00	64	-	64	3.00
APPL	146	146	1,380	1.48	2,157	-	3,537	2.43
Aryan	-	-	-	-	-	-	-	-
Total	8,717	7,288	57,170	1.55	112,637	1,022	170,830	2.34

Table 69: Revised approved Cost of Energy (Plant wise) for FY 2009-10

(Rs Lakhs)

		· ·	,
Particulars	Approved as per	Revised Estimates	Revised



	MYT order for FY 2009-10	submitted by MGVCL for FY 2009- 10	Approved for FY 2009- 10
Power Purchase Cost through Merit Order	197009	217437	170830

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 2009-10. Transmission charges of PGCIL have been taken as per the MYT Order.

Table 70: Revised Transmission Charges as submitted by MGVCL

(Rs Lakhs)

Transmission Charges of Utilities	Approved as per MYT order for FY 2009-10	Revised Estimates submitted by MGVCL for FY 2009-10
GETCO Charges	12678	21032
PGCIL Charges	1740	6005
Total Transmission Charges	13,467	27036

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

#### Commission's view

For approval of these charges, the Commission has considered the PGCIL transmission charges as submitted by the petitioner, however, transmission charges of GETCO has been computed based transmission tariff approved by the Commission in the GETCO's order for FY 2009-10 applied to net capacity allocated to MGVCL. The approved transmission charges payable to PGCIL and GETCO are as shown in the Table:

Table 71: Revised Approved Transmission Charges for FY 2009-10

(Rs Lakhs)



Transmission Charges of Utilities	Approved as per MYT order for FY 2009-10	Revised Estimates submitted by MGVCL for FY 2009-10	Revised Approved for FY 2009-10
GETCO Charges	12678	21032	13,459
PGCIL Charges	1740	6005	6,005
Total Transmission Charges	13,467	27,036	19,463

#### 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 the FY 2009-10 which are Rs 329.74 / MW/Half Year and Rs 534.21 /MW/Month respectively. The petitioner has applied these charges on net capacity of 1,530 MW. Total SLDC fees & Charges for petitioner is estimated at Rs.108 Lakhs.

#### Commission's views

The Commission has recomputed SLDC fees and Charges based as approved in SLDC's Order which are Rs 275/ MW/Half Year and Rs 540 /MW/Month respectively. These charges are applied to net capacity of 1,530 MW to calculate the Total SLDC Fees and Charges which is estimates at Rs 29 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 erstwhile GEB is entrusted with 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 Kandla Port Trust, Torrent Power Ltd's and Ahmedabad Distribution area 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 72: Revised Cost of GUVNL as submitted by MGVCL

(Rs Lakhs)

2009-10 MGVCL for FY 2009-
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Gujarat Electricity Regulatory Commission



		10
Revenue		
Revenue from sale of power to AECo +SECo	7 6,368	35,176
Revenue from sale of power to KPT	569	958
Revenue from sale of power to Others	6 1,264	50,351
Revenue from trade of Discom's Surplus	2 5,354	36,441
Other Income	1 4,603	15,974
Total Revenue from Sale of Power (A)	178,158	1 38,900
Expenditure		
SLDC Fees & Charges	-	2 0
Power purchase cost as per PPA allocation	149,459	89,216
Average variable cost of Discom's surplus traded	1 6,801	21,632
power	1 0,001	21,002
Employee Cost	1,742	1,577
Admin and General Expenses	1,087	657
Depreciation	862	93
Interest and Financial Charges	1 3,123	21,854
Share of E-Urja utilization charge	97	8 9
Total Expenses (B)	183,171	1 35,138
Amount of Cost Allocation (C=B-A)	5,013	( 3,761)

## Approach adopted for estimation of surplus / gap of GUVNL & 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 is deducted from the ARR to arrive at 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 the FY 2009-10, existing GERC approved tariff for the three licensees has been considered. Pursuant to commissioning of TPL's Sugen CCPP, GUVNL is expected to discontinue power supply to Torrent Power Limited (TPL)'s Ahmedabad and Surat distribution areas from August 2009. In view of this, the projections for the number of units sold to TPL are based on capacity requirement only upto July 2009 and KPT for the entire year. 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 2009-10, although this surplus is likely to appear only in energy terms and not in MW terms i.e., the surplus is



likely to be during off peak hours only. However, it has been assumed that 10% of the surplus being projected for a particular year shall be traded at marginal cost plus a Rs. 0.04 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 they pay for their allocated capacity from the revenues from trading.

#### Commission's View

GUVNL is 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 allocation of surplus / gap. The Commission's view on the projected revenues and expenditure of GUVNL and the petitioner's share of costs is analyzed 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 been assumed up to August 2009 (the incremental capacities available with GUVNL post August is allocated between the Discoms). The Commission has noted that sale to others comprise of the residual power left with GUVNL after supplying to the above parties with assumption of a margin of four (4) 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 2009-10, the Commission asked GUVNL to furnish detail with regards to the number of MUs traded by GUVNL during FY 2008-09 and it was found that the total MUs traded by GUVNL during FY 2008-09 was 988 MUs. These MUs are comparable to the projected surplus to be sold in FY 2009-10. Further, the Commission understand the uncertainty involved in estimation of surplus capacity with discoms and possibility of realization of sales and accordingly, the Commission agrees with the projections for FY 2009-10.

Considering the peak deficit faced by the state, the Commission accepts that the surplus is more likely to be 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 net ARR through sale of surplus energy with discoms.



# **Projected Expenses of GUVNL**

GUVNL expenditure can broadly be divided into two parts i.e 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 employee expenses and Administrative & General (A&G) expenses have been reduced there has been a significant increase in Interest and Finance Charges. The Commission has noted that the petitioner has not submitted any reasons for increase in interest and financial charges. This being the controllable expense Commission has not taken a view in this order, but will be reviewed during the next tariff order. The approved GUVNL expenses for FY 2009-10 are presented below.

**Table 73: Revised Approved GUVNL Operational Expenses** 

(Rs Lakhs)

Particulars	Approved as per MYT order for FY 2009-10	Revised Estimates submitted by MGVCL for FY 2009-10	Revised Approved for FY 2009-10
Employee Cost	1742	1577	1577
A&G expenses	1087	657	657
Depreciation	862	93	93
Interest and Finance Charges	13123	21854	21854

#### 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, the 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 licenses provided to each company for usage of the ERP package.

#### Commission's views

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

Table 74: Revised Approved Cost E-Urja for FY 2009-10

(Rs Lakhs)

Gujarat Electricity Regulatory Commission



Annual Recurring Charges	Approved as per MYT order for FY 2009-10	Revised Estimates submitted by MGVCL for FY 2009-10	Revised Approved for FY 2009-10
Depreciation	2,826	2,834	2,834
Interest Cost	2,136	1,678	1,678
Annual Maintenance Charges	960	960	960
Total Annual Expenditure	5,923	5,472	5,472
Percentage of total licenses with the Company	12.11%	12.11%	12.11%
Allocation to the Company	717	663	663

# Summary of Surplus / gap of GUVNL

# **Approved GUVNL Cost for the FY 2009-10**

(Rs Lakhs)

GUVNL Cost Allocation				
GUVNL Cost Allocation	Approved as per MYT order for FY 2009-10	Revised Estimates by MGVCL for FY 2009-10	Revised Approved for FY 2009-10	
Revenue				
Revenue from sale of power to TPLSurat and Ahmedabad	76368	35176	27,168	
Revenue from sale of power to KPT	569	958	820	
Revenue from sale of power to Others	61264	50351	35,348	
Revenue from trade of Discom's Surplus	25354	36441	30,167	
Other Income	14603	15974	15,974	
Total Revenue from Sale of Power (A)	178158	138900	109,477	
Expenditure				
SLDC Fees & Charges	0	20	5	
Power purchase cost as per PPA allocation	149459	89216	62,391	
Average variable cost of Discom's surplus traded power	16801	21632	16,794	
Employee Cost	1742	1577	1,577	
Admin and General Expenses	1087	657	657	
Depreciation	862	93	93	
Interest and Financial Charges	13123	21854	21,854	
Share of E-Urja utilization charge	97	89	89	
Total Expenses (B)	183171	135138	103,460	

Gujarat Electricity Regulatory Commission



Amount of Cost Allocation (C=B-A)	5013	(3761)	(6,016)

#### **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 MGVCL as shown in the table below:

Table 75: Sharing of GUVNL Cost /(Surplus)

(Rs Lakhs)

GUVNL Cost Allocation	2009-10				
GOVINE COST Allocation	PGVCL	UGVCL	MGVCL	DGVCL	Total
MUs Purchased	19251	14051	7281	10843	51426
% of Allocation	37.43%	27.32%	14.16%	21.08%	100%
GUVNL Cost Allocated to Discoms	(2,245)	(1,640)	(850)	(1,282)	(6,016)

# **Summary of Total Power Purchase Cost**

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

Table 76: Revised Total Power Purchase Cost for FY 2009-10

(Rs Lakhs)

Particulars	Approved as per MYT order for FY 2009-10	Revised Estimates by MGVCL for FY 2009-10	Revised Approved for FY 2009-10
Power Purchase Cost through Merit Order	197,009	217,437	170,830
Transmission Costs to PGCIL & GETCO	13,467	27,036	19,463
GUVNL	699	-	(850)
E-Urja Cost	717	663	663
SLDC Fees & Charges	-	108	29
Total Power Purchase Cost	211,892	245,244	190,135

# 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.

Gujarat Electricity Regulatory Commission



# a. Employee Expenses

#### Petitioner's submission

MGVCL has projected revised expenses of Rs. 21006 Lakhs as compared to the approved expenses of Rs. 21475 Lakhs FY2009-10 in the MYT Order.

Table 77: Employee Cost estimated by MGVCL for FY 2009-10

(Rs. Lakhs)

Particulars Particulars	Approved as per MYT order for FY 2009-10	Revised Estimates submitted by MGVCL for FY 2009- 10
Employee Cost excluding treatment of Sixth Pay Commission	18,910	15,269
40% of component of Sixth Pay Commission for FY 2007- 08 approved for payment in 2009-10	2,565	1,462
Employee Cost on account of provisions for Sixth pay commission for FY 2009-10	-	4,275
Total Employee Cost Considered	21,475	21,006

The petitioner submitted that the employee cost has been estimated considering trend of 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 due to regular increments as well as promotions.

