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



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

For

**Dakshin Gujarat Vij Company Limited** 

Case No. 993/2010

31<sup>st</sup> March 2010

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 2009-10 &

Aggregate Revenue Requirement for FY 2010-11

FOR

Dakshin Gujarat Vij Company Limited (DGVCL)

Case No. 993/2010

31<sup>st</sup> March 2010

#### **CONTENTS**

1.	_	und and Brief History	
	1.1.Bac	kground	13
	1.2.Dal	sshin Gujarat Vij Company Limited (DGVCL)	13
		mmission's Order for First Control Period	
	1.4.Cor	mmission's Order on APR of First year of the control period	14
	1.5.Adr	mission of the current petition and public hearing process	15
		ntents of the Order	
	1.7. <b>A</b> pp	proach of this Order	16
		proach for APR for FY 2009-10	
	1.9.App	proach for ARR for FY 2010-11	17
2.	Brief ou	tline of objections raised, response from Petitioner and Commission	າ'ຣ
	Views		18
	2.1.Bac	kground	18
	2.2.Rev	enue gap for FY 2009-10	18
	2.3. Inci	rease in Distribution Loss in FY 2009-10	19
	2.4. Filir	ng of single petition by all the Distribution licensees	20
	2.5. Pro	curement of Sub-standard material	20
	2.6. Fixe	ed Charges from HTP- IV and LTP- IV	21
	2.7. Inte	erest on Security Deposit	21
	2.8.Lor	g Pending list of Agriculture Connections	23
	2.9. Pov	ver factor rebate and penalty	23
	2.10.	Quantum and quality of supply to Agriculture and Supply Hours	to
		Agriculture	24
	2.11.	Minimum ceiling in LTP- III to be reduced from 20 kW to 15 kW	
	2.12.	LFD-I (Rural)	25
	2.13.	Clarification with respect to LTP-V category	25
	2.14.	Responses to be communicated in Gujarati language	26
	2.15.	Non-Compliance of Directives by Distribution licensees	26
	2.16.	FPPPA mechanism	27
	2.17.	Recovery of Reconnection charges without physical disconnection	28
	2.18.	Agriculture connections in dark zone	29
	2.19.	Separate Tariff for Brick Manufacturers instead of present agreeme	nt
		with Agriculture consumers	29
	2.20.	Ad-valorem structure of Electricity Duty	29
	2.21.	Meter rent to be recovered only up to the cost of meter	30
	2.22.	Similar tariff for Urban and Rural Residential Consumers	31



	2.23.	Increase in O&M expenses and Bad and doubtful debts	31
	2.24.	Increase in the ARR of FY 2010-11	
	2.25.	Distribution loss of JGY feeders	32
	2.26.	Amendment to Guidelines/Regulations related to consumer services.	33
3.	Annual P	erformance Review for FY 2009-10	34
	3.1.Sale	es	34
	3.2. Dist	ribution Losses and Energy Input Requirement	35
	3.3. Pow	er Purchase Cost	36
	3.4.O&N	Æxpenditure      Æxpenditure	38
	3.5.Cap	ital Expenditure and Capitalization	42
		reciation	
	3.7. Inter	rest Expenses	47
	3.8. Inter	rest on Working Capital	51
	3.9. Prov	vision for Bad Debts	53
	3.10.	Other Expenses	54
	3.11.	Return on Equity	56
	3.12.	Taxes	58
	3.13.	Aggregate Revenue Requirement for FY 2009-10	58
	3.14.	Revenue from sale of power for FY 2009-10	60
	3.15.	Non-Tariff Income	62
	3.16.	Other Consumer related Income for FY 2009-10	63
	3.17.	Subsidy for FY 2009-10	64
	3.18.	Total Revenue for FY 2009-10	64
	3.19.	Estimated Revenue Gap for FY 2009-10	65
4.	Determin	ation of Aggregate Revenue Requirement for FY 2010-11	66
	4.1.Sale	es	66
	4.2. Dist	ribution Losses and Energy Input Requirement	76
	4.3.Tota	al Power Purchase Cost	77
	4.4.O&N	# Expenditure	90
	4.5.Cap	ital Expenditure and Capitalization	93
	4.6.Dep	reciation	97
	4.7.Inter	rest Expenses	99
	4.8.Inter	rest on Working Capital	101
	4.9. Prov	rision 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 2010-11	106
	4.14.	Revenue from sale of power for FY 2010-11	107





#### APR for FY 2009-10 & ARR for FY 2010-11

	4.15.	Non-Tariff Income	108
	4.16.	Other Consumer related Income for FY 2010-11	109
	4.17.	Subsidy for FY 2010-11	110
	4.18.	Total Revenue for FY 2010-11	111
	4.19.	Estimated Revenue Gap for FY 2010-11	111
5.	Complia	nce of Directives	113
	5.1.Cor	mpliance of Earlier Directives	113
	5.2.Fre	sh Directives	126
6.	Fuel and	d Power Purchase Cost Adjustment	127
7.	Open A	ccess - Transmission Charges, Wheeling charges and cro	ss subsidy
	surchar	ge	132
	7.1.Tra	nsmission Charges	132
	7.2.Wh	eeling Charges	133
	7.3.Crd	ss-Subsidy Surcharge	134
8.	Tariff Ph	ilosophy and Category-Wise Tariffs	135
	8.1.Intr	oduction – Tariff Philosophy	135
	8.2.Tar	iff rationalisation is the key Focus	135
	8.3.Tar	iff rationalisation results in moderate tariff hike	136
	8.4.Ch	anges in the Tariff Schedule	137
	8.5. lmp	pact of Electricity Duty	138
	8.6.Rev	vised Gap	139



#### **TABLES**

Table 1: Distribution loss in JGY	
Table 2 : Revised Approved Sale for FY 2009-10	
Table 3: Distribution Losses considered by Commission for FY 2009-10	
Table 4: Energy Balance considered for FY 2009-10	
Table 5: Power Purchase Cost FY 2009-10	
Table 6: Approved Power Purchase Cost FY 2009-10	
Table 7: Employee Cost estimated by DGVCL for FY 2009-10	
Table 8: Employee expenses approved by Commission for FY 2009-10	
Table 9: R&M expenses estimated by DGVCL for FY 2009-10	
Table 10: R&M expenses approved by Commission for FY 2009-10	
Table 11: A&G Expenses estimated by DGVCL for FY 2009-10	. 41
Table 12: A&G Expenses approved by the Commission for FY 2009-10	. 42
Table 13: Revised Approved O& M Expenses by the Commission for FY 2009-10.	. 42
Table 14: Capital Expenditure as submitted by DGVCL	. 43
Table 15: Approved Capitalization by Commission for FY 2009-10	
Table 16: Depreciation for 2009-10 submitted by the DGVCL	. 46
Table 17: Depreciation Approved by Commission for FY 2009-10	
Table 18: Projected Interest Expenses for FY 2009-10	
Table 19: Loan allocation based on Interest on Working Capital	. 49
Table 20 : Details of Segregated Loans	
Table 21: Repayment considered for FY 2009-10	
Table 22: Interest & Financial Charges for FY 2009-10	. 51
Table 23: Interest on Working Capital submitted by DGVCL	. 52
Table 24: Interest on Working Capital for FY 2009-10	. 53
Table 25: Proposed provision for Bad Debts	. 53
Table 26: Approved provision for Bad Debts	. 54
Table 27: Other Expenses proposed in FY 2009-10	. 54
Table 28: Other expenses for FY 2009-10	. 56
Table 29: RoE estimated by DGVCL	. 56
Table 30: RoE Approved for FY 2009-10	. 57
Table 31: Taxes for FY 2009-10	. 58
Table 32: Aggregate Revenue Requirement for FY 2009-10	. 59
Table 33: Estimated Revenue in FY 2009-10	. 60
Table 34: Estimated Average Realization during FY 2009-10	. 61
Table 35: Projected Revenue in H2 – FY 2009-10	. 61
Table 36: Projected Revenue for FY 2009-10	. 62
Table 37: Approved Non-Tariff Income for FY 2009-10	. 63
Table 38: Consumer Related Income for FY 2009-10	. 63
Table 39: Subsidy for FY 2009-10	. 64
Gujarat Electricity Regulatory Commission	Pag



Table 40: Estimated Revenue Gap for FY 2009-10	65
Table 41: Historical Trend in Category-wise Units sold	66
Table 42: Category-wise Growth rates of Units Sold	67
Table 43: Category-wise No. of Consumers	67
Table 44: Growth rate of no. of Consumers	68
Table 45: Category-wise Connected Load	68
Table 46: Growth Rate for Connected Load (in MW)	69
Table 47: Revised Approved Residential Sales for FY 2010-11	70
Table 48: Revised Approved Commercial Sales for FY 2010-11	71
Table 49: Revised Approved Industrial Sales for FY 2010-11	71
Table 50: Revised Approved Public Water Works for FY 2010-11	72
Table 51: Sales proposed for Agriculture FY 2010-11	73
Table 52 Estimated Metered and Unmetered Sales in FY 2010-11	73
Table 53: Total Revised Sales for Agriculture FY 2010-11	74
Table 54: Revised Approved Public Lighting Sales for FY 2010-11	74
Table 55: Revised Approved Industrial HT for FY 2010-11	75
Table 56: Revised Approved Railway Demand for FY 2010-11	75
Table 57 : Approved Sales for FY 2010-11	76
Table 58: Distribution Losses approved by Commission for FY 2010-11	77
Table 59: Energy Balance considered for FY 2010-11	77
Table 60: Revised Power Purchase Cost submitted by DGVCL	78
Table 61: PPA Allocation for FY 2010-11	79
Table 62: Revised approved Cost of Energy (Plant wise) for FY 2010-11	81
Table 63: Approved Cost of Energy for FY 2010-11	82
Table 64: Revised Transmission Charges as submitted by DGVCL	83
Table 65: Revised Approved Transmission Charges for FY 2010-11	83
Table 66: Revised Cost of GUVNL as submitted by DGVCL	84
Table 67: Revised Approved GUVNL Operational Expenses	87
Table 68: Revised Approved Cost E-Urja for FY 2010-11	88
Table 69: Approved GUVNL Cost for the FY 2010-11	88
Table 70: Sharing of GUVNL Cost /(Surplus)	89
Table 71: Revised Total Power Purchase Cost for FY 2010-11	89
Table 72: Employee Cost estimated by DGVCL for FY 2010-11	90
Table 73: Employee expenses approved by Commission for FY 2010-11	91
Table 74: R&M expenses estimated by DGVCL for FY 2010-11	91
Table 75: Approved R&M expenses of DGVCL for FY 2010-11	
Table 76: A&G expenses estimated by DGVCL for FY 2010-11	
Table 77: Approved A&G expenses by DGVCL for FY 2010-11	93
Table 78: Revised Approved O& M Expenses by Commission for FY 2010-11	93



Table 79: Proposed Capital Expenditure for FY 2010-11	94
Table 80: Estimated Capital Expenditure for FY 2009-10	95
Table 81: Capital expenditure and Capitalization trend of last three years	96
Table 82: Approved Capitalization for FY 2010-11	96
Table 83: Proposed Depreciation by DGVCL for 2010-11	97
Table 84: Depreciation Approved by Commission for FY 2010-11	98
Table 85: Projected Interest Expenses for FY 2010-11	99
Table 86: Approved Interest & Financial Charges for FY 2010-11	. 100
Table 87: Interest on Working Capital submitted for FY 2010-11	. 101
Table 88: Approved Interest on Working Capital for FY 2010-11	. 102
Table 89: Provision for Bad Debts	
Table 90: Other expenses for FY 2010-11	. 104
Table 91: RoE for FY 2010-11 as submitted by DGVCL	. 104
Table 92: Approved RoE for FY 2010-11	. 105
Table 93: Taxes for FY 2009-10	. 106
Table 94 : Aggregate Revenue Requirement for FY 2010-11	. 106
Table 95: Projected Revenue for FY 2010-11	
Table 96: Non-Tariff Income for FY 2010-11	
Table 97: Other Consumer related Income for FY 2010-11	. 109
Table 98: Subsidy for FY 2009-10	. 110
Table 99: Total Revenue for FY 2010-11	. 111
Table 100: Estimated revenue gap during FY 2010-11	. 111
Table 101: Table showing the % of HT Consumers having AMR facility	. 118
Table 102: Table showing the Transformer failure rate	. 120
Table 103: Table showing the Meter replaced by the Petitioner	. 123
Table 104: Table showing the future plan for replacement of old meters	. 124
Table 105: Details of the cases detected Under Section 135	. 125
Table 106: Details of the cases detected Under Section 126	. 125
Table 107: Base Power Purchase cost for Calculation of FPPPA for FY 2010-11.	. 129
Table 108: Net Gap for FY 2010-11	
Table 109: Revised Approved ARR for FY 2010-11	. 140
Table 110: Table showing the Final ARR of FY 2008-09	. 170



#### **ABBREVIATIONS**

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



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



## BEFORE THE GUJARAT ELECTRICITY REGULATORY COMMISSION AT AHMEDABAD

Case No. 993/2010

Date of the Order: 31st March, 2010

#### **CORAM**

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

#### **ORDER**

#### Background and Brief History

#### 1.1. Background

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

#### 1.2. Dakshin Gujarat Vij Company Limited (DGVCL)

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

Gujarat Electricity Regulatory Commission

Page 13



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

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

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

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

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

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

The above order was issued based on the provisional accounts for FY 2008-09. The Petitioner has now submitted the audited accounts for FY 2008-09. The Commission



has taken note of the same. Based on this observation, the approved ARR for FY 2008-09 is enclosed as Annexure 1.3 to this Order.