The petitioner has proposed an increase of 8% in employee cost for FY 2009-10. In addition to the above, the impact of the recovery on account of the Sixth Pay Commsion recommendations for FY 2007-08 which were approved by the Hon'ble Commission for recovery in FY 2009-10 has also been considered as shown in above table.

#### Commission's View

As discussed in the earlier section 'Approach for ARR for the FY 2009-10', the Commission has not revised the controllable expenses for FY 2009-10. Accordingly, it has considered the employee expenses as approved in the MYT order. The approved employee expense for FY 2009-10 is shown below:

Table 78: Employee expenses approved by Commission for FY 2009-10

(Rs. Lakhs)

Gujarat Electricity Regulatory Commission



Particulars	Approved as per MYT order for FY 2009-10	Revised Estimates submitted by MGVCL for FY 2009-10	Revised Approved for FY 2009- 10
Employee Cost excluding treatment of Sixth Pay Commission	18,910	15,269	18,910
40% of component of Sixth Pay Commission for FY 2007-08 approved for payment in 2009-10	2,565	1,462	2,565
Employee Cost on account of provisions for Sixth pay commission for FY 2009-10	-	4,275	-
Total Employee Cost Considered	21,475	21,006	21,475

# b. R&M Expenses

#### Petitioner's submission

The petitioner has revised the R&M expenses for FY 2009-10 to Rs.4309 Lakhs. The same has been estimated by considering 10% increase on the provisional R&M expenses of FY 2008-09. The approved expenses as per the MYT Order for FY2009-10 were Rs. 4240 Lakhs.

Table 79: R&M expenses estimated by MGVCL for FY 2009-10

(Rs Lakhs)

Particulars Particulars	Approved as per MYT order for FY 2009-10	Revised Estimates submitted by MGVCL for FY 2009-10
Repair & Maintenance	4240	4309

# Commission's View

The Commission has noted the reviewed projection as submitted by the petitioner. However, since a major portion of the current year i.e. FY 2009-10 has already elapsed and the ARR petition for the FY 20010-11 is due, the Commission has not revised the

Gujarat Electricity Regulatory Commission



approved R & M expenses. The Commission's analysis of the R & M expenses is as given below:

Table 80: R&M expenses approved by Commission for FY 2009-10

(Rs Lakhs)

Particulars	Approved as per MYT order for FY 2009-10	Revised Estimates submitted by MGVCL for FY 2009-10	Revised Approved for FY 2009-10
Repair & Maintenance	4240	4309	4240

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

Gujarat Electricity Regulatory Commission

## Petitioner's submission

MGVCL has revised the A&G expenses to Rs. 3752 Lakhs as compared to the approved expenses of Rs. 3625 Lakhs for FY2009-10 in the MYT Order.

Table 81: A&G Expenses estimated by MGVCL for FY 2009-10

(Rs Lakhs)

Particulars	Approved as per MYT order for FY 2009-10	Revised Estimates submitted by MGVCL for FY 2009- 10
Administration & General Charges	3625	3752

## 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. Since these expenses are controllable in nature and a major portion of FY 2009-10 has already elapsed, the Commission has not revised the approved expenses. The Commission's analysis of the A & G expenses is as given in the table below

Table 82: A&G Expenses approved by Commission for FY 2009-10



(Rs Lakhs)

Particulars	Approved as per MYT order for FY 2009-10	Revised Estimates submitted by MGVCL for FY 2009-10	Revised Approved for FY 2009-10
Administration & General Charges	3625	3752	3625

# 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 83: Revised Approved O& M Expenses by Commission for FY 2009-10

(Rs Lakhs)

Particulars	Approved as per MYT order for FY 2009-10	Revised Estimates submitted by MGVCL for FY 2009-10	Revised Approved for FY 2009-10
Employee Expenses	21475	21006	21475
Repair & Maintenance Costs	4240	4309	4240
Administration & General Charges	3625	3752	3625
Total O&M Expenses	29340	29066	29340

# 4.5. Capital Expenditure and Capitalization

The capital expenditure as submitted by MGCVL is given in the table below:

Table 84: Capital Expenditure as submitted by MGVCL

(Rs Lakhs)

Sr. No.	Schemes	Approved as per MYT order for FY 2009-10	Revised Estimates submitted by MGVCL for FY 2009-10
Α	Distribution Schemes		
	Normal Development Scheme	5350	3650

Gujarat Electricity Regulatory Commission



	Capital Expenditure Total	38365	31445
G	Pending Agriculture Connections*	5091	0
	Golden Goal Scheme		
	Total	300	425
	New Gujarat Pattern	90	25
F	Urban Development	210	400
	Other Schemes		
	Total	12683	10895
	Other New Schemes	1442	495
	Misc. Civil work + Electrical works etc.	315	1350
	Replacement of Conductor/TC	155	250
	Underground Cables	336	1680
	Customer Care Centre	130	25
	Automation and Computerization		
	GIS in cities	125	65
	Automatic meter reading + ERS + Test bench	260	500
	HVDS in selected sub-division	7660	4350
	Aerial Bunch Conductors	1320	2000
	Automatic PF control panels	940	180
E	Other New Schemes		
	Total	1744	5050
	DRUM	0	1000
	RGGVY	1744	1150
	R - APDRP	0	2500
	SCADA	0	400
D	Non Plan Schemes	1744	<b>5050</b>
	Total	75	405
	Sagarkhedu Scheme	0	200
	Energy Conservation	75	205
С	Others	3201	0000
	Normal RE Works - Wells Total	460 <b>5207</b>	700 <b>6886</b>
	Special Component plan	58	25
	TASP (Wells and Petapara)	4689	6161
В	Rural Electrification Schemes	1000	0.10.1
	Total	13265	7784
	Others Harijan Basti	-	-
	Scheme for meters	3960	-
	kutir jyoti scheme	1176	1122
	Electrification of hutments	1909	2142
	System Improvement Scheme	870	870

# Petitioner's submission

Gujarat Electricity Regulatory Commission



The petitioner has submitted that all the schemes are in line with the schemes as approved by the Commission in the MYT Order. The only variation is change in capital expenditure against the Golden Goal Scheme which now stands withdrawn. Further, it submitted that similar activities (covered under Golden Goal Scheme) will be undertaken under the REC schemes under which it has estimated capital expenditure of Rs 5091Lakhs. The revised capital expenditure for FY 2009-10 as submitted by MGVCL is Rs 31445 Lakhs.

Table 85: Estimated Capital Expenditure for FY 2009-10

(Rs Lakhs)

Particulars	Approved as per MYT order for FY 2009-10	Revised Estimates submitted by MGVCL for FY 2009-10
Capital Expenditure	38365	31445

#### 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. There are also some schemes 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 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 prioritized 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 MGVCL at Rs 31445 Lakhs. Further, it is assumed that the Utility would also be able to capitalize the same during the financial year.

Table 86: Approved Capitalization by Commission for FY 2009-10

(Rs Lakhs)

Gujarat Electricity Regulatory Commission



	2009-10	MGVCL for FY 2009-10	
Capital Expenditure	38365	31445	-
Capitalization			31445
Less : Consumer Contribution	5077	4165	4165
Grants	10061	7581	7581
Balance CAPEX	23227	19699	19699
Debt @ 70%	16259	13789	13789
Equity @ 30%	6968	5910	5910

# 4.6. Depreciation

#### Petitioner's submission

The petitioner has considered Gross Fixed Assets & Depreciation for FY 2009-10 on the basis of actuals of FY 2008-09 as per the provisional 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 5.28% 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.

Table 87: Depreciation for 2009-10 submitted by MGVCL

(Rs Lakhs)

Particulars	Approved as per MYT order for FY 2009-10	Revised Estimates submitted by MGVCL for FY 2009- 10
Gross Block in Beginning of the year	186667	162699
Additions during the Year (Net)	38365	31445
Depreciation for the Year	7421	9390
Average Rate of Depreciation	3.61%	5.26%

MGVCL has further submitted that GERC regulations specify that the CERC rates have to be used for computation of the depreciation therefore it has revised the deprecation rates from 3.64% to 5.26% for FY 2009-10 in line with the new rates notified by CERC.

# Commission's View

Gujarat Electricity Regulatory Commission



The Commission, in its MYT Order, had considered depreciation expenditure of Rs 7421 Lakhs for FY 2009-10, which amounts to 3.61% of Opening level of Gross Fixed Assets (GFA) of MGVCL FY 2009-10. The opening GFA was considered as Rs 186667 Lakhs for FY 2009-10 and the depreciation rates were considered as prescribed under GERC Tariff Regulations.

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 utility would be able to capitalize the capital expenditure as projected and accordingly approved the depreciation.

It may be noted that at the time of APR for FY 2009-10, 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 88: Depreciation Approved by Commission for FY 2009-10

(Rs Lakhs)

Particulars	Approved as per MYT order for FY 2009-10	Revised Estimates submitted by MGVCL for FY 2009-10	Revised Approved for FY 2009-10
Gross Block in Beginning of the year	186667	162699	167913
Additions during the Year (Net)	38365	31445	31445
Depreciation for the Year	7421	9390	9664
Average Rate of Depreciation	3.61%	5.26%	5.26%

# 4.7. Interest Expenses

#### Petitioner's submission

MGVCL has projected revised interest expenses of Rs. 7514 Lakhs for FY 2009-10 as compared to the approved expenses of Rs. 7650 Lakhs in the MYT Order.