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

The Commission undertook a preliminary evaluation and analysis of the petition submitted by the Petitioner and admitted the petition for Annual Performance Review (APR) of FY 2009-10 and approval to continue existing tariff for FY 2010-11 for distribution business (Case No 993 of 2010) on 4<sup>th</sup> January 2010.

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

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

- 1. Gujarat Samachar (In all editions of the state)
- 2. Indian Express (In all editions of the state)

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

Interested parties/stakeholders were asked to file their objections and suggestions on the petition on or before 8<sup>th</sup> February, 2010. The Commission received objections/suggestions on the petition from sixteen respondents. The Commission thereafter fixed the dates of public hearing on 25<sup>th</sup> to 26<sup>th</sup> February and 3<sup>rd</sup> March, 2010 and sent communication to the objectors, inviting them to take part in the public hearing process for presenting their views on the petition before the Commission.

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

#### 1.6. Contents of the Order

The order comprises of eight chapters as under:

1. The first chapter provides a background regarding the Petitioner, the petition filed and details of the public hearing process.



- 2. The second chapter provides detailed account of the public hearing process, including the objections raised by various stakeholders, the Petitioner's responses and the Commission's views on the responses.
- 3. The third chapter details the process of Annual Performance Review of FY 2009-10.
- 4. The fourth chapter analyses the Aggregate Revenue Requirement for FY 2010-11.
- 5. The fifth chapter deals with compliance of earlier directives and issue of fresh directives.
- 6. The sixth chapter deals with fuel and power purchase cost adjustment.
- 7. The seventh chapter deals with computation of wheeling charges and cross-subsidy surcharge.
- 8. The eight chapter discuses the tariff philosophy and design approved by the Commission.

#### 1.7. Approach of this Order

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

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

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

Regulation 9.1 of the MYT Regulations provides that where the ARR of a generating company or a licensee is covered under a Multi-Year Tariff framework, the licensee

Gujarat Electricity Regulatory Commission

Page 16



shall be subject to Annual Performance Review (APR) during the Control Period. With regard to the scope of the APR, Regulation 9.3 of the MYT Regulations provides that the scope of the APR shall include a comparison of the performance of the generating company or the licensee, with the approved forecast of aggregate revenue requirement and expected revenue from tariff and charges.

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

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

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

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

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



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

#### 2.1. Background

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

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

#### **Objections**

Some stakeholders have highlighted the high gap of Rs. 16040 lakhs shown by the Petitioner and asked the Commission to reject the same on the grounds of inefficiencies of the petitioner. They have specifically highlighted increases in distribution loss and power purchase cost and reduction in sales as the prime reasons for the huge revenue gap, which ought to be rejected.

#### **DGVCL's response**

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



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

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

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

#### **Objections**

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

#### **DGVCL's response**

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

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

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

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

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



Providing insulated/coated/Arial bunch conductor in theft-prone areas

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

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

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

#### **Objections**

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

#### **DGVCL's response**

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

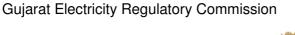
#### **Commission's Analysis**

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

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

#### **Objections**

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



Page 20



#### **DGVCL's response**

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

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

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

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

#### **Objections**

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

#### **DGVCL's response**

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

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

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

#### 2.7. Interest on Security Deposit

#### **Objections**

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



that the Petitioner shall issue equity shares against the security deposit to the consumers.

#### **DGVCL's response**

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

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

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

This will result in a substantial increase in administrative work (requirement of additional manpower, stationery, communication, correspondence with consumers, etc.) for the Company, to maintain its records of Bank Guarantees/NSCs; carefully preserve the Bank Guarantees/NSCs up to their validity periods; monitor the expiry of Bank Guarantees/NSCs of each consumer; and thereafter ensure the renewal of the same before its expiry. Any increase in expenditure on account of such a change shall ultimately pass through the tariff and will lead to an increase in the tariff.

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

THE PARTY OF THE P

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

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

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

#### **Objections**

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

#### **DGVCL's response**

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

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

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

#### 2.9. Power factor rebate and penalty

#### **Objections**

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

#### DGVCL's response

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

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

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



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

#### **Objections**

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

#### **DGVCL's response**

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

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

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

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

#### **Objections**

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

#### DGVCL's response

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



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

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

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

#### **Objections**

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

#### DGVCL's response

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

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

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

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

#### **Objections**

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

#### **DGVCL's response**

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

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



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

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

#### **Objections**

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

#### **DGVCL's response**

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

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

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

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

#### **Objections**

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

#### **DGVCL's response**

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

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

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



#### 2.16. FPPPA mechanism

#### **Objections**

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

#### DGVCL's response

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

The Commission may kindly appreciate that demand and availability of power is a dynamic situation which undergoes changes on a day-to-day and hour to hour basis. Power is scheduled in day ahead for next day, based on projected demand and supply of that day. On a particular day, demand may come down because of various reasons like rains, holidays, temperature variation, and festivals. Availability also undergoes change every day based on forced shutdown of plants, early completion of maintenance of power plants, wind power availability based on wind velocity, etc. Therefore, scheduling of power cannot remain constant. Everyday, scheduling of power from a particular source is decided based on cost or saving.

The bulk purchase of power is undertaken from various sources and bulk sale of power made to distribution companies/licensees. The estimated demand each day is met through the scheduling of generation of available power in accordance with the Merit Order Protocol, except to meet the technical requirement of Power Plant, Must Run Power Stations, gas based Power Stations having take or pay liability under gas

Gujarat Electricity Regulatory Commission

Page 27



supply agreement and compulsory running of some power plants in certain areas to maintain appropriate voltage in that area (where there are no other power plants), till the estimated demand is met. Thus, the power with the lower variable cost gets scheduled first and so on in that order.

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

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

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

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

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

#### **Objections**

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

#### **DGVCL's response**

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

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

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

Gujarat Electricity Regulatory Commission

Page 28



#### 2.18. Agriculture connections in dark zone

#### **Objections**

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

#### DGVCL's response

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

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

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

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

#### **Objections**

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

#### **DGVCL's response**

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

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

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

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

#### **Objections**

Several representations were made to the Commission, related to the levy of Electricity Duty in the state on tariff payable by consumers including the FPPA. It was pointed out that any increase in the power bills due to an increase in FPPPA puts an additional burden on the consumer due to the compounding effect of the *ad*-



*valorem* structure of Electricity Duty. It was suggested that the duty shall be charged only on energy charges and on a per unit basis.

#### **DGVCL's response**

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

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

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

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

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

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

#### **Objections**

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

#### **DGVCL's response**

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



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

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

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

#### **Objections**

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

#### **DGVCL's response**

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

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

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

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

#### **Objections**

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

#### **DGVCL's response**

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



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

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

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

#### **Objections**

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

#### DGVCL's response

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

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

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

#### 2.25. Distribution loss of JGY feeders

#### **Objections:**

The stakeholders have highlighted the high loss of above 56% in JGY feeders. Considering the significant share of consumption of JGY it is essential that the petitioner should reduce the losses of JGY feeders.



#### **DGVCL's response:**

JGY Category loss has large contribution to overall loss of the Petitioner and, therefore, reduction in JGY Losses is the prime task of the Petitioner. It has taken up this task in a phased manner, whereby, high loss feeders have been assigned to various officers for close monitoring. Due to enhanced vigilance activity and intensive efforts JGY category losses have reduced by more than 1.5% during the year FY 2008-09.

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

Sr.No.	Year	Unit sent out [MUs] Unit sold out [MUs]		% Loss
1	2007-08	1384.53	544.87	60.65
2	2008-09	1507.03	627.61	58.35
3	2009-10 (Upto Nov-2009)	1093.89	477.533	56.35

Table 1: Distribution loss in JGY

#### Commission's Analysis:

The Commission has taken note of the various activities carried out by the Petitioner to curb JGY losses. However, the Commission is concerned that the loss level is still very high at almost 56%. The Commission directs the Petitioner to target an annual reduction of at least 10% in the loss level.

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

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

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



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

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

#### 3.1. Sales

The Petitioner has submitted category-wise actual sales in H1 and total estimated sales for FY 2009-10 in the APR petition. The revised estimated sales for FY 2009-10 are approx 30 MUs higher than the sales approved by the Commission in its order dated 14 December, 2009. The revised estimated sales for the complete FY 2009-10 (except agricultural category) are not very different from the approved sale. Hence the Commission approves the estimated sales (sale in the agricultural category is considered as approved in last order). The revised approved sale for FY 2009-10 are shown in Table 2 below.

Table 2: Revised Approved Sale for FY 2009-10

(MU)

Consumer Category	Approved as per Order dt. 14th Dec 2009	Revised Estimates submitted by DGVCL for FY 2009-10	FY 2009- 10 (H1 - Actual)	FY 2009- 10 (H2 - Projected)	Revised Approved for FY 2009-10
LT Consumers					
Residential	1539	1539	759	780	1539
Commercial	532	532	281	251	532
Industrial LT	2464	2464	1263	1201	2464
Public Water Works	95	95	46	49	95
Agriculture	567	597	213	355	567
Street Light	30	30	14	17	30
Temporary Supply at LT	0	0	0	0	0

Gujarat Electricity Regulatory Commission



Page 34

Consumer Category	Approved as per Order dt. 14th Dec 2009	Revised Estimates submitted by DGVCL for FY 2009-10	FY 2009- 10 (H1 - Actual)	FY 2009- 10 (H2 - Projected)	Revised Approved for FY 2009-10
LT Total	5227	5257	2575	2653	5228
HT Consumers					
Industrial HT	3481	3481	1759	1722	3481
Railway Traction	270	270	137	133	270
HT Total	3751	3751	1895	1856	3751
TOTAL	8978	9008	4470	4509	8979

#### 3.2. Distribution Losses and Energy Input Requirement

#### Petitioner's submission

The Petitioner has submitted that it would be able to achieve distribution losses of 14.53% in FY 2009-10 as against 13.45% approved by the Commission

The Petitioner has submitted that the revised estimate for distribution loss is 14.53 % as against the approved level of 13.45% in the MYT Order. The actual distribution losses for H1 of FY 2009-10 are 15.29%.

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

#### Commission's view

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

The Commission has estimated the energy requirement based on the projected distribution losses. However it is clarified that this shall not be considered as approval of the higher distribution loss. The Commission will undertake the true-up (based on the MYT approved distribution losses of 13.45%) during the next APR process.





Table 3: Distribution Losses considered by Commission for FY 2009-10

Particulars	Approved as per Order dt. 14th Dec 2009	H1 Actual FY 2009-10	Revised Estimates submitted by DGVCL for FY 2009-10	Considered for calculating Energy requirement
<b>Distribution Losses</b>	13.45%	15.29%	14.53%	14.53%

The energy balance based on the distribution loss considered above and transmission loss as per GETCO Order is given in Table 4 below:

Table 4: Energy Balance considered for FY 2009-10

(MUs)

Particulars	Unit	Approved as per Order dt. 14th Dec 2009	FY 2009-10 (R E)	FY 2009-10 (H1 - Actual)	Considered for calculating Energy requirement
Energy Sales	MUs	8848	9008	4470	8979
Distribution Losses	MUs	1375	1531	807	1526
	%	13.45%	14.53%	15.29%	14.53%
Energy Requirement	MUs	10223	10539	5277	10505
Transmission Losses	MUs	454	555	275	466
	%	4.25%	5.00%	4.96%	4.25%
Total Energy to be input to Transmission System	MUs	10677	11094	5552	10971
Pooled Losses in PGCIL System	MUs	166	162	81	162
Total Energy Requirement	MUs	10843	11256	5633	11133

#### 3.3. Power Purchase Cost

#### Petitioner's submission

The total power purchase cost for the Petitioner consists of the basic power purchase cost, transmission charges payable to GETCO & PGCIL and the Discom's share of Gujarat Electricity Regulatory Commission Page 36



GUVNL cost and E-Urja charges. The total estimated power purchase cost for FY 2009-10 is submitted by the Petitioner is based on H1 actual and estimated cost of H2 based on the estimated demand presented above.

Table 5: Power Purchase Cost FY 2009-10

(Rs. Lakhs)

Particulars	Approved as per Order dt. 14th Dec 2009	H1 Actual FY 2009-10	Revised Estimates submitted by DGVCL for FY 2009-10
Total Power Purchase Cost	356772	214564	423119

#### Commission's View

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

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

Based on the above, the power purchase costs for the Control Period have been calculated and approved by the Commission is as shown in Table 6 below:



**Table 6: Approved Power Purchase Cost FY 2009-10** 

Particulars	Approved as per Order dated 14- 12-2009	Revised Estimates submitted by DGVCL for FY 2009-10	FY 2009-10 (H1 - Actual)	FY 2009- 10 (H2 - Projected)	Revised Estimates considered for APR
Total Power Purchase Cost	356772	423119	214564	176451	399553

# 3.4. O&M Expenditure

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

## a. Employee Expenses

#### Petitioner's submission

The Petitioner has projected revised expenses of Rs. 18199 Lakhs as compared to the approved expenses of Rs. 12154 Lakhs FY 2009-10 in the Order dated 14 December, 2009.

Table 7: Employee Cost estimated by DGVCL for FY 2009-10

(Rs. Lakhs)

Particulars	Approved as per Order dated 14-12-2009	H1 Actual FY 2009- 10	H2 Estimated FY 2009- 10	Revised Estimates submitted by DGVCL for FY 2009-10
Employee Cost excluding treatment of Sixth Pay Commission	10992	9237	7800	17037
40% of component of Sixth Pay Commission for FY 2007-08 approved for payment in 2009-10	1162	0	0	1162
Total Employee Cost Considered	12154	9237	7800	18199

Actual employee cost for H1 of FY 2009-10 is Rs. 9237 Lakhs. The Petitioner has submitted that employee expenditure is estimated on the basis of actual employee

Gujarat Electricity Regulatory Commission

Page 38



cost incurred by the company during H1 of FY 2009-10. Further, employee cost for H2 of FY 2009-10 is estimated after considering the 4% escalation on actual employee cost for H1 of FY 2009-10 after excluding gratuity fund provision of Rs. 1737 Lakhs.

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

#### Commission's View

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

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

As discussed in the earlier section 'Approach for APR for FY 2009-10', the Commission has not revised the controllable expenses for FY 2009-10. Therefore, it has considered the employee expenses as approved in the Order dated 14<sup>th</sup> December, 2009. The Commission will review the actual employee expenses for FY 2009-10 during the next APR process. The approved employee expense for FY 2009-10 is shown in Table 8 below:



Table 8: Employee expenses approved by Commission for FY 2009-10

Particulars	Approved as per Order dated 14-12-2009	Revised Estimates submitted by DGVCL for FY 2009-10	Revised Estimates considered for APR
Employee Cost excluding treatment of Sixth Pay Commission	10992	17037	10992
40% of component of Sixth Pay Commission for FY 2007-08 approved for payment in 2009-10	1162	1162	1162
Total Employee Cost Considered	12154	18199	12154

## b. R&M Expenses

#### Petitioner's submission

The Petitioner has revised the R&M expenses for FY 2009-10 to Rs. 2237 Lakhs. The same has been estimated by considering 10% increase on the provisional R&M expenses for FY 2008-09. The actual R&M cost for H1 of FY 2009-10 is Rs.616 Lakhs.

Table 9: R&M expenses estimated by DGVCL for FY 2009-10

(Rs. Lakhs)

Particulars	Approved as per Order dated 14- 12-2009	H1 Actual FY 2009-10	H2 Estimated FY 2009-10	Revised Estimates submitted by DGVCL for FY 2009-10
Repair & Maintenance Costs	3093	616	1621	2237

#### Commission's View

The Commission has noted the projection as submitted by the Petitioner. Since these expenses are controllable in nature, the Commission has not revised the approved R & M expenses as proposed by the Petitioner for FY 2009-10. The approved R&M expenditure is as shown in the Table 10 below:

Gujarat Electricity Regulatory Commission



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

Particulars	Approved as per Order dated 14- 12-2009	Revised Estimates submitted by DGVCL for FY 2009-10	Revised Estimates considered for APR
Repair & Maintenance Costs	3093	2237	3093

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

#### Petitioner's submission

The Petitioner has revised the A&G expenses for FY 2009-10 to Rs. 2853 Lakhs by considering an escalation of 8% on the actual A&G expenditure for FY 2008-09. The actual A&G expense for H1 of FY 2009-10 is Rs. 1453 Lakhs.

Table 11: A&G Expenses estimated by DGVCL for FY 2009-10

(Rs. Lakhs)

Particulars	Approved as per Order dated 14-12-2009	H1 Actual FY 2009-10	H2 Estimated FY 2009- 10	Revised Estimates submitted by DGVCL for FY 2009-10
Administration & General Charges	2755	1453	1400	2853

## **Commission's View**

As discussed in the earlier section 'Approach for APR for the FY 2009-10, the Commission has not revised the controllable expenses for FY 2009-10. Accordingly, it has considered the A&G expenses as approved in the Tariff Order dated 14<sup>th</sup> December, 2009. The Commission will review the actual A&G expenses for FY 2009-10 during the next APR process. The approved A&G expense for FY 2009-10 is shown in Table 12



Table 12: A&G Expenses approved by the Commission for FY 2009-10

Particulars	Approved	Revised Estimates	Revised
	as per	submitted by	Estimates
	Order dated	DGVCL for FY 2009-	considered
	14-12-2009	10	for APR
Administration & General Charges	2755	2853	2755

# **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 13: Revised Approved O& M Expenses by the Commission for FY 2009-10

(Rs. Lakhs)

Particulars	Approved as per Order dated 14-12-2009	Revised Estimates submitted by DGVCL for FY 2009-10	Revised Estimates considered for APR
Employee Expenses	12154	18199	12154
Repair & Maintenance Costs	3093	2237	3093
Administration & General Charges	2755	2853	2755
Total O&M Expenses	18002	23289	18002

## 3.5. Capital Expenditure and Capitalization

Actual capital expenditure incurred by the Petitioner in H1 and total estimated capital expenditure for FY 2009-10 is shown in Table 14 below:



Table 14: Capital Expenditure as submitted by DGVCL

				(ns. Lakiis)
Sr. No.	Schemes	Approved as per MYT Order dated 17- 01-2009	H1 Actual FY 2009-10	Revised Estimates submitted by DGVCL for FY 2009-10
Α	Distribution Schemes			
	Normal Development Scheme	6000	1557	6549
	System Improvement Scheme	9000	548	4777
	Jyoti Gram Yojna	0	0	0
	Electrification of hutments	191	1	57
	Kutir Jyoti Scheme	1176	120	120
	Total	16367	2226	11503
В	Rural Electrification Schemes			
	TASP( Wells&Petapara)	88	3298	9522
	Special Component Plan	65	4	4
	PMGY	0	0	0
	RE Normal (Wells) New Guj. Pattern	45	50	600
	Drip Irrigation	0	0	0
	Electrification of Premitive Tribes	0	0	0
	Total	198	3352	10126
С	Others			
	Energy Conservation		0	182
	Total	0	0	182
D	Non-Plan Schemes			
	RE Non Plan (Tatkal)	0	0	0
	APDRP	0	0	2000
	RGGVY	2075	405	3000
	SPA	0	17	37
	ADB	0	0	0
	RE scheme exp.	0	0	0
	Total	2075	422	5037
Е	Other New Schemes			
	Automatic PF control panels	1200	0	0
	Aerial Bunch Conductors	500	68	500
	HVDS in selected sub-division	500	224	700
	Automatic Meter Reading	0	0	100
	GIS in cities	200	20	20

Gujarat Electricity Regulatory Commission



Sr. No.	Schemes	Approved as per MYT Order dated 17- 01-2009	H1 Actual FY 2009-10	Revised Estimates submitted by DGVCL for FY 2009-10
	Underground Cables	0	0	2500
	Costal	0	111	1566
	Gaurav path	0	0	0
	Misc. Civil work	800	6	50
	Total	3200	429	5436
F	Other Schemes			
	New Gujarat Pattern	0	2	2
G	Golden Goal Scheme			
	Pending Agriculture Connections	5002	0	0
I	Capital Expenditure Total	26842	6432	32286

#### Petitioner's submission

The Petitioner has submitted that it has incurred a capital expenditure of Rs.6432 Lakhs in the first half of FY 2009-10. Further, it has revised estimate of capital expenditure to Rs. 32286 Lakhs which is higher than the capital expenditure approved by the Hon'ble Commission.

#### Commission's View

The Commission noted that while the overall capital expenditure during H1 of FY 2009-10 is comparative low, there is significant variation in the expenditure proposed against some of the schemes at the individual level. Also, some schemes which were not approved by the Commission during the MYT Order have been additionally proposed.

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



For FY 2009-10, the Commission has considered the revised capital expenditure as submitted by the Petitioner at Rs 32286 Lakhs. Further, it is assumed that the Utility would also be able to capitalize the same during the financial year.

Table 15: Approved Capitalization by Commission for FY 2009-10

(Rs. Lakhs)

Particulars	Approved as per Order dated 14-12-2009	Revised Estimates submitted by DGVCL for FY 2009-10	Revised Estimates considered for APR
Capital Expenditure	-	32286	-
Capitalization	29692	-	32286
Less : Consumer Contribution	6620	6645	6645
Grants	9218	14151	14151
Balance CAPEX	13854	11490	11490
Debt @ 70%	9698	8043	8043
Equity @ 30%	4156	3447	3447

## 3.6. Depreciation

#### Petitioner's submission

The Petitioner has considered Gross Fixed Assets & Depreciation for FY 2009-10 on the basis of actual of FY 2008-09 as per the final accounts with the addition during FY 2009-10 on the basis of revised capital expenditure plan for FY 2009-10. The Petitioner has further submitted that the GERC regulations specify that the CERC rates have to be used for computation of depreciation. Therefore the Petitioner has revised the deprecation rates from 3.64% to 5.27% for FY 2009-10 in line with the new rates notified by the CERC in the terms and conditions for tariff applicable for 2009 to 2014. This is shown in the Table 16 below



Table 16: Depreciation for 2009-10 submitted by the DGVCL

Particulars	Approved as per Order dated 14- 12-2009	Revised Estimates submitted by DGVCL for FY 2009-10
Gross Block in Beginning of the year	171653	171653
Additions during the Year (Net)	29692	32286
Depreciation for the Year	9821	9896
Average Rate of Depreciation	5.27%	5.27%

#### Commission's View

The Commission, in its order dated 14 December, 2009, had considered depreciation expenditure of Rs 9896 Lakhs for FY 2009-10. The closing gross fixed assets (GFA) of the FY 2008-09 is considered as opening GFA for FY 2009-10 and the depreciation rates were considered as per new rates prescribed under CERC Tariff Regulations.

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

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

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

Gujarat Electricity Regulatory Commission

Page 46



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

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

Table 17: Depreciation Approved by Commission for FY 2009-10

(Rs. Lakhs)

Particulars	Approved as per Order dated 14-12-2009	Revised Estimates submitted by DGVCL for FY 2009-10	Revised Estimates considered for APR
Gross Block in Beginning of the year	171653	171653	171653
Additions during the Year (Net)	29692	32286	32286
Depreciation for the Year	9821	9896	9896
Average Rate of Depreciation	5.27%	5.27%	5.27%

## 3.7. Interest Expenses

## Petitioner's submission

The Petitioner has projected revised interest expenses of Rs. 9703 Lakhs for FY 2009-10 as compared to the approved expenses of Rs. 5612 Lakhs in the Order dated 14<sup>th</sup> December, 2009.



Table 18: Projected Interest Expenses for FY 2009-10

Particulars	Approved as per Order dated 14-12-2009	H1 Actual FY 2009- 10	H2 Estimated FY 2009- 10	Revised Estimates submitted by DGVCL for FY 2009-10
Opening Loans	49943	63810	60606	63810
Opening Loans considered for Capital Expenditure	24249	1	1	-
Loan Additions during the Year	9698	6087	13087	19174
Repayment during the Year	6553	9291	11830	21121
Closing Loans	27394	60606	61863	61863
Average Loans	25821	62208	61235	62837
Interest on Loan	2582	3052	6008	6166
Interest in Security Deposit	2880	1709	1709	3418
Guarantee Charges	150	0	119	119
Total Interest & Financial Charges	5612	4761	7836	9703
Weighted Average Rate of Interest	10.00%	9.81%	9.81%	9.81%

The Opening balance of Loan for FY 2009-10 is revised to Rs. 65528 Lakhs as against Rs. 56929 Lakhs, as per the closing balance (balance sheet) of FY 2008-09. The loan addition in FY 2009-10 has been computed at Rs. 19174 Lakhs as per the Capex funding plan discussed above and balance for funding the past liabilities. The repayment is computed on the assumption that the loan would be repaid in the same proportion as it was paid last year. i.e  $\{(21785 \times 63810) / 65818 = 21121\}$  as shown in Table 21 below. The total repayment of existing and new loan during the year is computed at Rs. 21121 Lakhs. Further, it is submitted that based on the interest paid on the outstanding loans, the weighted average rate of interest works out to @ 9.81% as against 10% approved by the Commission.