Table 89: Projected Interest Expenses for FY 2009-10

(Rs Lakhs)

Gujarat Electricity Regulatory Commission



Particulars	Approved as per MYT order for FY 2009-10	Revised Estimates submitted by MGVCL for FY 2009-10
Opening Loans	61174	55923
Loan Additions during the Year	8889	13789
Repayment during the Year	6117	5592
Closing Loans	63946	64120
Average Loans	62560	60022
Interest on Loan	10.00%	9.70%
Interest in Security Deposit	6256	5821
Guarantee Charges	1236	1571
Total Interest & Financial Charges	158	123
Net Interest & Financial Charges	7650	7514
Less : Interest on Working capital		2282
Net Interest & Financial Charges	7650	5592

The Opening balance of Loan for FY 2009-10 is revised to Rs. 55,293 Lakhs as against Rs. 61,174 Lakhs, which is closing balance as per provisional numbers of FY 2008-09. The normative loan addition in FY 2009-10 is computed at Rs. 13789 Lakhs as per the Capex funding plan discussed above. Repayment of loan has been computed assuming that 1/10<sup>th</sup> portion would be repaid in every Financial Year. The total repayment of existing and new loan during the year is computed at Rs. 5592 Lakhs.

Security Deposit and Guarantee Charges have been assumed at the same level as the provisional figures of FY 2008-09. 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

Gujarat Electricity Regulatory Commission

The Commission has taken note that Interest and Finance charges approved in MYT Order had an element of Interest on Working Capital which is claimed separately on 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 shall be segregated. Accordingly, the Commission has 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 below:

Table 90: Loan allocation based on Interest of Working Capital

Particulars	Unit
Net Interest in FY 2008-09 (Rs Lakhs) #	5435
Actual Interest on Working Capital (Rs Lakhs)	3032
% of Loan Allocated for Working Capital	56%
% of Loan Allocated for Capital Expenditure	44%

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

The Commission has considered the interest rate of 10% for estimating the interest cost for FY 2009-10. Further, Interest on Security Deposit and Guarantee charges has been considered as estimated by the petitioner. Approved Interest and Finance Charges after considering the above allocation has been tabulated below.

Table 91: Interest & Financial Charges for FY 2009-10

(Rs Lakhs)

Particulars	Approved as per MYT order for FY 2009-10	Revised Estimates submitted by DGVCL for FY 2009-	Revised Approved for FY 2009- 10
Opening Loans	61174	55923	48105
Opening Loans considered for Capital Expenditure	0	0	21269
Loan Additions during the Year	8889	13789	13789
Repayment during the Year	6117	5592	5592
Closing Loans	63946	64120	29466
Average Loans	62560	60022	25367
Interest rate	10.00%	9.70%	10.00%
Interest on Loan	6256	5821	2537
Interest in Security Deposit	1236	1571	1571
Guarantee Charges	158	123	123
Total Interest & Financial Charges	- 7650	- 7514	4230

Gujarat Electricity Regulatory Commission

#### 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. 2671 Lakhs. However, instead of considering Revenues for two months, revenues of the company for only one month has 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

Table 92: Interest on Working Capital submitted by MGVCL

(Rs Lakhs)

Particulars	Approved as per MYT order for FY 2009-10	Revised Estimates submitted by MGVCL for FY 2009-10
O & M expenses	2445	2422
Maintenance Spares	946	1156
Receivables	21555	22483
Total Working Capital	24946	26061
Rate of Interest on Working Capital	10.25%	10.25%
Interest on Working Capital	2557	2671

MGVCL has further submitted that interest on working capital has been calculated based on the normative working methodology as specified by the 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 has been considered for projecting the total working capital during the FY 2009-10.

#### Commission's View

The Commission has estimated the working capital as per clause No. 66 of GERC terms and conditions of tariff and accordingly considered the Operation and maintenance

Gujarat Electricity Regulatory Commission



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 months of sales (in line with the same proposed by the petitioner). Further, the estimation is based on the 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 MGVCL has considered receivables equivalent to one month as submitted above. But instead of taking 1/12th of sales, MGVCL 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 below

Table 93: Interest on Working Capital for FY 2009-10

(Rs Lakhs)

Particulars	Approved as per MYT order for FY 2009-10	Revised Estimates submitted by MGVCL for FY 2009-10	Revised Approved for FY 2009-10
O & M expenses	2445	2422	2445
Maintenance Spares	946	1156	1156
Receivables	21555	22483	18571
Total Working Capital	24946	26061	22172
Rate of Interest on Working Capital	10.25%	10.25%	10.25%
Interest on Working Capital	2557	2671	2273



#### 4.9. Provision for Bad Debts

MGVCL has estimated the provisioning for write-off of bad debts at 0.10% of the revenue from sale of power. The Commission has recomputed the bad debts at 0.10% of the revenue as shown in the table below

**Table 94: Provision for Bad Debts** 

(Rs Lakhs)

Particulars	Approved as per MYT order for FY 2009-10	Revised Estimates submitted by MGVCL for FY 2009-10	Revised Approved for FY 2009-10
Provision for Bad Debts	248	270	223

# 4.10. Other Expenses

## Other Debits and Prior period expenses

FY 2009-10 MGVCL has projected Rs 1044 Lakhs in other debits and Prior Period expenses. 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 Rs 118 Lakhs and nil for other debits and Prior Period expenses respectively for FY 2009-10.

# **Extraordinary Items**

For FY 2009-10, MGVCL has projected Rs 3 Lakhs under the head Extraordinary Items. The Commission has approved Rs 4 Lakhs in the MYT Order. As discussed above all the controllable expenses are considered as approved in the MYT Order dated Jan 17, 2009. Accordingly, the approved amount in case of Extraordinary Items is Rs 4 Lakhs for FY 2009-10.

#### Other Expenses Capitalize

MGVCL has estimated that expenses capitalized for FY 2009-10 would be at the same levels as that of FY 2008-09. 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 Rs 4772 Lakhs for 2009-10.

Table 95: Other expenses for FY 2009-10

(Rs Lakhs)

Gujarat Electricity Regulatory Commission



Particulars	Approved as per MYT order for FY 2009-10	Revised Estimates submitted by MGVCL for FY 2009-10	Revised Approved for FY 2009-10
Other Debits	118	1044	118
Extraordinary Items	4	3	4
Net Prior Period Expenses / (Income)	0	0	0
Other Expenses Capitalized	(4472)	(4074)	(4472)
Total Other Costs	(4350)	(3027)	118

# 4.11. Return on Equity

## Petitioner's submission

MGVCL has submitted the revised estimate of Return on Equity for FY 2009-10 as Rs 6378 Lakhs. The return on equity has been computed @ 14% on average equity based upon the opening balance of equity and normative additions during the year, which has been arrived at by considering 30% of the capital expenditure net of consumer contribution and grants as funded from equity.

Table 96: ROE for FY 2009-10 as submitted by MGVCL

(Rs in Lakhs)

Particulars	Approved as per MYT order for FY 2009-10	Revised Estimates submitted by MGVCL for FY 2009-10
Opening Equity Capital	47467	42606
Equity Additions during the Year	6968	5910
Closing Equity	54435	48515
Average Equity	50951	45560
Rate of Return on the Equity	14.00%	14.00%
Return on Equity	7133	6378

# Commission's View

The Commission has considered the opening equity as per the provisional accounts. For the purpose of equity addition during the year, the Commission has considered capitalised

Gujarat Electricity Regulatory Commission



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 2009-10 is summarised in the following Table

Table 97: ROE for FY 2009-10

(Rs in Lakhs)

Particulars	Approved as per MYT order for FY 2009-10	Revised Estimates submitted by MGVCL for FY 2009-10	Revised Approved for FY 2009-10
Opening Equity Capital	47467	42606	44170
Equity Additions during the Year	6968	5910	5910
Closing Equity	54435	48515	50079
Average Equity	50951	45560	47125
Rate of Return on the Equity	14.00%	14.00%	14.00%
Return on Equity	7133	6378	6597

#### 4.12. Taxes

#### Petitioner's submission

The petitioner has estimated that the income tax for FY 2009-10 is Rs 820 Lakhs as against Rs 107 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

Gujarat Electricity Regulatory Commission

Since taxes are considered to be pass through, and there is no gain / loss calculation considered at this point of time, the Commission has considered the tax amount as the same as approved in the MYT Order ie. Rs 107 Lakhs for the FY 2009-10.

**Table 98: Taxes for FY 2009-10** 

(Rs Lakhs)

Particulars	Approved as per	Revised Estimates	Revised



	MYT order for FY 2009-10	submitted by MGVCL for FY 2009- 10	Approved for FY 2009-10
Provision for Tax / Tax Expenses	107	820	107

# 4.13. Aggregate Revenue Requirement for FY 2009-10

Based on analysis of each component discussed above, the Aggregate Revenue Requirement of MGVCL for FY 2009-10 as approved by the Commission in its MYT Order, as estimated by MGVCL in the APR Petition and as approved by the Commission in this Order is given in the following Table:

Table 99: Aggregate Revenue Requirement for FY 2009-10

(Rs Lakhs)

Sr. No.	Particulars	Approved as per MYT order for FY 2009-10	Revised Estimates submitted by DGVCL for FY 2009- 10	Revised Approved for FY 2009-10
1	Cost of Power Purchase	211862	245244	190135
2	Operation & Maintenance Expenses	29340	29066	29340
2.1	Employee Cost	21475	21006	21475
2.2	Repair & Maintenance	4240	4309	4240
2.3	Administration & General Charges	3625	3752	3625
3	Depreciation	7421	9390	9664
4	Interest & Finance Charges	7650	5232	4230
5	Interest on Working Capital	2557	2875	2273
6	Other Debits	118	1044	118
7	Extraordinary Items	4	3	4
8	Provision for Bad Debts	248	270	223
9	Net Prior Period Expenses / (Income)	0	0	0

Gujarat Electricity Regulatory Commission



Sr. No.	Particulars	Approved as per MYT order for FY 2009-10	Revised Estimates submitted by DGVCL for FY 2009-	Revised Approved for FY 2009-10
10	Other Expenses Capitalized	(4472)	(4074)	(4472)
11	Sub-Total [1+2 +(3 to 10)]	254728	289050	231515
12	Return on Equity	7133	6378	6597
13	Provision for Tax / Tax Paid	107	820	107
14	Total Expenditure (11 to 13)	261968	296249	238219
15	Less: Non-Tariff Income	3302	2619	3302
16	Aggregate Revenue Requirement (14 - 15)	258666	293630	234917
17	Revenue Gap in FY 2008-09 after treating losses due to Uncontrollable Factor (#)		10213	
18	Revised Aggregate Revenue Requirement (16 + 17)	258666	303843	234917

<sup>#.</sup> As explained in the earlier section, the gap of FY 2008-09 would be considered by the Commission during the tariff determination for FY 2010-11.