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

Gujarat Electricity Regulatory Commission



#### Commission's View

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

The Commission had noted that that the said approach was not correct and had directed that rather than deducting Interest on Working capital from the total Interest and Finance charges, the principal loan amount should be segregated. Based on the suggested approach, the Commission also segregated the opening balance in proportion to the actual interest paid for capital expenditure and interest paid for financing working capital in FY 2008-09, as shown in Table 19 below:

Table 19: Loan allocation based on Interest on Working Capital

Particulars	Unit
Net Interest in FY 2008-09 (Rs. Lakhs) #	6187
Actual Interest on Working Capital (Rs. Lakhs)	3183
% of Loan Allocated for Working Capital	51%
% of Loan Allocated for Capital Expenditure	49%

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

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

Table 20: Details of Segregated Loans

(Rs. Lakhs)

FY 2008-09	Opening Balance	Addition	Repayment	Closing Balance
Loan taken by Discom	289	170	1	458
Loan from GUVNL	65529	19607	21784	63352
Total Loan	65818	19778	21785	63810
Less: Loan towards Working Capital	29759	19594	14003	35350
Loan towards Capital Expenditure	36059	184	7783	28460

Based on the details submitted by the Petitioner, the Commission has adopted the revised opening balance of loan as mentioned above. The total capital expenditure Gujarat Electricity Regulatory Commission



proposed for FY 2009-10 is Rs 11490 Lakhs (excluding grants) and total loan proposed to be taken by the Petitioner is Rs 19174 Lakhs.

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

The Commission has considered fresh loans only up to the seventy percent of the proposed capital expenditure and correspondingly recomputed the repayments as shown in Table 21 below.

Table 21: Repayment considered for FY 2009-10

(Rs. Lakhs)

Closing Loans	Actual as per Final accounts FY 2008-09	Revised Estimates submitted by DGVCL for FY 2009-10	Revised Estimates considered for APR
Opening Loans	65818	63810	28460
Additions	19777	19174	8043
Repayments	21785	21121	9420
Closing	63810	61863	27083

The Commission has considered the revised weighted average rate of interest (9.81%) for estimating the interest cost for FY 2009-10. Further, Interest on Security Deposit and Guarantee charges has been considered as per the Petitioner's estimation. Approved Interest and Finance Charges, after considering the above allocation, has been tabulated as shown below.



Table 22: Interest & Financial Charges for FY 2009-10

Closing Loans	Approved as per Order dated 14- 12-2009	Revised Estimates submitted by DGVCL for FY 2009-10	Revised Estimates considered for APR
Opening Loans	49943	63810 <sup>1</sup>	-
Opening Loans considered for Capital Expenditure	24249	-	28460
Loan Additions during the Year	9698	19174	8043
Repayment during the Year	6553	21121	9420
Closing Loans	27394	61863	27083
Average Loans	25821	62837	27772
Interest on Loan	2582	6166	2725
Interest in Security Deposit	2880	3418	3418
Guarantee Charges	150	119	119
Total Interest & Financial Charges	5612	9703	6262
Weighted Average Rate of Interest	10.00%	9.81%	9.81%

## 3.8. Interest on Working Capital

## Petitioner's submission

The Petitioner has estimated interest on a normative working capital in accordance with the GERC Tariff Regulations which works out to Rs. 4332 Lakhs. However, instead of considering revenues for two months, revenues of the company for only one month have been considered for projecting the total working capital during the FY 2009-10. The Petitioner has computed the interest on working capital at current short-term prime lending rate of SBI i.e. 10.25% as shown below

Gujarat Electricity Regulatory Commission



<sup>&</sup>lt;sup>1</sup> Rs 63810 Lakhs is inclusive of Loans taken to fund Working Capital.

Table 23: Interest on Working Capital submitted by DGVCL

Particulars	Approved as per Order dated 14- 12-2009	H1 Actual FY 2009-10	H2 Estimated FY 2009-10	Revised Estimates submitted by DGVCL for FY 2009-10
O & M expenses	1500	942	902	1941
Maintenance Spares	1741	815	751	1824
Receivables	31983	19342	18311	38502
Total Working Capital	35223	21100	19963	42267
Rate of Interest on Working Capital	10.25%	10.25%	10.25%	10.25%
Interest on Working Capital	3610	2163	2046	4332

## Commission's View

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

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

The Commission has observed that while calculating the interest on working capital based on the above provision, the Petitioner has considered receivables equivalent to one month, as submitted above. But instead of calculating 1/12 of the sales, the Petitioner has calculated 1/12 of ARR. The Commission has corrected this error and has recomputed the normative interest on working capital at 10.25%, as shown in Table 24 below.



Table 24: Interest on Working Capital for FY 2009-10

Particulars	Approved as per Order dated 14-12-2009	Revised Estimates submitted by DGVCL for FY 2009-10	Revised Estimates considered for APR
O & M expenses	1500	1941	1500
Maintenance Spares	1741	1824	1824
Receivables	31983	38502	36308
	25002	40067	20000
Total Working Capital	35223	42267	39632
Rate of Interest on Working Capital	10.25%	10.25%	10.25%
Interest on Working Capital	3610	4332	4062

#### 3.9. Provision for Bad Debts

## Petitioner's submission

The Petitioner has estimated the provisioning for write-off of bad debts at 0.10% of the revenue from sale of power i.e Rs. 436 Lakhs as shown in Table 25 below

Table 25: Proposed provision for Bad Debts

(Rs. Lakhs)

Particulars	Approved as per Order dated 14- 12-2009	H1 Actual FY 2009- 10	H2 Estimated FY 2009- 10	Revised Estimates submitted by DGVCL for FY 2009-10
Provision for Bad and Doubtful Debts	384	223	213	436



# **Commission's Analysis**

The Commission in its Order dated 14<sup>th</sup> December, 2009 approved Rs 384 Lakhs towards bad debt. The Commission has recomputed the bad debts at 0.10% of the revenue as shown in the Table 26 below:

**Table 26: Approved provision for Bad Debts** 

(Rs. Lakhs)

Particulars	Approved as per Order dated 14-12-2009	Revised Estimates submitted by DGVCL for FY 2009-10	Revised Estimates considered for APR
Provision for Bad and Doubtful Debts	384	436	414

## 3.10. Other Expenses

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

Table 27: Other Expenses proposed in FY 2009-10

(Rs. Lakhs)

Particulars	Approved as per Order dated 14- 12-2009	H1 Actual FY 2009-10	H2 Estimated FY 2009- 10	Revised Estimates submitted by DGVCL for FY 2009- 10
Other Debits	104	50	382	433
Extraordinary Items	150	14	14	29
Net Prior Period Expenses/(Income)	0	0	0	0
Other Expenses Capitalized	(4818)	(2100)	(2100)	(4200)
Total Other Costs	(4564)	(2035)	(1703)	(3738)



#### Petitioner's submission

#### **Other Debits**

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

## **Commission's Analysis**

The Petitioner has projected Rs 433 Lakhs as expenses in Other Debits based on the H1 actual expenses of Rs 50 Lakhs. As discussed earlier, all the controllable expenses are considered as approved in the Tariff Order dated 14<sup>th</sup> December, 2009. Accordingly, the approved amount considered for the same is Rs 104 Lakhs.

### **Extraordinary Items**

The Petitioner has projected Rs 29 Lakhs under Extraordinary Items. However, the Commission has considered Rs 150 Lakhs in Extraordinary Items as approved in the tariff order dated 14 December, 2009.

## **Net Prior Period Expenses**

The Petitioner has not estimated any amount under Net Prior Period Expenses. Accordingly, it has been considered at Nil for FY 2009-10.

#### Other Expenses Capitalized

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

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

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

The Commission has considered Other Expenses Capitalized at the same level as that approved in its Tariff Order dated 14<sup>th</sup> December, 2009, i.e Rs 4818 Lakhs.



## Summing up

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

Table 28: Other expenses for FY 2009-10

(Rs. Lakhs)

Particulars	Approved as per Order dated 14-12- 2009	Revised Estimates submitted by DGVCL for FY 2009-10	Revised Estimates considered for APR
Other Debits	104	433	104
Extraordinary Items	150	29	150
Net Prior Period Expenses	0	0	0
Other Expenses Capitalized	(4818)	(4200)	(4818)
Total Other Costs	(4564)	(3738)	(4564)

## 3.11. Return on Equity

#### Petitioner's submission

The Petitioner has submitted the revised estimate of Return on Equity for FY 2009-10 as Rs 6198 Lakhs. The Return on Equity has been computed at 14% on the average equity, which is the opening balance of equity and normative additions during the year, arrived at by considering 30% of the capital expenditure net of consumer contribution and grants funded from equity.

Table 29: RoE estimated by DGVCL

(Rs. Lakhs)

Particulars	Approved as per Order dated 14-12- 2009	H1 Actual FY 2009-10	H2 Estimated FY 2009- 10	Revised Estimates submitted by DGVCL for FY 2009-10
Return on Equity	5340	2979	3099	6198



### **Commission's Analysis**

The Commission has observed that against the approved RoE of Rs.5340 Lakhs in its Order dated 14<sup>th</sup> December 2009 by the Commission, the Petitioner has claimed RoE of Rs. 6198 Lakhs.

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

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

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

Table 30: RoE Approved for FY 2009-10

(Rs. Lakhs)

Particulars	Approved as per Order dated 14-12-2009	Revised Estimates submitted by DGVCL for FY 2009-10	Revised Estimates considered for APR
Opening Equity Capital	36067	42550	36067
Equity Additions during the Year	4156	3447	3447
Closing Equity	40223	45997	39514
Average Equity	38145	44274	37790
Rate of Return on the Equity	14.00%	14.00%	14.00%
Return on Equity	5340	6198	5291



#### 3.12. Taxes

#### Petitioner's submission

The Petitioner has estimated that the income tax for FY 2009-10 is Rs 958 Lakhs as against Rs 61 Lakhs as approved by the Commission in the MYT Order.

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

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

Since taxes are considered to be pass- through, the Commission has considered the tax amount as the same as approved in the MYT Order ie. Rs 61 Lakhs for the FY 2009-10. It will consider the actual tax paid during the true-up process of FY 2009-10.

**Table 31: Taxes for FY 2009-10** 

(Rs. Lakhs)

Particulars	Approved as per Order dated 14- 12-2009	Revised Estimates submitted by DGVCL for FY 2009-10	Revised Estimates considered for APR
Provision for Tax	61	958	61

## 3.13. Aggregate Revenue Requirement for FY 2009-10

Based on the analysis of each component discussed above, the Aggregate Revenue Requirement of the Petitioner for FY 2009-10 as approved by the Commission in its order dated 14<sup>th</sup> December, 2009, as estimated by the Petitioner in the APR Petition and as approved by the Commission in this Order, is given in Table 32 below:



Table 32: Aggregate Revenue Requirement for FY 2009-10

Particulars	Approved as per Order dated 14-12- 2009	Revised Estimates submitted by DGVCL for FY 2009-10	Revised Estimates considered for APR
Cost of Power Purchase	356772	423119	399553
Operation & Maintenance Expenses	18002	23289	18002
Employee Cost	12154	18199	12154
Repair & Maintenance	3093	2237	3093
Administration & General Charges	2755	2853	2755
Depreciation	9821	9896	9896
Interest & Finance Charges	5612	6520	6262
Interest on Working Capital	3610	4332	4062
Other Debits	104	433	104
Extraordinary Items	150	29	150
Provision for Bad Debts	384	436	414
Net Prior Period Expenses / (Income)	0	0	0
Other Expenses Capitalized	(4818)	(4200)	(4818)
Sub-Total	389637	463853	433625
Return on Equity	5340	6198	5291
Provision for Tax / Tax Paid	61	958	61
Total Expenditure	395039	471009	438977
Less: Non-Tariff Income	4302	8983	8983
Aggregate Revenue Requirement	390736	462026	429994

Gujarat Electricity Regulatory Commission



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

#### Petitioner's submission

During H1 of FY 2009-10, the Petitioner has earned revenue of Rs. 223102 Lakhs. The Petitioner has revised its revenue estimates for FY 2009-10 to Rs. 435695 Lakhs, as against Rs. 382816 Lakhs that was approved by the Commission in its Tariff Order dated 14<sup>th</sup> December, 2009. The H1 revenues are at actual (including FPPPA charges) and the H2 revenue has been estimated by considering an FPPPA of Rs. 0.77 per unit.

Table 33: Estimated Revenue in FY 2009-10

(Rs. Lakhs)

Particulars	Approved as per Order dated 14-12-2009	H1 Actual FY 2009-10	H2 Estimated FY 2009-10	Revised Estimates submitted by DGVCL for FY 2009-10
LT Consumers				
Residential	50334	30884	30353	61237
Commercial	25669	16322	14220	30542
Industrial LT	112749	64094	59154	123248
Public Water Works	2713	1858	1891	3749
Agriculture	6946	4855	7024	11879
Public Lighting	958	604	684	1288
LT Total (A)	199369	118617	113326	231943
HT Consumers				
Industrial HT	169023	96424	91631	188055
Railway Traction	14424	8061	7635	15696
HT Total (B)	183447	104485	99266	203751
Grand Total (A + B)	382816	223102	212593	435695

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

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



Table 34: Estimated Average Realization during FY 2009-10

Consumer Category	Approved Sales as per Order dated 14th Dec 2009	Approved Revenue as per Order dated 14th Dec 2009	Estimated Average Realization Rs/kWh
LT Consumers			
Residential	1539	47874	3.11
Commercial	532	25893	4.87
Industrial LT	2464	108375	4.40
Public Water Works	95	2801	2.94
Agriculture	567	10870	1.92
Street Light	30	1020	3.42
LT Total	5227	196833	
HT Consumers			
Industrial HT	3481	172994	4.97
Railway Traction	270	13963	5.17
HT Total	3751	186957	
TOTAL	8978	383790	

Table 35: Projected Revenue in H2 - FY 2009-10

Particulars	Estimated Sales H2	Estimated Average Realization	Total Revenue
	MUs	Rs/kWh	Rs. Lakhs
LT Consumers			
Residential	780	3.11	24261
Commercial	251	4.87	12237
Industrial LT	1201	4.40	52805
Public Water Works	49	2.94	1450
Agriculture	355	1.92	6797
Public Lighting	17	3.42	574
LT Total (A)	2653		98123
HT Consumers			
Industrial HT	1722	4.97	85598
Railway Traction	133	5.17	6904
HT Total (B)	1856		92502
Grand Total (A + B)	4509		190625

Gujarat Electricity Regulatory Commission



Page 61

The total estimated revenue for FY 2009-10 is as shown in Table 36 below.

Table 36: Projected Revenue for FY 2009-10

(Rs. Lakhs)

Particulars	Approved as per Order dated 14-12- 2009	Revised Estimates submitted by DGVCL for FY 2009-10	Revised Estimates considered for APR
LT Consumers			
Residential	47874	61237	55145
Commercial	25893	30542	28559
Industrial LT	108375	123248	116899
Public Water Works	2801	3749	3308
Agriculture	10870	11879	11652
Public Lighting	1020	1288	1178
LT Total (A)	196833	231943	216740
HT Consumers			
Industrial HT	172994	188055	182022
Railway Traction	13963	15696	14965
HT Total (B)	186957	199662	196987
Grand Total (A + B)	383790	199662	413727

### 3.15. Non-Tariff Income

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

## Petitioner's submission

The Petitioner has estimated Non-Tariff Income for FY 2009-10 of Rs. 8983 as against Rs 4302 Lakhs approved by the Commission in its Tariff Order dated 14<sup>th</sup> December, 2009.

## Commission's views

The Commission has noted the submissions by the Petitioner and has accepted the estimate of the Non-Tariff Income as shown in Table 37 below.



Table 37: Approved Non-Tariff Income for FY 2009-10

Particulars	Approved as per Order dated 14-12- 2009	Revised Estimates submitted by DGVCL for FY 2009-10	Revised Estimates considered for APR
Non-Tariff Income	4302	8983	8983

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

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

## Petitioner's submission

The Petitioner has estimated Other Consumer related Income for FY 2009-10 as Rs 7261 Lakhs. Income from related income in H1 was Rs 3181 Lakhs.

## Commission's views

The Commission has accepted the estimate of the Other Consumer related income as proposed by the Petitioner as shown in Table 38 below.

Table 38: Consumer Related Income for FY 2009-10

(Rs. Lakhs)

Particulars	Approved as per Order dated 14-12- 2009	Revised Estimates submitted by DGVCL for FY 2009-10	Revised Estimates considered for APR
Other Consumer related Income	7146	7261	7261

THE PARTY OF THE P

## 3.17. Subsidy for FY 2009-10

#### Petitioner's submission

The Petitioner has revised the amount of agricultural subsidy to Rs 5217 Lakhs from Rs 5403 Lakhs. Further, it has not estimated any amount under other subsidy in FY 2009-10.

#### Commission's views

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

Table 39: Subsidy for FY 2009-10

(Rs. Lakhs)

Particulars	Approved as per Order dated 14-12- 2009	Revised Estimates submitted by DGVCL for FY 2009-10	Revised Estimates considered for APR
Agriculture Subsidy	5403	5217	5217
Other Subsidies	3518	0	0
Total Subsidy	8921	5217	5217

## 3.18. Total Revenue for FY 2009-10

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



Table 39: Total Revenue for FY 2009-10

Particulars	Approved as per Order dated 14- 12-2009	Revised Estimates submitted by DGVCL for FY 2009-10	Revised Estimates considered for APR
Revenue with Existing Tariff	383790	435695	413727
Other Income (Consumer related)	7146	7261	7261
Total Revenue excluding subsidy	390936	442955	420988
Agriculture Subsidy	5403	5217	5217
Other Subsidies	3518	0	0
Total Revenue including subsidy	399857	448173	426205

# 3.19. Estimated Revenue Gap for FY 2009-10

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

Table 40: Estimated Revenue Gap for FY 2009-10

(Rs. Lakhs)

Particulars	Approved as per Order dated 14- 12-2009	Revised Estimates submitted by DGVCL for FY 2009-10	Revised Estimates considered for APR
Revised Aggregate Revenue Requirement	390736	462026	429994
Total Revenue including Subsidy	399857	448173	426205
Revised Provisional Gap for FY 2009-10	(9120)	13853	3788



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

#### 4.1. Sales

## Petitioner's Approach to Sales Projections

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

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

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

Table 41: Historical Trend in Category-wise Units sold

(MU)

DGVCL	FY04-05	FY05-06	FY06-07	FY07-08	FY08-09	FY09-10 (Projection)
LT Consumers						
Residential	874	987	1121	1239	1346	1539
Commercial	330	356	395	450	487	532
Industrial LT	1911	1976	2136	2313	2280	2464
Public Water Works	62	68	75	84	89	95
Agriculture	509	522	527	530	533	597 <sup>3</sup>
Street Light	24	23	25	27	29	30
Temporary Supply at LT	0	0	0	0	0	0
LT Total	3710	3932	4279	4644	4764	5257

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

Gujarat Electricity Regulatory Commission



Page 66

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

DGVCL	FY04-05	FY05-06	FY06-07	FY07-08	FY08-09	FY09-10 (Projection)
LT Consumers						
Industrial HT	2683	2909	3052	3084	3281	3481
Railway Traction	210	224	227	252	260	270
HT Total	2893	3133	3279	3336	3541	3751
TOTAL	6603	7065	7558	7979	8305	9008

Table 42: Category-wise Growth rates of Units Sold

Sales	CAGR (5 year) FY 09 over 05	CAGR (3 year) FY 09 over 07	FY 08 over FY 07	FY 09 over FY 08	FY 10 over FY 09
Low Tension Consumers					
Residential	11.40%	9.58%	10.54%	8.62%	14.31%
Commercial	10.22%	11.04%	14.02%	8.14%	9.24%
Industrial LT	4.51%	3.32%	8.29%	-1.43%	8.07%
Public Water Works	9.46%	8.93%	12.48%	5.50%	7.16%
Agriculture	1.16%	0.57%	0.57%	0.57%	11.99%
Street Light	4.84%	7.70%	6.84%	8.57%	2.86%
Temporary Supply at LT	0.00%	0.00%	0.00%	0.00%	0.00%
LT Total	6.45%	5.52%	8.52%	2.59%	10.34%
High Tension Consumers					
Industrial HT	5.16%	3.68%	1.04%	6.40%	6.10%
Railway Traction	5.48%	7.02%	11.01%	3.17%	3.85%
HT Total	5.18%	3.92%	1.73%	6.15%	5.93%
TOTAL	5.90%	4.83%	5.58%	4.08%	8.46%

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

Table 43: Category-wise No. of Consumers

DGVCL	FY04-05	FY05-06	FY06-07	FY07-08	FY08-09	FY09-10 (Projection)
LT Consumers						
Residential	1238788	1307843	1371201	1472747	1564107	1690800
Commercial	178484	189917	201337	212551	223121	236955
Industrial LT	43800	44967	46471	48215	49667	51157
Public Water Works	5770	6329	6759	7373	8315	8880
Agriculture	74795	77184	79101	81279	84317	90557
Street Light	3166	3306	3463	3701	3976	4159

Gujarat Electricity Regulatory Commission



Temporary Supply at LT	0	0	0	0	0	0
LT Total	1544803	1629546	1708332	1825866	1933503	2082508
LT Consumers						
Industrial HT	1713	1767	1827	1932	2060	2128
Railway Traction	5	5	5	5	5	5
HT Total	1718	1772	1832	1937	2065	2133
TOTAL	1546521	1631318	1710164	1827803	1935568	2084641

Table 44: Growth rate of no. of Consumers

No. of Consumers	CAGR (5 year) FY 09 over 05	CAGR (3 year) FY 09 over 07	FY 08 over FY 07	FY 09 over FY 08	FY 10 over FY 09
LT Consumers					
Residential	6.00%	6.80%	7.41%	6.20%	8.10%
Commercial	5.74%	5.27%	5.57%	4.97%	6.20%
Industrial LT	3.19%	3.38%	3.75%	3.01%	3.00%
Public Water Works	9.56%	10.91%	9.08%	12.78%	6.79%
Agriculture	3.04%	3.24%	2.75%	3.74%	7.40%
Street Light	5.86%	7.15%	6.87%	7.43%	4.60%
Temporary Supply at LT	0.00%	0.00%	0.00%	0.00%	0.00%
LT Total	5.77%	6.39%	6.88%	5.90%	7.71%
LT Consumers					
Industrial HT	4.72%	6.19%	5.75%	6.63%	3.30%
Railway Traction	0.00%	0.00%	0.00%	0.00%	0.00%
HT Total	4.71%	6.17%	5.73%	6.61%	3.29%
TOTAL	5.77%	6.39%	6.88%	5.90%	7.70%

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

**Table 45: Category-wise Connected Load** 

(MW)

DGVCL	FY04-05	FY05-06	FY06-07	FY07-08	FY08-09	FY09-10 (Projection)
LT Consumers						
Residential	1049	1095	1138	1224	1298	1357
Commercial	283	285	311	346	374	392
Industrial LT	1023	1093	1117	1196	1218	1273
Public Water Works	49	49	50	56	61	64
Agriculture	356	397	398	415	417	456
Street Light	17	19	20	20	20	21
Temporary Supply at LT	0	0	0	0	0	0
LT Total	2777	2937	3034	3257	3389	3563
LT Consumers						

Gujarat Electricity Regulatory Commission



Industrial HT	919	920	1014	1125	1203	1265
Railway Traction	57	57	60	60	64	65
HT Total	976	977	1074	1185	1267	1330
TOTAL	3753	3914	4108	4443	4655	4893

Table 46: Growth Rate for Connected Load (in MW)

Load	CAGR (5 year) FY 09 over 05	CAGR (3 year) FY 09 over 07	FY 08 over FY 07	FY 09 over FY 08	FY 10 over FY 09
LT Consumers					
Residential	5.48%	6.82%	7.55%	6.09%	4.51%
Commercial	7.21%	9.65%	11.26%	8.06%	4.84%
Industrial LT	4.46%	4.43%	7.09%	1.84%	4.50%
Public Water Works	5.75%	10.71%	12.43%	9.01%	4.44%
Agriculture	4.01%	2.31%	4.34%	0.33%	9.45%
Street Light	4.35%	0.40%	-2.03%	2.88%	4.17%
Temporary Supply at LT	0.00%	0.00%	0.00%	0.00%	0.00%
LT Total	5.10%	5.68%	7.36%	4.03%	5.15%
LT Consumers					
Industrial HT	6.97%	8.93%	10.95%	6.94%	5.14%
Railway Traction	2.74%	2.89%	0.53%	5.31%	2.33%
HT Total	6.73%	8.60%	10.37%	6.86%	5.00%
TOTAL	5.53%	6.45%	8.14%	4.79%	5.11%

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

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

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

## a. Residential Category

The Commission has observed that the Petitioner had witnessed a double digit growth in the units sold in the last few years. In FY 2009-10 the average growth in



sales observed is 14.31%. The Company has assumed 14% growth in sales for FY 2010-11.

Further increase in number of consumers and connected load in this category had recorded a growth of 8.00% and 4.50% between FY 2008-09 and FY 2009-10 and the Petitioner expects the above trend to continue.

The sales to this category constitute about 17% to 19% of total energy sales of the company. The Commission in its Multi-Year Tariff Order dated Jan 17, 2009 approved 1828 MUs for FY 2010-11. The revised sales based on CAGR as discussed in the above paragraph works out to 1754 MUs.