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

# Petitioner's submission

MGVCL has estimated category wise revenue based on the existing tariff which works out to Rs. Lakhs for FY 2009-10. It includes the FPPPA charges at Rs 0.91/kWh.

#### Commission's View

The Commission has estimated revenue on the basis of the revised approved sales and at existing tariffs. The Commission has considered the FPPPA charges at 0.12/kWh as

Gujarat Electricity Regulatory Commission



considered at the time of MYT Order. Further, incremental income from the new tariff category is not considered as the expected consumers which will fall in the new category would be marginal hence the revenue impact of the same would not be significant. The Commission's analysis of revenue from sale of power is as given below:

Table 100: Projected Revenue for FY 2009-10

(Rs Lakhs)

		Revenue FY 2009-10			
	Approved as per MYT order for FY 2009-10	Revised Estimates submitted by MGVCL for FY 2009-10	Revised Approved for FY 2009-10		
LT Consumers					
Residential	45,086	56,079	44,744		
Commercial	24,136	26,168	22,058		
Industrial LT	22,916	27,017	23,197		
Public Water Works	3,737	5,208	4,053		
Agriculture	7,651	15,650	8,274		
Street Light	2,052	2,548	2,070		
LT Total	105,578	132,669	104,395		
HT Consumers					
Industrial HT	93,173	116,174	100,245		
Railway Traction	17,164	20,951	18,214		
HT Total	110,337	137,125	118,460		
TOTAL	215,915	269,794	222,854		

# 4.15. Non-Tariff Income

Non-tariff income comprises of interest on loans & advances to employees / contractors, income from investments with Banks, Delayed Payment Surcharges from the Consumers etc.

#### Petitioner's submission

MGVCL has estimated Non-Tariff Income for FY 2009-10 by assuming 6% escalation over the provisional/final figures of FY 2008-09. The Non tariff income estimated by the petitioner for FY 2009-10 is Rs 2619 lakhs.

## Commission's views



Gujarat Electricity Regulatory Commission

The Commission has noted the submissions by the petitioner. The Commission has accepted the non-tariff income as estimated in MYT Order.

Table 101: Non-Tariff Income for FY 2009-10

(Rs Lakhs)

Particulars	Approved as per MYT order for FY 2009-10	Revised Estimates submitted by MGVCL for FY 2009-10	Revised Approved for FY 2009-10
Net Other Income	3302	2619	3032

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

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

MGVCL has estimated Other Consumer related Income for FY 2009-10 by escalating the provisional figures of FY 2008-09 by the average increase in number of consumers during FY 2009-10.

#### Commission's views

The Commission has considered the Other Income for FY 2009-10 as approved in MYT Order as given in the table below:

Table 102: Consumer Related Income for FY 2009-10

(Rs Lakhs)

Particulars	Approved as per MYT order for FY 2009-10	Revised Estimates submitted by MGVCL for FY 2009-10	Revised Approved for FY 2009-10
Other Consumer related Income	7392	4907	7392

Gujarat Electricity Regulatory Commission



#### 4.17. Subsidy for FY 2009-10

#### Petitioner's submission

MGVCL 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. 7971 Lakhs for the FY 2009-10. Apart from the above, the petitioner has submitted that MGVCL writes back 10% of its balance amount of consumer contribution and government grants every year and the same need to be added to the subsidy amount.

#### Commission's views

Commission has studied the methodology adopted by the petitioner, has analyzed the quantum of subsidy as estimated by the petitioner and accordingly approves the subsidy as below:

Table 103: Subsidy for FY 2009-10

(Rs Lakhs)

Particulars	Approved as per MYT order for FY 2009-10	Revised Estimates submitted by MGVCL for FY 2009- 10	Revised Approved for FY 2009-10
% Share in Unmetered Agriculture Sales			
Share of Agriculture Subsidy	7425	7971	7971
Other Subsidies (Write back of C.C. / Grants)	3008	4200	4200
Total	10433	12171	12171

#### 4.18. Total Revenue for FY 2009-10

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

Table 104: Total Revenue for FY 2009-10

(Rs Lakhs)



Gujarat Electricity Regulatory Commission

Sr. No.	Particulars	Approved as per MYT order for FY 2009-10	Revised Estimates submitted by MGVCL for FY 2009-10	Revised Approved for FY 2009-10
1	Revenue from sale of power at Current Tariff	215917	269794	222854
2	Other Income (Consumer related)	7392	4907	7392
3	Agriculture Subsidy	7425	7971	7971
4	Other Subsidies	3008	4200	4200
5	Total Revenue including Subsidy (1 to 4)	233742	286872	242418

#### 4.19. 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 105: Estimated revenue gap during FY 2009-10

(Rs Lakhs)

Sr. No.	Particulars	Approved as per MYT order for FY 2009- 10	Revised Estimates submitted by MGVCL for FY 2009-10	Revised Approved for FY 2009-10
1	Revised ARR	258666	303843	234917
2	Revenue from sale of power at Current Tariff	215917	269794	222854
3	Other Income (Consumer related)	7392	4907	7392
4	Total Revenue before Subsidy (2 + 3)	223309	274701	230246
5	Agriculture Subsidy	7425	7971	7971
6	Other Subsidies	3008	4200	4200
7	Total Revenue After Subsidy (4 to 6)	233742	286872	242418

Gujarat Electricity Regulatory Commission



	8	Gap / (Surplus) (1 - 7)	24924	16971	(7500)
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The Commission also observes that a major portion of the second year (FY 2009-10) of the control period has elapsed and the date for submission of ARR petition for FY 2010-11 is due on 15<sup>th</sup> December 2009. Therefore, the Commission is of the opinion that it shall address the computed gap/surplus in its next order when it considers the tariff determination for FY 2010-11. Hence the Commission directs the petitioner to continue to bill consumers at the existing tariffs and file its petition for tariff determination of FY 2010-11.



### 5. Compliance of Directives

The Commission in its multi-year tariff order dated 17th January 2009, for the control period FY 2008-09 to FY 2010-11 had issued various directives to MGVCL.

MVCL has submitted the details of compliance of the Directives issued earlier.

The Commission's comments on the status of Compliance of the Directives by MGVCL are given below. The Commission has also given specific directives to the licensee wherever required.

#### 5.1. Compliance of Existing Directives

#### **Directive 1**

#### **Purchase of Power from Renewable Energy Sources (RES)**

MGVCL is required to purchase power from renewable sources in accordance with the Regulations in force from time to time.

#### Compliance

MGVCL has stated that its renewable purchase obligation was 2% of its total consumption for the year FY 2008-09. Approved consumption of MGVCL for the year FY 2008-09 was 4923 MUs against which MGVCL purchased 161 MUs i.e. 3.26% of its total consumption. Thus, MGVCL has met its RPO.

#### Commission's comments

The Commission notes the fulfilment of the RPO obligation by the petitioner

#### Directive 2

#### **Timely Meter Reading and Billing**

There is a need for timely reading of meter promptly on the due date so that slab overlap does not put the consumer to loss. The licensee is required to provide relevant consumer related information on the spare space in the bill or along with the bill.



#### Compliance:

Following actions are already being implemented by MGVCL for efficient meter reading, billing and collection.

- MGVCL has already introduced spot billing system and bills are served to consumers on the spot on the basis of meter reading taken by meter readers.
- Meter reading through Hand-Held Computers have been implemented wherein meter reading data is entered in the Hand-Held Computers and print out is taken on the spot and the same is attached with the energy bill for that amount. The meter reading data in the Hand Held Instruments are stored properly to utilize the same in next bill. This ensures accuracy in the data and billing work in each cycle is expedited resulting into saving in time.

Accordingly, all efforts are being made to avoid slab overlapping.

The consumer related information is already being provided on the bill.

#### Commission's comments

The Commission has noted the compliance of MGVCL on timely meter reading and billing as well as printing of additional information on the consumer bill.

#### Directive 3

#### Consumption by agricultural pump sets

The progress on this is very poor. Only 22135 transformers are metered out of 40418 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 2008-09 may be furnished by May 2009.

#### Compliance:

It is submitted that only metered Agriculture connections are being released by MGVCL. This is evident from the information provided in the table below:



	М	etered		Un-Metered		To	otal Ag		
Years	Consumers	НР	MUs	Consumers	НР	MUs	Consumers	HP	MUs
2004- 05	27803	295439	256.65	28238	287051	487.98	56041	582490	744.63
2005- 06	30230	317898	261.58	27078	280660	481.02	57308	598558	742.6
2006- 07	31445	331192	245.39	26542	280684	477.68	57987	611876	723.07
2007- 08	33324	347089	264.76	26276	278730	474.63	59600	625819	739.39
2008- 09	36120	365433	335.21	26170	278311	473.05	62290	643744	808.26

Years	Total Ag			%age Metering		
Tears	Consumers	HP	MUs	Mtrd	Un-Mtrd	
2004-05	56041	582490	744.63	49.61	50.39	
2005-06	57308	598558	742.6	52.75	47.25	
2006-07	57987	611876	723.07	54.23	45.77	
2007-08	59600	625819	739.39	55.91	44.09	
2008-09	62290	643744	808.26	57.99	42.01	

As can be seen from the above table, the numbers of metered consumers are increasing every year and they account for almost 60% of the total agriculture consumers in FY 2008-09.

Further, meters are being also provided at Distribution Transformers feeding a group of pump-sets, which help in energy accounting of the consumers connected to that Distribution Transformer. Agriculture consumers are also being educated for adopting the metered tariff.



Further we wish to submit that M/s Feedback Ventures Private Limited has been engaged for studying the consumption of Agricultural pump set of all four Distribution Companies and the report is awaited.

#### Commission's comments

The Commission notes that the extent of metering by end of FY 2008-09 still remains at only 60%. MGVCL is directed to accelerate the pace of metering. In order to achieve consumer buy-in for metering, MGVCL should communicate with consumers, especially agriculture and interior regions' consumers, highlighting the long-term benefits of metering. Further, submission of the report on agriculture consumption should be expedited.

Further, MGVCL is directed to undertake a comprehensive study to obtain a realistic assessment of consumption of agriculture pumps. MGVCL, before commencing the study, shall share the detailed approach and methodology with the Commission and take its approval on the same.

#### **Directive 4**

#### **Energy Audit**

The metering on balance transformers may be completed. A brief report on the reduction in losses based on Energy Audit on some transformers at random in urban areas may be submitted to the Commission.

#### Compliance

MGVCL stated that it has been undertaking energy audit as an ongoing activity to identify high loss areas and to take effective steps to reduce the losses. It is submitted that the present loss level in MGVCL area is around 14.01%. However, it would be the endeavor of the company to ensure further improvement. Accordingly, more thrust is given to metering at transformer level and its proper reading along with the regular meter reading of the consumers connected to it. MGVCL would submit brief report on the same separately.

#### Commission's comments

The submission of the report on the reduction in losses based on Energy Audit performed on some transformers, at random in urban areas, shall be expedited.

#### Directive 5



#### **Distribution loss**

The measures taken shall result in reduction of losses further. Loss levels in different areas may be closely monitored and action taken to reduce the losses.

#### Compliance

The compliance had been submitted in the previous MYT filing and MGVCL is continuing with its efforts to monitor and reduce the losses further.

#### Commission's comments

MGVCL shall submit the steps taken to reduce technical and commercial losses.

#### **Directive 6**

#### Jyoti Gram Yojana

DISCOM shall report to the Commission to what extent the losses are reduced in each village / group of villages.

#### Compliance

MGVCL is closely monitoring the losses of JGY category and following work is being carried out to control the JGY losses over and above regular monitoring.

- The Aerial Bunch Conductor and PVC Coated Conductor are used in rural areas.
- The line span of JGY feeder is made either with ABC conductor or PVC coated conductor to avoid theft of energy by Agriculture consumers.
- The village transformers are augmented to correct size.
- The village transformers are balanced.
- 5 KVA transformers are used in small clusters as well as for BPL schemes.
- Energy accounting is carried out for the village transformers.
- The meters are taken out from the premises of the consumers.
- The feeder bifurcation is done where the length of the line was very long or the Amp loading is 150 Amp.

Last year 141 high loss feeders were entrusted to Senior Officers of the rank of SE and above. As a result, during the FY 2008-09, there was reduction of 4.71% in losses and a saving of 19.28 MUs.



#### Commission's comments

The Commission has noted the steps taken by MGVCL to reduce losses in JGY feeders. However, MGVCL has still not submitted the village-wise (single village or group of villages) loss reduction achieved. MGVCL shall submit the same in its next APR petition.

## <u>Directive – 7: Efficient Meter Reading Billing and Collection & Consumer Services</u>

#### Compliance

The compliances against the above directives were submitted along with the MYT petition. MGVCL would like to submit that the efforts are being continued to ensure efficient meter reading, billing and collection. All efforts are also being made to introduce consumer focused initiatives to improve the consumer services and satisfaction levels.

#### Commission's comments

The Commission has noted the compliance as submitted by MGVCL in the MYT petition.

#### **Directive 9**

#### 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 metering of the balance unmetered connections has been expedited and is expected to be completed within a short time frame. Further, all the consumers other than agricultural consumers are being provided with meters. For agricultural consumers too, as mentioned earlier under response to directive no. 3, new connections under any scheme are being released with meters

#### Commission's comments



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

#### **Directive 10**

#### **Business Plan**

Preparation of Business Plan including techno-economic justifications of the proposed schemes shall be expedited.

#### Compliance

MGVCL has finalized a comprehensive scope for the preparation of a Strategic Long-Term Business Plan which was entrusted to M/s.Crisil Infrastructure Advisory in January 2008. M/s. Crisil Infrastructure Advisory recently submitted (in June-2009) a draft report incorporating accounts of FY 2007-08. The copy of the same will be furnished to GERC separately.

#### Commission's comments

The Commission has noted the compliance of MGVCL.

#### **Directive 11**

#### Introduction of MYT

The MYT filing for the control period FY 2008-09 to FY 2010-2011 is delayed. Review petition on annual performance should be filed in time.

#### Compliance

Based on MGVCL request, the Commission had extended the time limit for filing of Annual Performance Review Petition upto 30.06.2009. However, due to unforeseen circumstances, the same could not be filed by the extended timeframe. MGVCL requests the Commission to condone this delay in the filing.

#### Commission's comments

The Commission has taken a very serious view of the delay in submission of the petition. The Commission is of the view that for future submissions the petitioner should file the petition within the stipulated time frame. In this regard the Commission

Gujarat Electricity Regulatory Commission





is of the opinion that for the FY 2010-11, the petitioner should submit its petition within the permissible time frame as provided under the regulations.

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

#### **Directive 12**

#### **Allocation of PPAs**

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

#### Compliance

As submitted in the MYT filing, the PPA allocation is reviewed from time to time by GUVNL and the four government discoms. It is a dynamic activity in view of the fact that the consumer mix, load growth and revenue realization is different from discom to discom and varies from year to year. Further, with the volatility of the fuel prices seen in the markets, firm allocation of PPA's to the discoms will put the discoms to the risk of very high power purchase expenses. Accordingly, to maintain parity of revenues among the discoms, PPAs have to be reallocated periodically as the energy requirements and the load profile of companies keeps differing. The issue of cross subsidy amongst the discoms is being addressed, at present, through PPA reallocation so as to maintain uniform retail tariff. We may have to continue this exercise unless the Commission addresses the issue of cross subsidy amongst various discoms through some other methodology. Accordingly, PPAs have been reallocated while preparing the Tariff Petition for FY 2009-10 based on the actual allocation in FY 2008-09 as per the provisional accounts.

#### Commission's comments

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

#### **Directive 13**

#### **Distribution Transformer Failures**



The transformer failures have marginally gone up during 2007-08. The transformer failures shall be reduced.

#### Compliance

The compliance to the above directive has been submitted as part of the previous MYT petition. In line with the directive, there has been further decrease in transformer failures as mentioned below:

Year wise % Transformer Failure

Particulars	FY 2004-05	FY 2005-06	FY 2006-07	FY 2007-08	FY 2008-09
Transformer Population	31597	34099	37926	40412	44509
Transformer Failures	3956	4436	3640	3910	2721
Transformer Failed (%)	12.52	13.01	09.60	9.68	6.11

As can be seen from the above, the Transformer failure is reduced to 6.11% in the year FY 2008-09 from 9.68% for the year 2007-08. In future also MGVCL will continue its efforts to reduce the distribution transformer failures and adhere to the standard of performance.

#### Commission's comments

The reduction in transformer failure rate especially in FY 2008-09 is appreciated. The Commission has noted the compliance.

#### 5.2. Fresh Directives

#### **Directive 1**

MGVCL 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**



MGVCL 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**

MGVCL 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**

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



### 6. Fuel and Power Purchase Cost Adjustment

#### **Submission by Petitioner**

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

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

Where,

Fog	Adjustment on account of variations in delivered cost of Fuel
	at GEB's (now GSECL) Thermal Power Stations Rs. Millions
PPP <sub>1</sub>	Adjustment on account of variable cost of power purchased in
	Rs. Millions
PPP <sub>2</sub>	Adjustment on account of fixed cost of power purchased in
	Rs. Millions
SE	Saleable Energy in Million Units

MGVCL has submitted that the above formula does not take into account the impact of variation in the fixed cost of GSECL Station which has significantly large impact on power purchase cost. Further, it expects that the GSECL's new plants coming in next few years will have additional impact. To incorporate the effect of above factors, it has suggested the following modification in the FPPPA formula.

In case of GSECL plants, for claiming the increase in the fuel costs, the existing formula approved by the Commission should be retained to calculate the Fuel price adjustment on account of fuel price increase of GSECL Plants as reproduced below

k
$$FOG = \sum [(H_B \times OGD_A) \times (Fuel C_A - Fuel C_B)]$$
n=1

Where,

F <sub>og</sub>	Adjustment on account of variations in delivered cost of Fuel at GSECL's
	Thermal Power Stations Rs. in millions

Gujarat Electricity Regulatory Commission



N	1 to k, the thermal power stations in GSECL.
$OGD_A$	is the actual level of delivered energy at the bus bar (net generation)
	from GSECL's thermal plants in million units during the FY 2009-10.
H <sub>B</sub>	is the base station heat rate in K.Cal./ Kwh calculated on the net output
	using permitted auxiliary consumption
FuelC <sub>A</sub>	is the new landed price of fuel at relevant GSECL's generating stations,
	expressed in Rs. / Kcal calculated after allowing only statutory / notified
	increases (or decreases) in the price of fuel/railway freight, taxes and
	duties on fuel as well as fuel price increase by the central/state
	Government PSUs.
FuelC <sub>B</sub>	is the base landed price of fuel at relevant GSECL's generating stations,
	expressed in Rs. / Kcal calculated using the base data. This parameter is
	constant (frozen) for the various quarters (periods) for which increases in
	fuel prices is being permitted.