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

Table 47: Revised Approved Residential Sales for FY 2010-11

(MU)

Consumer Category	Approved as per MYT Order for FY 2010-11	Revised Estimates submitted by DGVCL for FY 2010- 11	Revised Approved for FY 2010-11
Residential	1828	1754	1754

## b. Commercial Category

It is observed that increase in sales, number of consumers and connected load in Commercial category recorded a growth of 9.24%, 6.20% and 4.80% between FY 2008-09 and FY 2009-10. The sales to this category constitute about 5% to 7% of total energy sales of the company. Commission in its Multi-Year Tariff Order dated Jan 17, 2009 approved 587 MUs. The revised sales assumption based on the CAGR as projected in the above paragraph works out to 582 MUs.

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



projected by the Commission, the Commission has approved the sales as projected by the Petitioner for FY 2010- 11.

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

(MUs)

Consumer Category	Approved as per MYT Order for FY 2010-11	Revised Estimates submitted by DGVCL for FY 2010-11	Revised Approved for FY 2010-11
Commercial	587	582	582

# c. Industrial LT Category

The Commission has observed that increase in sales, number of consumers and connected load in this category recorded a growth of 8.07%, 3.0% and 4.50% between FY 2008-09 and FY 2009-10 and the Petitioner expects the above trend to continue except in sales where it has assumed a growth rate of 7%.

The sales to this category constitute about 27% of total energy sales of the company. Commission in its Multi-Year Tariff Order dated Jan 17, 2009 approved 2923 MUs. The revised sales based on the CAGR as projected in the above paragraph work out to be 2639 MUs.

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

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

(MUs)

Consumer Category	Approved as per MYT Order for FY 2010-11	Revised Estimates submitted by DGVCL for FY 2010-11	Revised Approved for FY 2010-11
Industrial LT	2923	2639	2639



#### d. Public Water Works

The Commission has observed that increase in sales, number of consumers and connected load in this category recorded a growth of 7.16%, 6.80% and 4.50% between FY 2008-09 and FY 2009-10 and the Petitioner expects the above trend to continue except in case of connected load where the growth has been un even so it has assumed a growth rate of 5%.

The sales to this category constitute about 1 to 2% of total energy sales of the company. The Commission in its Multi-Year Tariff Order dated Jan 17, 2009 approved 105 MUs. The revised sales based on the CAGR assumed as projected in the above paragraph works out to be 102 MUs.

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

Table 50: Revised Approved Public Water Works for FY 2010-11

(MUs)

Consumer Category	Approved as per MYT Order for FY 2010-11	Revised Estimates submitted by DGVCL for FY 2010-11	Revised Approved for FY 2010-11
Public Water Works	105	102	102

## e. Agriculture Category

#### Petitioner's submission

The sales to this category constitute about 5% of total energy sales of the company. The consumption of electricity by irrigation pump-sets are not metered except connections released during recent years. The Petitioner has submitted that it plans to release around 6300 new connections under this category. The Petitioner has estimated that an additional connected load of 26MW based on their current norm of 5.5 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, the Petitioner has proposed 1200 kWH/HP/Annum ((700+1700)/2=1200). This would translate into an additional consumption of around 42 MU (1200 kWH/HP/Annum) as shown below:

Gujarat Electricity Regulatory Commission



Page 72

**Release of Pending Agriculture Connections** Unit FY 2010-11 6300 Number of New Agriculture Connections Nos. 26 Total Additional Load in MW MW34650 Additional Load Added in HP HP Additional Demand on Account of New Agriculture MU 42 Connections

Table 51: Sales proposed for Agriculture FY 2010-11

#### Commission's View

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

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

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

Total metered connections are arrived by addition of the existing connections and the new connections proposed to be added during the year by the Petitioner (43188 +6300 =49488). Unmetered connections are as considered by the Commission in MYT Order.

Table 52 Estimated Metered and Unmetered Sales in FY 2010-11

FY 2010-11	Sales (MU's)	No. of Consumers	Load (in MW)	Load (in HP)
Metered	257	49488	295	395098
Unmetered	426	47369	187	250580
Total	683	96857	482	645678

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

Table 53: Total Revised Sales for Agriculture FY 2010-11

(MU)

Consumer Category	Approved as per MYT Order for FY 2010-11	Revised Estimates submitted by DGVCL for FY 2010-11	Revised Approved for FY 2010-11
Agriculture metered	188	211	257
Agriculture unmetered	523	427	426
Total	711	638	683

## Street (Public) Lighting

The sales to this category constitute about 0.5% to 1% of total energy sales. The Commission in its Multi-Year Tariff Order dated Jan 17, 2009 approved 29 MUs. The revised sales based on the growth rates assumed by the Petitioner works out to 30 MUs. Since there was no significant difference between the sales projected by the Petitioner and that projected by the Commission, the Commission has approved the sales projected by the Petitioner for FY 2010-11.

Table 54: Revised Approved Public Lighting Sales for FY 2010-11

(MUs)

Consumer Category	Approved as per MYT Order for FY 2010-11	Revised Estimates submitted by DGVCL for FY 2010-11	Revised Approved for FY 2010-11
Public Lighting	29	30	30

## g. Industrial HT Category

The Commission has observed that increase in sales, number of consumers and connected load in this category recorded a growth of 6.1%, 3.30% and 5.10% between FY 2008-09 and FY 2009-10.

The sales to this category constitute about 38% of total energy sales of the company. The Commission in its Multi-Year Tariff Order dated Jan 17, 2009 approved 3694

Gujarat Electricity Regulatory Commission



MUs. The revised sales based on CAGR as discussed in the above paragraph works out to be 3690 MUs. Since there was no significant difference between the sales projected by the Petitioner and that projected by the Commission, the Commission has approved the sales projected by the Petitioner for FY 2010-11.

Table 55: Revised Approved Industrial HT for FY 2010-11

(MUs)

Consumer Category	Approved as per MYT Order for FY 2010-11	Revised Estimates submitted by DGVCL for FY 2010-11	Revised Approved for FY 2010-11
Industrial HT	3694	3690	3690

## h. Railway Traction Category

The Petitioner has considered a nominal growth of 4% in sales and 2.90% in load in Railways based on the past trend. The sales to this category constitute about 3-4% of total energy sales of the company. The Commission in its Multi-Year Tariff Order dated Jan 17, 2009 approved 290 MUs. The revised sales based on CAGR as discussed in the above paragraph works out to be 281 MUs. Since there was no significant difference between the sales projected by the Petitioner and that projected by the Commission, the Commission has approved the sales projected by the Petitioner for FY 2010-11.

Table 56: Revised Approved Railway Demand for FY 2010-11

(MUs)

Consumer Category	Approved as per MYT Order for FY 2010-11	Revised Estimates submitted by DGVCL for FY 2010-11	Revised Approved for FY 2010-11
Railways	290	281	281

## **Total Energy Sales**

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



Table 57: Approved Sales for FY 2010-11

(MUs)

Consumer Category	Approved as per MYT Order for FY 2010-11	Revised Estimates submitted by DGVCL for FY 2010-11	Revised Approved for FY 2010-11
<b>Low Tension Consumers</b>			
Residential	1828	1754	1754
Commercial	587	582	582
Industrial LT	2923	2639	2639
Public Water Works	105	102	102
Agriculture - Metered	711	211	257
Agriculture - Un-Metered	711	427	426
Street Light	29	30	30
Temporary Supply at LT	0	0	0
LT Total	6183	5746	5790
High Tension Consumers			
Industrial HT	3694	3690	3690
Railway Traction	290	281	281
HT Total	3984	3971	3971
TOTAL	10167	9717	9761

# 4.2. Distribution Losses and Energy Input Requirement

# Petitioner's submission

The Petitioner has considered distribution loss of 12.45% as approved by the Commission in its MYT Order.

# Commission's view

The Commission has noted the submission made by the Petitioner and has continued with the MYT approved distribution losses of 12.45% and accordingly estimated the energy requirement.



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

Particulars	Approved as per MYT Order for FY 2010-11	Revised Estimates submitted by DGVCL for FY 2010-11	Revised or Approved for FY 2010-11	
Distribution Loss	12.45%	12.45%	12.45%	

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

Table 59: Energy Balance considered for FY 2010-11

(MUs)

Particulars	Unit	Approved as per MYT Order for FY 2010-11	Revised Estimates submitted by DGVCL for FY 2010-11	Revised Approved for FY 2010-11
Energy Sales	MUs	10167	9717	9761
Distribution Losses	MUs	1446	1382	1388
Distribution Losses	%	12.45%	12.45%	12.45%
Energy Requirement	MUs	11613	11099	11149
Transmission Losses	MUs	482	596	489
Transmission Losses	%	3.99%	5.10%	4.20%
Total Energy to be input to Transmission System	MUs	12095	11695	11638
Pooled Losses in PGCIL System	MUs	219	151	151
Total Energy Requirement	MUs	12314	11846	11789

# 4.3. Total Power Purchase Cost

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

- a. Cost of the energy or power purchase cost based on PPA allocation and merit order despatch
- b. Transmission charges of GETCO and PGCIL
- c. SLDC fees and charges



Gujarat Electricity Regulatory Commission

- d. Allocated gap/surplus of GUVNL
- e. E-Urja Cost (part of GUVNL cost)

## Petitioner's submission

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

Table 60: Revised Power Purchase Cost submitted by DGVCL

(Rs. Lakhs)

S.No.	Particulars Approved as per MY I		Revised Estimates submitted by DGVCL for FY 2010-11
1	Power Purchase Cost through Merit Order	401699	433108
2	Transmission Costs to PGCIL & GETCO	28761	56132
3	GUVNL	603	603
4	E-Urja Cost	0	0
5	SLDC Fees & Charges	0	252
6	Total Power Purchase Cost	431063	490095

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

# a. Cost of energy

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

# **Allocation of Capacities/PPAs**

The Petitioner has stated that the company has been allocated PPAs as mentioned in Table 61. The Petitioner has also stated that while most of the stations already exist, some are expected to come online during the FY 2010-11. Further, GUVNL has discontinued supply of power to Torrent Power Limited (TPL) from August, 2009 pursuant to the commissioning of Sugen CCPP. In view of this, the capacity retained

by GUVNL for supply of power to TPL's Ahmedabad and Surat distribution areas has been allocated to the four distribution companies of Gujarat viz. DGVCL, MGVCL, PGVCL and UGVCL.

Table 61: PPA Allocation for FY 2010-11

(MW)

Generating Stations	Allocated Capacity
Ukai TPS	170
Ukai Hydro	0
Gandhinagar I to IV	330
Gandhinagar V	63
Wanakbori I to VI	378
Wanakbori VII	0
Sikka TPS	192
Kutch Lignite I to III	0
Kutch Lignite IV	19
Dhuvaran oil	170
Kadana Hydro	61
Utran Gas Based	95
Dhuvaran Gas Based - Stage-I	64
Dhuvaran Gas Based - Stage-II	84
Utran Extension	244
Sikka Extension	0
ESSAR	210
GPEC	373
GIPCL II (160)	32
GIPCL-SLPP	0
GSEG	53
GIPCL - I (145)	29
GMDC - Akrimota	0
GSEG Expansion	88
GIPCL, Expansion	63
GSPC-Pipavav	175
NPC - Tarapur- 1&2	0
NPC - Kakrapar	39
NPC - Tarapur- 3&4	144
NTPC - KORBA	0
NTPC - VINDHYACHAL - I	0
NTPC - VINDHYACHAL - II	0



Generating Stations	Allocated Capacity
NTPC - VINDHYACHAL - III	98
NTPC - KAWAS	138
NTPC - JHANOR	123
NTPC - Kahalgoan	47
NTPC - Sipat Stage - II	72
SSNNL - Hydro	0
NTPC Kahalgaon (New)	24
NTPC North Karanpura	0
Sipat Stage-I	18
Wind Farms (Old Policy)	5
Wind Farms (New Policy)	203
Tarini Infrastructure Limited	1
APPL	0
Aryan	0

# **Merit Order Dispatch**

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

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

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

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

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







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

DGVCL	Units Available (MU)	Units Dispatched (MU)	Fixed Cost (Rs. Lacs)	Variable Cost (Rs./Unit)	Variable Cost (Rs. Lacs)	Incentive (Rs. Lacs)	Total Cost (Rs. Lacs)	Per Unit Cost (Rs./Unit)
Ukai TPS	1002	1002	5459	1.43	14325	0	19784	1.97
Ukai Hydro	0	0	0	0.00	0	0	0	0.00
Gandhinagar I to IV	1943	1943	15987	1.59	30895	0	46882	2.41
Gandhinagar V	462	462	3329	1.48	6838	151	10318	2.23
Wanakbori I to VI	2561	862	12737	1.69	14569	377	27682	3.21
Wanakbori VII	0	0	0	0.00	0	0	0	0.00
Sikka TPS	1129	339	10029	1.72	5826	0	15854	4.68
Kutch Lignite I to III	0	0	0	0.00	0	0	0	0.00
Kutch Lignite IV	116	116	2521	0.96	1110	0	3631	3.14
Dhuvaran oil	1038	508	5951	3.44	17492	0	23442	4.61
Kadana Hydro	47	47	1871	0.00	0	0	1871	3.97
Utran Gas Based	739	222	4166	2.16	4787	241	9194	4.15
Dhuvaran Gas -I	489	147	3235	2.21	3243	136	6615	4.51
Dhuvaran Gas -II	645	193	5453	2.21	4278	179	9911	5.12
Utran Extension	1657	497	18721	1.86	9246	0	27967	5.63
Sikka Extension	0	0	0	0.00	0	0	0	0.00
ESSAR	1249	375	7774	2.01	7532	0	15306	4.08
GPEC	2223	667	26174	2.47	16472	0	42646	6.39
GIPCL II (160)	218	65	1027	1.72	1124	0	2151	3.29
GIPCL-SLPP	0	0	0	0.00	0	0	0	0.00
GSEG	361	361	3917	1.48	5345	0	9263	2.56
GIPCL - I (145)	174	52	645	2.17	1131	0	1776	3.41
GMDC - Akrimota	0	0	0	0.00	0	0	0	0.00
GSEG Expansion	409	123	239	2.12	2598	0	2838	2.32
GIPCL, Expansion	380	114	4380	1.75	1994	0	6374	5.59
GSPC-Pipavav	292	88	479	2.12	1856	0	2335	2.67
NPC - Tarapur- 1&2	0	0	0	0.00	0	0	0	0.00
NPC - Kakrapar	241	241	0	2.03	4892	0	4892	2.03
NPC - Tarapur- 3&4	911	911	0	2.73	24859	0	24859	2.73
NTPC - KORBA	0	0	0	0.00	0	0	0	0.00
VINDHYACHAL - I	0	0	0	0.00	0	0	0	0.00

Gujarat Electricity Regulatory Commission



VINDHYACHAL - II	0	0	0	0.00	0	0	0	0.00
VINDHYACHAL - III	637	637	4425	0.94	5986	0	10410	1.63
NTPC - KAWAS	935	281	7663	3.09	8668	0	16331	5.82
NTPC - JHANOR	838	251	6225	1.73	4350	0	10575	4.21
NTPC - Kahalgoan	305	305	2833	1.21	3687	0	6519	2.14
NTPC - Sipat - II	466	466	0	0.54	2517	0	2517	0.54
SSNNL - Hydro	0	0	0	0.00	0	0	0	0.00
NTPC Kahalgaon	152	46	1647	1.70	777	0	2424	5.30
NTPC Nt Karanpura	0	0	0	0.00	0	0	0	
Sipat Stage-I	117	35	1261	1.70	595	0	1857	5.30
Captive Power Plant	9	9	0	2.34	210	0	210	2.34
Wind (Old Policy)	11	11	0	1.75	190	0	190	1.75
Wind (New Policy)	408	408	0	3.37	13750	0	13750	3.37
Tarini Inds Limited	7	7	0	3.00	218	0	218	3.00
APPL	0	0	0	0.00	0	0	0	0.00
Aryan	0	0	0	0.00	0	0	0	0.00
Total	22169	11789	158150	1.88	221360	1083	380593	3.23

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

Particulars	Approved as per MYT Order for FY 2010-11	Revised Estimates submitted by DGVCL for FY 2010-11	Revised Approved for FY 2010-11
Cost of Power through Merit Order	401699	433108	380593

# b. Transmission Charges of GETCO and PGCIL

# Petitioner's submission

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



Table 64: Revised Transmission Charges as submitted by DGVCL

Transmission Charges of Utilities	Approved as per MYT Order for FY 2010-11	Revised Estimates submitted by DGVCL for FY 2010-11
GETCO Charges	15518	47902
PGCIL Charges	3243	8230
Total Transmission Charges	28761	56132

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

#### Commission's view

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

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

(Rs. Lakhs)

Transmission Charges	Approved as per MYT Order for FY 2010-11	Revised Estimates submitted by DGVCL for FY 2010- 11	Revised Approved for FY 2010-11
GETCO Charges	15518	47902	35576
PGCIL Charges	3243	8230	8230
Total Transmission Charges	28761	56132	43806

# c SLDC Fees and Charges



#### Petitioner's submission

The Petitioner has proposed the SLDC Fees and Charges as proposed by SLDC in its petition for FY 2010-11, which are Rs 329.74/MW/ Half Year and Rs 534.21 /MW / Month respectively. The Petitioner has applied these charges on net capacity at 3571 MW. Total SLDC fees and charges for the Petitioner is estimated at Rs. 252 Lakhs.

#### Commission's views

The Commission has recomputed SLDC fees and charges on the basis of the approval in SLDC's Order, which are Rs 375/MW/ Half Year and Rs 519 /MW/Month. These charges are being applied to the net capacity to calculate the total SLDC fees and charges which is estimated at Rs 250 Lakhs.

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

#### Petitioner's submission

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

Table 66: Revised Cost of GUVNL as submitted by DGVCL

(Rs. Lakhs)

GUVNL Cost Allocation	Approved as per MYT Order for FY 2010-11	Revised Estimates submitted by DGVCL for FY 2010-11
Revenue		
Revenue from sale of power to TPL-A +TPL-S		0
Revenue from sale of power to KPT	186933	911
Revenue from sale of power to Others	100900	1170
Revenue from trade of Discom's Surplus		69690

Gujarat Electricity Regulatory Commission



GUVNL Cost Allocation	Approved as per MYT Order for FY 2010-11	Revised Estimates submitted by DGVCL for FY 2010-11
Other Income		16174
Total Revenue from Sale of Power (A)	186933	87945
Expenditure		
SLDC Fees & Charges	0	1
Power purchase cost as per PPA allocation		1700
Average variable cost of Discom's surplus traded power	168480	37229
Employee Cost	1846	2440
Admin and General Expenses	1141	851
Depreciation	862	128
Interest and Financial Charges	13123	20322
Share of E-Urja utilization charge	97	97
Total Expenses (B)	185549	62767
Amount of Cost Allocation (C=B-A)	(1384)	(25179)

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

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

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

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





the projections of GUVNL's expenses and revenues. Discoms would be able to recover some of the fixed cost that they pay for their allocated capacity from the revenues from trading.

## Commission's View

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

# **Projected Revenue of GUVNL**

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

In order to estimate trading during the FY 2010-11, the Commission asked GUVNL to furnish detail with regards to the number of MUs traded by GUVNL during FY 2009-10 and it was found that the total MUs traded (including UI Sale) by GUVNL up to Feb 2010 is 2191 MUs. These MUs are considered as a base to project the surplus power to be sold in FY 2010-11. Further, the Commission understand the uncertainty involved in estimation of surplus capacity with discoms and possibility of realization of sales.

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

## **Projected Expenses of GUVNL**

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

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

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

(Rs. Lakhs)

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

## e. E-Urja Cost

# Petitioner's submission

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

## Commission's views

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



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

Annual Recurring Charges	Approved as per MYT Order for FY 2010-11	Revised Estimates submitted by DGVCL for FY 2010- 11	Revised Approved for FY 2010- 11
Depreciation	2826	2826	2826
Interest Cost	2136	2136	2136
Annual Maintenance Charges	960	960	960
Total Annual Expenditure	5923	5923	5922
Percentage of total licenses with the Company	10.17%	10.17%	10.17%
Allocation to the Company	603	603	603

# Summary of (Surplus) / gap of GUVNL

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

(Rs. Lakhs)

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

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

# **GUVNL Cost Allocation**

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

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

(Rs. Lakhs)

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

# **Summary of Total Power Purchase Cost**

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

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

(Rs. Lakhs)

Particulars	Approved as per MYT Order for FY 2010-11	Revised Estimates submitted by DGVCL for FY 2010-11	Revised Approved for FY 2010-11
Power Purchase Cost	401699	433108	380593
Transmission Costs to PGCIL & GETCO	28761	56132	43806
E-Urja Cost	603	603	603

Gujarat Electricity Regulatory Commission



Total Power Purchase Cost	431063	490095	414037
SLDC Fees & Charges	0	252	250
GUVNL	0	0	(11214)

# 4.4. **O&M Expenditure**

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

# a. Employee Expenses

## Petitioner's submission

The Petitioner has projected revised expenses of Rs. 16524 Lakhs as compared to the approved expenses of Rs. 11652 Lakhs for FY 2010-11 in the MYT Order.

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

(Rs. Lakhs)

Particulars	Approved as per MYT Order for FY 2010-11	Revised Estimates submitted by DGVCL for FY 2010-11
Employee Cost	11652	16524

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

The Petitioner has proposed an increase of 8% in Employee Cost on FY 2009-10 after excluding gratuity fund provision of Rs. 1737 Lakhs for FY 2010-11.

## Commission's View

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



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

Particulars	Approved as per MYT Order for FY 2010-11	Revised Estimates submitted by DGVCL for FY 2010-11	Revised Approved for FY 2010-11
Employee Cost	11652	16524	11652

## b. R&M Expenses

## Petitioner's submission

The Petitioner has revised the R&M expenses for FY 2010-11 to Rs. 2460 Lakhs as compared to the approved expenses of Rs. 3248 Lakhs for FY 2010-11 in the MYT Order.

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

(Rs. Lakhs)

Particulars	Approved as per MYT Order for FY 2010-11	Revised Estimates submitted by DGVCL for FY 2010-11
Repair & Maintenance	3248	2460

#### Commission's View

As discussed in the earlier section 'Approach for ARR for the FY 2010-11, the Commission has not revised the controllable expenses for FY 2010-11. Accordingly, it has considered the R&M expenses as approved in the MYT Order. The approved R&M expense for FY 2010-11 is shown in Table 75 below:



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

Particulars	Approved as per MYT Order for FY 2010-11	Revised Estimates submitted by DGVCL for FY 2010-11	Revised Approved for FY 2010-11
Repair & Maintenance	3248	2460	3248

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

#### Petitioner's submission

The Petitioner has revised the A&G expenses for FY 2010-11 to Rs. 3081 Lakhs. The same has been estimated by considering 8% increase on the provisional A&G expenses of FY 2010-11. The approved expenses as per the MYT Order for FY 2010-11 were Rs. 2920 Lakhs.

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

(Rs. Lakhs)

Particulars	Approved as per MYT Order for FY 2010-11	Revised Estimates submitted by DGVCL for FY 2010-11
Administration & General Charges	2920	3081

# Commission's View

The Commission has analyzed the submission by the Petitioner. Further, the Commission has also noted that the Petitioner has not provided any explanation for revision in A&G expenses. Since these expenses are controllable in nature, the Commission has not revised the approved expenses. The Commission's analysis of the A & G expenses is as given in the Table 77 below.

Gujarat Electricity Regulatory Commission



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

Particulars	Approved as per MYT Order for FY 2010-11	Revised Estimates submitted by DGVCL for FY 2010-11	Revised Approved for FY 2010-11	
Administration & General Charges	2920	3081	2920	

# **Summary of O & M expenses**

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

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

(Rs. Lakhs)

Particulars	Approved as per MYT Order for FY 2010-11	Revised Estimates submitted by DGVCL for FY 2010-11	Revised Approved for FY 2010-11	
Employee Expenses	11652	16524	11652	
Repair & Maintenance Costs	3248	2460	3248	
Administration & General Charges	2920	3081	2920	
Total O&M Expenses	17820	22065	17820	

# 4.5. Capital Expenditure and Capitalization

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

Gujarat Electricity Regulatory Commission



Table 79: Proposed Capital Expenditure for FY 2010-11

Sr. No.	Particulars	Approved as per MYT Order for FY 2010-11	Revised Estimates submitted by DGVCL for FY 2010-		
Α	Distribution Schemes				
	Normal Development Scheme	6000	6000		
	System Improvement Scheme	9000	1500		
	Jyoti Gram Yojna	0	0		
	Electrification of hutments/harijan basti	200	200		
	Kutir Jyoti Scheme	1235	100		
	Total	16435	7800		
В	Rural Electrification Schemes				
	TASP( Wells&Petapara)	92	9622		
	Special Component Plan	15	65		
	PMGY	0	0		
	RE Normal (Wells) New Guj. Pattern	45	600		
	Electrification of Premitive Tribes	0	0		
	Total	152	10287		
С	Others				
	Energy Conservation	0	200		
	Total	0	200		
D	Non Plan Schemes				
	RE Non Plan (Tatkal)	0	0		
	APDRP	0	2900		
	RGGVY	0	2500		
	SPA	0	0		
	DRUM	0			
	Total	0	5400		
E	Other New Schemes				
	Automatic PF control panels	1200	0		
	Aerial Bunch Conductors	500	1100		
	HVDS in selected sub-division	900	900		
	Automatic Meter Reading	0	100		
	GIS in cities	200	0		
	Underground Cables	206	2500		
	Costal	0	1000		



Sr. No.	Particulars	Approved as per MYT Order for FY 2010-11	Revised Estimates submitted by DGVCL for FY 2010- 11
	Gaurav path	0	0
	Misc. Civil work	500	500
	Total	3506	6100
F	Other Schemes		
	New Gujarat Pattern	0	0
G	Golden Goal Scheme		
	Pending Agriculture Connections	5002	0
I	Capital Expenditure Total	25095	29787

## Petitioner's submission

The Petitioner has submitted that all the schemes are in line with the schemes as approved by the Commission in the MYT Order. The only variation is change in capital expenditure against the Golden Goal Scheme which now stands withdrawn. Further, it submitted that similar activities (covered under Golden Goal Scheme) will be undertaken under the REC schemes under which it has estimated capital expenditure of Rs 10287 Lakhs. The revised capital expenditure for FY 2009-10 as submitted by the Petitioner is Rs 29787 Lakhs.