And to capture the impact of variation of fixed cost from the approved base values by the Hon'ble Commission an additional component for recovery of the variation in fixed cost of GSECL plants from the approved fixed cost (hereinafter called as "PPP<sub>2G</sub>") shall be introduced as shown below

 $\label{eq:FPPA} \textbf{FPPA} = \left[\textbf{F}_{\text{OG}} + \textbf{PPP}_{\text{2G}} + \textbf{PPP}_{1} + \textbf{PPP}_{2}\right] / \left[\textbf{S.E.}\right]$  Where,

F <sub>og</sub>	Adjustment on account of variations in delivered cost of Fuel at GEB's (now GSECL) Thermal Power Stations Rs. Millions	
PPP <sub>2G</sub>	Adjustment on account of fixed cost of power purchased from GSECL station in Rs. Millions	
PPP <sub>1</sub>	Adjustment on account of variable cost of power purchased in Rs. Millions	
PPP <sub>2</sub>	Adjustment on account of fixed cost of power purchased in Rs. Millions	
SE	Saleable Energy in Million Units	

#### Commission's view:

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

Gujarat Electricity Regulatory Commission



#### Base Power Purchase Prices for Calculation of FPPPA for FY 2009-10

As substantial part of the financial year is already over for calculation of FPPPA for FY 2009-10, the base rates approved vide multi-year tariff order dated 17th January, 2009 will be considered as indicated in the table below. Further, FPPPA be recovered in the form of fuel and power purchase adjustment charge for every unit of the 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 106: Base Power Purchase Prices for Calculation of FPPPA for FY 2009-10

Sr. No.	Power Stations	Capacity (MW)	Fixed Cost (Rs. Lakhs)	Energy Purchase (MU)	Variable Cost (Rs/Kwh)
	GSECL				
1	Ukai TPS	850	26973	4,879	1.50
2	Ukai Hydro	305	2806	637	-
3	Gandhinagar I to IV	660	27946	3,340	1.75
4	Gandhinagar V	210	9631	1,540	1.47
5	Wanakbori I to VI	1260	40126	8,538	1.73
6	Wanakbori VII	210	9334	1,540	1.64
7	Sikka TPS	240	11679	1,408	1.99
8	Kutch Lignite I to III	215	17452	1,190	1.07
9	Kutch Lignite IV	75	6229	461	0.98
10	Dhuvaran oil	220	7797	1,313	3.76
11	Kadana Hydro	242	6863	190	0.00
12	Utran Gas Based	135	5890	1,044	2.16
13	Dhuvaran Gas Based - Stage-I	107	5636	815	2.21
14	Dhuvaran Gas Based - Stage-II	112	7912	860	2.22
15	Utran Extension	374	14239	-	1.86
16	Sikka Extension	-	0	-	2.01
	Total of GSECL Plants	4,841	200,513	27,755	
	IPPs				
17	ESSAR	300	11106	1224	2.01

Gujarat Electricity Regulatory Commission



Sr. No.	Power Stations	Capacity (MW)	Fixed Cost (Rs. Lakhs)	Energy Purchase (MU)	Variable Cost (Rs/Kwh)
18	GPEC	655	45919	2556	2.47
19	GIPCL II (160)	160	5136	953	1.72
20	GIPCL-SLPP	250	18071	1577	0.95
21	GSEG	156.1	11522	722	1.48
22	GIPCL - I (145)	41.6	922	0	2.17
23	GMDC - Akrimota	250	23841	1388	0.61
24	GSEG Expansion	350	958	18	2.12
25	GIPCL, Expansion	250	17520	1377	1.75
26	GSPC-Pipavav	360	986	23	2.12
	Total of IPPs	2,773	135,981	9,838	
	Share from Central Sector				
27	NPC - Tarapur- 1&2	160	0	1010	0.94
28	NPC - Kakrapar	125	0	803	2.03
29	NPC - Tarapur- 3&4	274	0	1822	2.73
30	NTPC - KORBA	360	9014	2474	0.57
31	NTPC - VINDHYACHAL - I	230	7464	1575	1.03
32	NTPC - VINDHYACHAL - II	239	10733	1636	0.98
33	NTPC - VINDHYACHAL - III	266	11982	1908	0.94
34	NTPC - KAWAS	187	10417	350	3.09
35	NTPC - JHANOR	237	11965	1544	1.73
36	NTPC - Kahalgoan	166	10005	1076	1.21
37	NTPC - Sipat Stage - II	273	0	1769	0.54
38	SSNNL - Hydro	231	0	288	2.05
39	NTPC Kahalgaon (New)	260	18221	1264	1.70
40	NTPC North Karanpura	77	5396	375	1.70
41	Sipat Stage-I	540	37843	3500	1.70
	Total from central Sector	3,625	133,040	21,394	

OTHERS	MU		Variable Cost (Rs/Kwh)
Reliance Industries LTD. Naroda	161.49	105	2.34
United Phosphorous LTD. Jhagadia	0.00	0	0.00
Gujarat Alkalis & Chemical LTD. Baruch	53.76	35	1.97

Gujarat Electricity Regulatory Commission



OTHERS		MU		Variable Cost (Rs/Kwh)
ONGC Anlkeshwar		44.04	23	1.90
ONGC, Hazira		15.85	5	1.90
Adani Exports (Philips Carbon)		54.24	16	2.00
Arvind Mills LTD		0.00	0	0.00
Wind Farms	Capacity (MW)	Fixed Cost (Rs.	Energy Purchase (MU)	Variable Cost (Rs/Kwh)
		Lakhs)		
Wind Farms (Old Policy)	24	24	48	1.75
Wind Farms (New Policy)	700.5	0	1227	3.37
Bagasse Plants				
Bagasse	15.9	15.9	98	3
Competitive Bidding		_		
APPL	1000	91209	6482	1.479
Aryan	200	21866	519	0.2084

### 7. Tariff Philosophy and Category-Wise Tariffs

# 7.1. Open Access- Transmission Charges, Wheeling Charges and Cross Subsidy Surcharge

As major portion of the FY 2009-10 has already elapsed, the Commission has decided to continue with the existing Open Access- Transmission Charges, Wheeling Charges and Cross Subsidy Surcharge. The Commission will review the same during the ARR and Tariff Determination process of FY 2010-11.

#### 7.2. Impact of Electricity Duty

An issue was raised before the Commission related to levy of Electricity Duty which is levied in the State on tariff payable by Consumers including the FPPPA. It was pointed out that any increase in the power bills due to increase in FPPPA puts an additional burden on Consumer due to compounding effect of *ad-valorem* structure of Electricity Duty. Several representations were made to the Commission to change the above structure of Electricity Duty.

It must be noted that imposition of Electricity Duty is the prerogative of the Government. The Commission, therefore, has no direct jurisdiction to deal with this matter. However, in view of the public concerns on the issue the Commission requested Additional Secretary, Finance Department Government of Gujarat to represent the State Government in the public hearing. In response to the above it was submitted by the Additional Secretary that Electricity Duty has been rationalised over a period of time. It has been reduced from its peak of 60% to current maximum limit of 25% which translates into a reduction of Rs 1000 Cr of Electricity Duty.

It was further clarified by Finance Department that Electricity Duty is dealt with by Energy and Petrochemicals Department and this issue needs to be examined by the said department. Only after it receives official communication from Energy and Petrochemicals Department, it would be able to announce any change in the current structure.



The Commission feels that the system of *ad-valorem* duty makes the impact of any tariff increase compound even further. Due to the current *ad-valorem* structure of Electricity Duty its impact on the net tariff payable by Consumers in the State of Gujarat is on a 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 *ad-valorem* nature of the Electricity Duty.

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.

#### 7.3. Proposal of MGVCL for structural changes in tariff categories

MGVCL in its tariff petition has not proposed any tariff hike for FY 2009-10. However, the company has proposed some minor modifications to the current tariff structure. The company has also proposed new categories such as LFD-II (b) and LTP V for better management of the system.

#### Commission's decision

As major portion of the FY 2009-10 has already elapsed, the Commission has decided to consider the proposed changes during the APR and tariff determination process for FY 2010-11.

However, the Commission has decided to consider the petitioner's proposal to introduce a new sub-category in respect of LT supply for lift irrigation purpose. The background, requirement and applicability of the said category is presented below.

#### **Background**

The Commission in its MYT Order had introduced HTP-V Category applicable to High Tension Agricultural Pumping loads, HT Lift Irrigation Scheme (for lifting water from canal/river/dam etc to supply water directly to the fields of farmers for agricultural purpose only). GUVNL had requested to introduce a new category LTP-V in the same lines as that of HTP-V after the public hearing for MYT petition. The same was not considered in the MYT Order dated Jan 17, 2009.



Subsequently, Government of Gujarat decided to take up the pilot projects of Pressurized Irrigation Network System (PINS) in the command area of Sardar Sarovar Project. Accordingly, need was felt to introduce a new category of LT supply to such schemes.

#### Requirement of the proposed category of tariff

It has been submitted to the Commission that the Sardar Sarovar Project is in its advance stage of completion and Sardar Sarovar Narmada Nigam Limited (SSNNL) has taken up several Pilot Projects of Pressurized Irrigation Network System (PINS) in the Command area of Sardar Sarovar Project (SSP). SSNNL has therefore, requested GUVNL and its subsidiary companies to arrange to provide necessary power connection in view of overall economy of pressurized irrigation Network System (PINS) at the locations of pilot projects on top priority basis with a proposal to charge prevailing tariff for Agriculture power usage.

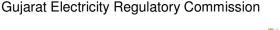
Further, Government had decided to take up 100 Pilot Projects in the first phase and to release connections accordingly vide letter dt.20<sup>th</sup> November,2008. The decision of the State Government was communicated to GUVNL with regard to implementation of the Pilot Project by SSNNL for pressurized irrigation network system in the command area of Sardar Sarovar Project. Under the current tariff structure there is no tariff category which applies to the above mentioned LT Load. The Commission, therefore, appreciates the need to introduce a new tariff category in lines of HTP-V. The applicability and tariff schedule for the said category is as mentioned below.

#### **Applicability**

#### 5.6 RATE LTP-V (for LT Lift Irrigation scheme only)

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

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



### **COMMISSION'S ORDER**

The Commission provisionally approves the gap of Rs 96.27 Cr based on the Annual Performance Review for FY 2008-09. The Commission further approves the Aggregate Revenue Requirement (ARR) for Madhya Gujarat Vij Company Limited (MGVCL) for FY 2009-10 as shown in the following table:

Table 107: Revised Approved ARR for FY 2009-10

(Rs Lakhs)

Particulars	Revised Approved ARR for FY 2009-10
Cost of Power Purchase	190135
Operations & Maintenance Expenses	29340
Employee Cost	21475
Repair & Maintenance	4240
Administration & General Charges	3625
Depreciation	9664
Interest & Finance Charges	4230
Interest on Working Capital	2273
Other Debits	118
Extraordinary Items	4
Provision for Bad Debts	223
Net Prior Period Expenses / (Income)	0
Other Expenses Capitalized	(4472)
Sub-Total	231515
Return on Equity	6597
Provision for Tax / Tax Paid	107
Total Expenditure	238219
Less: Non-Tariff Income	3032
Aggregate Revenue Requirement	234917



The approved retail supply tariff will be in accordance with the Tariff Schedule annexed to this order. The order shall come into force with immediate effect.

Sd/- Sd/-

DR. P K MISHRA Chairman SHRI PRAVINBHAI PATEL
Member

Place: Ahmedabad

Date: 14<sup>th</sup> December, 2009

### **TARIFF SCHEDULE**

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

#### 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 utilised only within the compact area of the premises not intervened by any area/road belonging to any person or authority other than the consumer.
- Except in cases where the supply is used for the purpose for which the Distribution Licensee has permitted lower tariff, the power supplied to any consumer shall be utilised only for the purpose for which supply is taken and as provided for in the tariff.
- 7. The above is without prejudice to the rights of the GERC to determine different tariffs for such consumers as it may consider it expedient under the provisions of Section 61 and Section 62 of the Electricity Act, 2003.
- 8. The 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.
- The Fuel Cost and Power Purchase Adjustment Charges shall be applicable in accordance with the Formula approved by the Gujarat Electricity Regulatory Commission from time to time.
- 10. Payment of penal charges for usage in excess of contract demand / load for any billing period does not entitle the consumer to draw in excess of contract demand / load as a matter of right.



#### PART - I

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

#### 1.0 RATE LFD-I (FOR RESIDENTIAL PREMISES):

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.

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
---------------	------------------

#### **PLUS**

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

(a)	First 50 units	270 Paise per Unit
(b)	Next 50 units	300 Paise per Unit
(c)	Next 100 units	360 Paise per Unit
(d)	Next 100 units	420 Paise per Unit
(e)	Above 300 units	470 Paise per Unit

Gujarat Electricity Regulatory Commission



1.3 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

\*\*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.

#### 2.0 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 <u>Fixed Charges/Month:</u>

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



#### **PLUS**

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

(a)	First 50 units	220 Paise per Unit
(b)	Next 50 units	250 Paise per Unit
(c)	Next 100 units	310 Paise per Unit
(d)	Next 100 units	370 Paise per Unit
(e)	Above 300 units	430 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)

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

#### 2.4 <u>Minimum bill (excluding meter charges)</u>:

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 in rural area with population upto 10,000 as per Census- 2001, entire consumption will be charged under this tariff.

#### 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 <u>Fixed Charges</u>:

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

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#### 3.2 <u>Energy charges</u>:

(a)	For the first 50 units per month	360 Paise per unit
(b)	For the next 100 units per month	420 Paise per unit
(c)	For the next 150 units per month	480 Paise per unit
(d)	For the remaining units per month	490 Paise per unit

#### 3.3 <u>Minimum Bill</u> (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	310 Paise per Unit

#### 5.0 RATE-LTP

This tariff shall be applicable for motive power services

#### 5.1 <u>RATE LTP-I</u>

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:

Ī		For installation having contracted load upto and including	
	(a)	10 BHP:	360 Paise per Unit
		For entire consumption during the month	

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	For installation having contracted load exceeding 10 BHP:	385 Paise per Unit
(b)	For entire consumption during the month	303 Faise per Offit

#### **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 <u>Minimum bill per installation per month for consumers other than Seasonal</u> <u>Consumers:</u>

(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 400 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	400 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 20 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 20 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	Rs.210/- per kW

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demand

#### **PLUS**

#### 5.3.2 Energy charges:

For the entire consumption during the month 405 Paise per	Unit
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#### **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) 20 kW

#### 5.3.5 Minimum Bill

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

#### NOTE:

- 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:

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

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

#### 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 20 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.

Fixed Charges per month:

Gujarat Electricity Regulatory Commission



#### **PLUS**

#### **Energy Charges**:

For entire consumption during the month	200 Paise per Unit
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#### 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.

#### 5.6 RATE LTP-V

Applicable for supply of electricity to Low Tension Agricultural consumers contracting load up to 125 BHP requiring 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

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#### 6.0 RATE WW (Water Works)

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	350 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	PLUS			
(b)	Energy charges per month: For entire consumption during the month	330 Paise per Unit		

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

Energy charges per month:	240 Paise/Unit
For entire consumption during the month	240 Paise/Offit

6.4 **Type IV** - Water works and sewerage pumps operated by Municipalties / Nagarpalikas:

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Energy charges per month:	270 Paise/Unit
For entire consumption during the month	270 Faise/Offit

# 6.5 <u>Time of Use Discount</u>:

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.

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.140/BHP/month

#### **ALTERNATIVELY**

# 7.1.2 <u>Metered Tariff:</u>

Fixed Charges	Rs.10 per BHP per month
Energy Charges: For entire consumption	50 Paise per Unit per month

# 7.1.3 <u>Tatkal Scheme:</u>

Fixed Charges	Rs.10 per BHP per month
Energy Charges:	70 Paise per Unit per month
For entire consumption	70 Faise per Offit per month

Gujarat Electricity Regulatory Commission



<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.
- 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.

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 <u>Tariff for Street Light for Local Authorities and Industrial Estates</u>:

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

#### 8.1.1 Energy Charges:

For all the units consumed during the month: For streetlights operated	330 Paise per Unit
by industrial estates and local authority	330 Faise per Offit

#### 8.1.2 <u>Minimum Charges</u>:

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:

Gujarat Electricity Regulatory Commission



December 2009

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 <u>Tariff for power supply for street lighting purposes to consumers other than the local authorities and industrial estates:</u>

# 8.2.1 Energy charges:

For all units consumed during the month	330 Paise per kWh
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#### 8.2.2 Minimum Charges:

Rs.3 per month per fixture

#### 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 <u>Maintenance other than Replacement of Lamps:</u>

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 <u>Energy Charges</u>:

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

#### 9.1.2 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

Gujarat Electricity Regulatory Commission



<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.

# 10.0 DELAYED PAYMENT CHARGES FOR LT CONSUMERS:

10.1 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 1.5% per month or part thereof (upto the time of ultimate disconnection of supply) in case of all LT 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 1.25%. Delayed payment charges will be levied at the rate of 1% per month or part thereof 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-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

#### 11. RATE HTP-I

For regular power supply for larger power service purposes not specified in rate HTP-II (A) and II (B)

12. RATE HTP-II (A)

For the purpose specified therein.

13. RATE HTP-II (B)

For the purposes specified therein.

14. RATE HTP-III

For supplying at high tension for temporary purposes and for contract load of not less than 100 kVA.

15. RATE HTP-IV

For using electricity exclusively during night hours.

16. RATE HTP-V

#### 17. RATE RAILWAY TRACTION

# 11.0 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 Rate HTP-II(A) and HTP-II(B). Research & Development Units recognised by the Ministry of Science and Technology, Department of Scientific and Industrial Reasearch and Government, shall pay at HTP-I rates. Water Works and Sewerage pumping stations run by Local Authorities and GW & SB, GIDC Water Works, Jetty which is an integrated part of main plant of industries and water works connection which is an integrated part of main plant of industries having the Contracted Demand 100 kVA and above shall pay at HTP-I rates.

- 11.1 <u>Demand Charges ; (other than Public Water Works)</u>
- 11.1.1 For billing demand upto contract demand.

Gujarat Electricity Regulatory Commission



(a)	For first 500 kVA of billing demand	Rs.98/- per kVA per month
(b)	For next 500 kVA of billing demand	Rs.139/- per kVA per month
(c)	For next 1500 kVA of billing demand	Rs.208/- per kVA per month
(d)	For billing demand in excess of 2500 kVA	Rs.237/- per kVA per month

11.1.1a For billing demand upto contract demand for Public Water Works of Gujarat Water and Sewage Board, Municipal Coporations, Municipalities and other local authorities.

(a)	For first 500 kVA of billing demand	Rs.89.25/- per kVA per month
(b)	For next 500 kVA of billing demand	Rs.126/- per kVA per month
(c)	For next 1500 kVA of billing demand	Rs.189/- per kVA per month
(d)	For billing demand in excess of 2500 kVA	Rs.215.25/- per kVA per month

11.1.2 For Billing Demand in Excess of Contract Demand (other than Public Water Works)

For	billing	demand	in	excess	over	the	Rs.369 per kVA per month
contra	act den	nand					Tio.ooo per kv/k per monur

11.1.2a For billing demand in excess of contract demand for Public Water Works of Gujarat Water and Sewage Board, Municipal Coporations, Municipalities and other local authorities.

F	or	billing	demand	in	excess	over	the	Rs.335 per kVA per month
С	ont	ract den	nand					Tio.oco por teve por monar

#### **PLUS**

11.2 <u>Energy Charges</u> for all HTP-I consumers including Public Water Works.

For	For entire consumption during the month				
(a)	Upto 1000 kVA contract demand	385 Paise per Unit			
(b)	For 1001 kVA to 2500 kVA contract demand	405 paise per Unit			
(c)	Above 2500 kVA contract demand	415 Paise per Unit			

#### **PLUS**

11.3 <u>Time of Use Charges</u>:

Gujarat Electricity Regulatory Commission



(These charges shall be levied from a consumer having contract demand or actual demand of 500 kVA and above):

For energy consumption during the two peak periods, viz., 0700
Hrs to 1100 Hrs and 1800 Hrs to 2200 Hrs

75 Paise per Unit

#### 11.4 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

#### 11.5 Minimum Bills:

Payment of "demand charges" based on kVA of billing demand.

#### 11.6 <u>Lighting and Non-Industrial Loads</u>:

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.

# 11.7 <u>Power Factor</u>:

#### 11.7.1 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 "Demand Charges" and "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 "Demand Charges" and "Energy Charges", will be charged.

#### 11.7.2 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 "Demand Charges" and



"Energy Charges" for every 1% rise or part thereof in the average power factor during the month above 95%.

#### 11.8 Meter Charges:

The meter charges per month are chargeable 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.

#### 11.9 <u>Electricity Duty and Tax on Sale of Electricity</u>:

Electricity Duty and tax on sales of electricity will be collected in accordance with the rates prescribed by the Government from time to time. The consumer shall make separate metering arrangement for segregation of energy consumption wherever necessary for the purpose of levying electricity duty at different rate.

#### 11.10 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 minutes period of maximum use where such meter reading directly the maximum demand in KW/KVA have been provided.

#### 11.11 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.

#### 11.12 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%

#### 11.13 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.

# 11.14 Seasonal Consumers taking HT Supply:

11.14.1 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.

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

11.14.3 The total minimum amount under the head "Demand and Energy Charges" payable by a seasonal consumer satisfying the eligibility criteria under sub clause 10.14.1 above and complying with provisions stipulated under sub clauses 10.14.2 above shall be Rs.4000/- per annum per kVA of the billing demand.

#### 11.14.4 The billing demand shall be the highest of the following:

- (a) The highest of the actual maximum demand registered during the calendar year.
- (b) Eighty-five percent of the arithmetic average of contract demand during the year.
- (c) One hundred kVA.

11.14.5 Units consumed during the off-season period shall be charged for at the flat rate of 415 Paise per unit.

11.14.6 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.



#### 11.15 <u>Delayed Payment Charges</u>:

No delayed payment charges if the bill is paid within ten days from the date of billing.

Delayed payment charges are payable at the rate of 1.5% per month on Distribution Licensees' charges upto the time of ultimate disconnection of supply and at the rate of 1.25% per month from the date of permanent disconnection.

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

# 12.0 RATE HTP-II(A)

**Applicability:** This tariff shall be applicable for supply of energy to HT consumers contracting for 100 KVA and above, requiring power supply for Railways (other than Railway Workshops chargeable under Rate HTP-I and Railway Traction), hotels, amusement parks, resorts, water parks, aerodromes, cinemas, auditoriums, banks, studios, offices, film production, etc., requiring and given separate point of supply and such other establishments as may be approved from time to time by the Commission.

#### 12.1 Demand Charges:

(a)	For billing demand upto contract demand:				
	(i)	For first 1000 kVA of billing demand	Rs.173/- per kVA per month		
	(ii)	For billing demand in excess of 1000	Rs.260/- per kVA per month		
	()	kVA	Tiol2007 por KV7 (por mona)		
	For h	oilling demand in excess of contract	Rs.396 per kVA per month for billing		
(b)	demand		demand in excess over the contract		
	dema	ind	demand		

#### **PLUS**

# 12.2 Energy Charges:

For all units consumed during the month	420 Paise per Unit
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#### **PLUS**

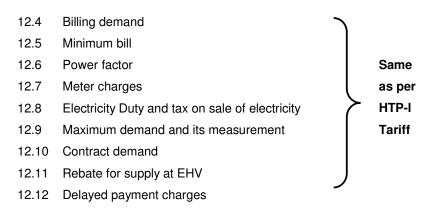
# 12.3 <u>Time of Use Charges</u>:

(These charges shall be levied from a consumer having contract demand or actual demand of 500 kVA and above):

Gujarat Electricity Regulatory Commission



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 False per Offic



# 13.0 **RATE HTP-II(B)**:

**Applicability:** This tariff shall be applicable for supply of energy to HT consumers contracting for 100 kVA and above, requiring power supply for residential colonies, townships, educational institutions governed by the government, and Defence Establishments (Establishments under the Armed Forces and the Ministry of Defence, other than the units of public sector undertakings under the Ministry of Defence), requiring and given separate point of supply.

### 13.1 <u>Demand Charges</u>:

(a) For entire billing demand	Rs.127/- per kVA per month
(b) For billing demand in excess of contract demand	Rs.385 per kVA per month

# **PLUS**

#### 13.2 <u>Energy Charges</u>:

For all units consumed during the month	370 Paise/Unit
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#### **PLUS**

#### 13.3 <u>Time of Use Charges</u>:

These charges shall be levied on a consumer having contract demand or actual demand of 500 kVA and above:

Gujarat Electricity Regulatory Commission



	ergy consumption during the two peak periods, viz., Irs to 1100 Hrs and 1800 Hrs to 2200 Hrs	75 Paise per Unit
13.4	Billing Demand	
13.5	Minimum Bill	
13.6	Power Factor	Same as
13.7	Meter Charges	per HTP-I
13.8	Electricity Duty and Tax on Sale of Electricity	Tariff
13.9	Maximum Demand and its Measurement	
13.10	Contract Demand	
13.11	Rebate for supply at EHV	
13.12	Delayed Payment Charges	

# 14.0 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 regular basis under a proper agreement shall be deemed to be taking supply for temporary period.

# 14.1 <u>Demand Charges</u>:

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**

# 14.2 <u>Energy Charges</u>:

For all units consumed during the month	630 Paise per Unit
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#### **PLUS**

# 14.3 <u>Time of use charges</u>:

(These charges be levied from the consumer who is having contracted demand or actual demand of 500 kVA and above).

Additional charge for the en	ergy consumption during two pe	eak 75 Paisa par Unit
periods, i.e., 07.00 Hrs to 11.00	Hrs and 18.00 Hrs to 22.00 Hrs.	75 Faise per Utili

# 14.4 Billing Demand:

Gujarat Electricity Regulatory Commission



14.5	Minimum Bill:	
14.6	Maximum demand and its measurement.	Same as per
14.7	Meter Charges:	HTP-I
14.8	Electricity duty and tax on sale of electricity	Tariff
1/0	Contract domand	

14.9 Contract demand

14.10 Delayed payment charges

# 15.0 RATE HTP-IV

This tariff shall 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 Rate HTP-II(A) and HTP-II(B); and consumer opting to use electricity <u>exclusively</u> during night hours from 10.00 PM to 06.00 AM next day.

#### 15.1 <u>Demand Charges:</u>

Same rates as specified in Rate HTP-I

#### **PLUS**

# 15.2 <u>Energy Charges:</u>

For all units consumed during the month			200 Paise per Unit
15.3	Billing demand	١	
15.4	Minimum bill		
15.5	Power factor		
15.6	Meter charges		As per
15.7	Electricity duty and tax on sale of Electricity	$\geq$	Rate
15.8	Maximum demand and its measurement		HTP-I
15.9	Contract demand		
15.10	Rebate for supply at EHV		
15.11	Delayed payment charges	1	

### 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.

# 16.0 <u>RATE HTP- V</u>

# 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.

#### 16.1 Demand Charges:

Demand Charges Rs. 25 per kVA per Month

#### **PLUS**

# 16.2 Energy Charges:

For all units consumed during the month	160 Paise per Unit	
S	<b>'</b>	

- 16.3 Power Factor
- 16.4 Meter charge
- 16.5 Billing Demand
- 16.6 Contract demand
- 16.7 Minimum bill
- 16.8 Maximum demand
- 16.9 Delayed Payment Charges
- 16.10 Rebate for supply at EHV

# As per HTP-I Tariff

# 17.0 RATE – RAILWAY TRACTION:

Gujarat Electricity Regulatory Commission

This tariff is applicable for power supply to Railway Traction at 132 kV/66 kV.

#### 17.1 Demand Charges:

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(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 17.1(b).

#### **PLUS**

# 17.2 Energy Charges:

For all units consumed during the month 455 Paise per Unit	For all units consumed during the month	455 Paise per Unit
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- 17.3 Power Factor
- 17.4 Meter charge
- 17.5 Billing Demand
- 17.6 Contract demand
- 17.7 Minimum bill
- 17.8 Maximum demand
- 17.9 Delayed Payment Charges
- 17.10 Rebate for supply at EHV

As per HTP-I Tariff



# **Annexure 1.1 – List of Objectors**

# List of Organizations and Individuals who filed objections/suggestions

1	N M Sadguru Water & Development Foundation
2	Shri Rameshbhai J. Fuletra
3	Shri Pankajkumar B. Patel
4	Mahuva Chamber of Commerce & Industry
5	Smt. Chetnaben M. Patel
6	Consumer Education and Research Society
7	Gondal Chamber of Commerce & Industry
8	Shri Surendrabhai B. Mehta
9	Bhatia International Limited
10	Bhavnagar District Chamber of Industries
11	Bhartiya Kisan Sangh
12	Akhil Bhartiya Grahak Panchayat – Rajkot
13	Sarpanch, Dhunvav Gram Panchyat
14	Tax Payers' Users' Consumers Association – Jamnagar
15	Dediyasan Industrial Estate Association
16	Shri Sunil Oza
17	Dy. Chief Electrical Engineer, Western Railway
18	Utility Users' Welfare Association
19	Federation of Gujarat Industries
20	Shri Vipul Hirabhai Raiyani
21	Gujarat Krushi Vij Grahak Suraksha Sangh



# **Annexure 1.2 – List of participants in Public Hearing**

# List of participants in Public Hearing

1.	N M Sadguru Water & Development Foundation
2.	Shri Surendrabhai B. Mehta
3.	Akhil Bhartiya Grahak Panchayat – Rajkot
4.	Sarpanch, Dhunvav Gram Panchyat
5.	Dy. Chief Electrical Engineer, Western Railway
6.	Gondal Chamber of Commerce & Industry
7.	Jagega Gujarat Sangharsh Samiti
8.	Shri Amarsinh Chavda
9.	Consumer Education and Research Society
10.	Bhatia International Limited
11.	Utility Users' Welfare Association
12.	Federation of Gujarat Industries
13.	Dediyasan Industrial Estate Association
14.	Shri Vipulbhai Hirabhai Raiyani
15.	Shri Hasmukh Shah
16.	Gujarat Krushi Vij Grahak Suraksha Sangh

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