Table 80: Estimated Capital Expenditure for FY 2009-10

(Rs. Lakhs)

Particulars	Approved as per MYT Order for FY 2010-11	Revised Estimates submitted by DGVCL for FY 2010-11
Capital Expenditure	25095	29787

### Commission's View

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





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

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

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

(Rs. Lakhs)

Particulars	2006-07	2007-08	2008-09	Average
Proposed Capital Expenditure	20914	33000	28713	82627
Actual Capital Expenditure incurred	25737	21573	22082	69391
Actual Capitalization	25737	21573	22082	69391
Ratio	123%	65%	77%	84%

The average actual capitalization achieved by the Petitioner is 84% hence the Commission has considered that the Petitioner will be able to capitalize 84% proposed capital expenditure and has accordingly approved the capitalization for FY 2010-11 as shown in Table 82 below

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

(Rs. Lakhs)

Particulars	Approved as per MYT Order for FY 2010-11	Revised Estimates submitted by DGVCL for FY 2010-11	Revised Approved for FY 2010-11
Capital Expenditure	25095	29787	-
Capitalization	-	-	25016
Less : Consumer Contribution	5505	6090	6090
Grants	2042	13437	13437
Balance CAPEX	17548	10260	5489
Debt @ 70%	12284	7182	3842
Equity @ 30%	5264	3078	1647

Gujarat Electricity Regulatory Commission



# 4.6. Depreciation

#### Petitioner's submission

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

Table 83: Proposed Depreciation by DGVCL for 2010-11

(Rs. Lakhs)

Particulars	Approved as per MYT Order for FY 2010-11	Revised Estimates submitted by DGVCL for FY 2010-11
Gross Block in the beginning of the Year	210920	203939
Additions during the Year (Net)	25095	29787
Depreciation for the Year	7761	11531
Average Rate of Depreciation	3.62%	5.27%

## Commission's View

The Commission, in its MYT Order, had considered depreciation expenditure of Rs 7761 Lakhs for FY 2010-11, which amounts to 3.64% of Opening level of Gross Fixed Assets (GFA) of the Petitioner FY 2010-11. The closing GFA of FY 2009-10 is considered as the opening GFA for FY 2010-11 and the depreciation rates considered were as per those prescribed under the GERC Tariff Regulations.

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

Gujarat Electricity Regulatory Commission



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

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

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

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

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

(Rs. Lakhs)

Particulars	Approved as per MYT Order for FY 2010-11	Revised Estimates submitted by DGVCL for FY 2010-11	Revised Approved for FY 2010- 11
Gross Block in Beginning of the year	210920	203939	203939
Additions during the Year (Net)	25095	29787	25016
Depreciation for the Year	7761	11531	11406
Average Rate of Depreciation	3.62%	5.27%	5.27%



# 4.7. Interest Expenses

#### Petitioner's submission

The Petitioner has projected revised interest expenses of Rs. 9963 Lakhs for FY 2010-11 as compared to the approved expenses of Rs. 8373 Lakhs in the MYT Order.

Table 85: Projected Interest Expenses for FY 2010-11

(Rs. Lakhs)

Particulars	Approved as per MYT Order for FY 2010-11	Revised Estimates submitted by DGVCL for FY 2010-11
Opening Loans	57929	61863
Loan Additions during the Year	6209	7182
Repayment during the Year	5793	6186
Closing Loans	58345	62859
Average Loans	58137	62361
Interest on Loan	5814	6144
Interest in Security Deposit	2407	3700
Guarantee Charges	152	119
Total Interest & Financial Charges	8373	9963
Less: Interest on Working Capital	-	3183
Net Interest & Financial Charges	-	6780

The Opening balance of Loan for FY 2010-11 is revised to Rs. 61863 Lakhs as against Rs. 57929 Lakhs, which is closing balance as per MYT Order for FY 2009-10. The normative loan addition in FY 2010-11 is computed at Rs. 7182 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. 6186 Lakhs.

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

# Commission's View

Gujarat Electricity Regulatory Commission



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

The Commission has considered the revised weighted interest rate of 9.85 % as considered in the MYT order for estimating the interest cost for FY 2010-11. Further, interest on security deposit and guarantee charges has been considered as estimated by the Petitioner. The approved interest and finance charges, after considering the above allocation, are tabulated below.

.

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

(Rs. Lakhs)

Particulars	Approved as per MYT Order for FY 2010-11	Revised Estimates submitted by DGVCL for FY 2010-11	Revised Approved for FY 2010-11
Opening Loans	57929	61863 <sup>4</sup>	27083
Loan Additions during the Year	6209	7182	3842
Repayment during the Year	5793	6186	2708
Closing Loans	58345	62859	28217
Average Loans	58137	62361	27650
Interest on Loan	5814	6144	2724
Interest in Security Deposit	2407	3700	3700
Guarantee Charges	152	119	119

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

Gujarat Electricity Regulatory Commission



Total Interest & Financial Charges	8373	9963	6543	
------------------------------------	------	------	------	--

# 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.4947 Lakhs. However, instead of considering revenues for two months, revenues of the company for only one month have been considered for projecting the total working capital during FY 2009-10. The Petitioner has computed the interest on working capital at current short-term prime lending rate of SBI, that is, 10.25% as shown below.

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

(Rs. Lakhs)

	Approved as per MYT Order for FY 2010-11	Revised Estimates submitted by DGVCL for FY 2010-11
Particulars Particulars		
O & M expenses	1481	1839
Maintenance Spares	1095	2232
Receivables	38980	44193
Total Working Capital	41556	48263
Rate of Interest on Working Capital	10.25%	10.25%
Interest on Working Capital	4259	4947

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



#### Commission's View

The Commission has estimated the working capital as per Clause No. 66 of the GERC terms and conditions of tariff and accordingly considered the Operation & Maintenance expenses for one month; maintenance spares @ 1% of the historical cost escalated @ 6% per annum from the date of commercial operation; and receivables equivalent to one month of sales (in line with the same proposed by the Petitioner). Further, the estimation is based on O&M, historical costs and sales as approved by the Commission in this tariff order.

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

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

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

(Rs. Lakhs)

Particulars	Approved as per MYT Order for FY 2010-11	Revised Estimates submitted by DGVCL for FY 2010-11	Revised Approved for FY 2010-11
O & M expenses	1481	1839	1485
Maintenance Spares	1095	2232	2184
Receivables	38980	44193	34329
Total Working Capital	41556	48263	37997
Rate of Interest on Working Capital	10.25%	10.25%	10.25%
Interest on Working Capital	4259	4947	3895



#### 4.9. Provision for Bad Debts

The Petitioner has estimated the provisioning for write-off of bad debts at 0.10% of the revenue from sale of power i.e Rs. 474 Lakhs. The Commission has recomputed the bad debts at 0.10% of the revenue as shown in the table below:

**Table 89: Provision for Bad Debts** 

(Rs. Lakhs)

Particulars	Approved as per MYT Order for FY 2010-11	Revised Estimates submitted by DGVCL for FY 2010-11	Revised Approved for FY 2010-11
Provision for Bad Debts	475	474	412

# 4.10. Other Expenses

#### **Other Debits**

For FY 2010-11, the Petitioner has projected Rs 433 Lakhs in other debits. As discussed above all the controllable expenses are considered as approved in the MYT Order dated Jan 17, 2009. Accordingly, the approved amount considered for the same is as shown in Table 90 below.

# **Extraordinary Items**

For FY 2010-11, the Petitioner has projected Rs 20 Lakhs under the head of Extraordinary Items. However, the Commission has considered the amount as approved in the MYT Order dated Jan 17,2009 as shown in Table 90 below.

## **Prior period expenses**

For FY 2010-11, the Petitioner has not projected the head of Prior period expenses. Accordingly, the approved amount is nil for FY 2010-11.

## **Other Expenses Capitalized**

The Petitioner has estimated that expenses capitalized for FY 2010-11 would be Rs 4200 Lakhs. The Commission has considered Expenses Capitalized as per the levels specified in the MYT Order. Accordingly, the approved amount in case of Other Expenses Capitalized is as shown in Table 90 below.

Gujarat Electricity Regulatory Commission



Table 90: Other expenses for FY 2010-11

Particulars	Approved as per MYT Order for FY 2010-11	Revised Estimates submitted by DGVCL for FY 2010-11	Revised Approved for FY 2010- 11
Other Debits	109	433	109
Extraordinary Items	150	29	150
Net Prior Period Expenses / (Income)	0	0	0
Other Expenses Capitalized	(5107)	(4200)	(5107)
Total Other Costs	(4848)	(3738)	(4848)

# 4.11. Return on Equity

# Petitioner's submission

The Petitioner has submitted the revised estimate of Return on Equity for FY 2010-11 as Rs 6655 Lakhs. The RoE has been computed @ 14% of the average equity based on the opening balance of equity and normative additions during the year, which have been arrived at by considering 30% of the capital expenditure net of consumer contribution and grants as funded from equity.

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

(Rs. Lakhs)

Particulars	Approved as per MYT Order for FY 2009-10	Revised Estimates submitted by DGVCL for FY 2009-10
Opening Equity Capital	45104	45997
Equity Additions during the Year	5264	3078
Closing Equity	50368	49075
Average Equity	47736	47536
Rate of Return on the Equity	14.00%	14.00%
Return on Equity	6683	6655

Gujarat Electricity Regulatory Commission



## Commission's View

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

Table 92: Approved RoE for FY 2010-11

(Rs. Lakhs)

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
Opening Equity Capital	45104	45997	39514
Equity Additions during the Year	5264	3078	1647
Closing Equity	50368	49075	41160
Average Equity	47736	47536	40337
Rate of Return on the Equity	14.00%	14.00%	14.00%
Return on Equity	6683	6655	5647

## 4.12. Taxes

## Petitioner's submission

The Petitioner has estimated that the income tax for FY 2010-11 is Rs 1028 Lakhs as against Rs 58 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, the Commission has considered the tax amount as the same as approved in the MYT Order ie. Rs 58 Lakhs for the FY 2010-11.

**Table 93: Taxes for FY 2009-10** 

(Rs. Lakhs)

Particulars	Approved as per	Revised Estimates	Revised
	MYT Order for FY	submitted by DGVCL	Approved for
	2009-10	for FY 2009-10	FY 2009-10
Provision for Tax	58	1028	58

# 4.13. Aggregate Revenue Requirement for FY 2010-11

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

Table 94: Aggregate Revenue Requirement for FY 2010-11

(Rs. Lakhs)

Particulars	Approved as per MYT Order for FY 2010-11	Revised Estimates submitted by DGVCL for FY 2010-11	Revised Approved for FY 2010- 11
Cost of Power Purchase	431063	490095	414037
Operation & Maintenance Expenses	17820	22065	17820
Employee Cost	11652	16524	11652
Repair & Maintenance	3248	2460	3248
Administration & General Charges	2920	3081	2920
Depreciation	7761	11531	11406
Interest & Finance Charges	8373	6780	6543
Interest on Working Capital	4260	4947	3895
Other Debits	109	433	109
Extraordinary Items	150	29	150

Gujarat Electricity Regulatory Commission



Particulars	Approved as per MYT Order for FY 2010-11	Revised Estimates submitted by DGVCL for FY 2010-11	Revised Approved for FY 2010- 11
Provision for Bad Debts	475	474	412
Net Prior Period Expenses / (Income)	0	0	0
Other Expenses Capitalised	(5107)	(4200)	(5107)
Sub-Total	464904	532154	449265
Return on Equity	6683	6655	5647
Provision for Tax / Tax Paid	58	1028	58
Total Expenditure	471645	539838	454970
Less: Non-Tariff Income	3883	9522	9522
Aggregate Revenue Requirement	467762	530315	445447

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

## Petitioner's submission

The Petitioner has estimated category wise revenue based on the existing tariff which works out to Rs. 473844 Lakhs for FY 2010-11. It includes the FPPPA charges at Rs 0.77/kWh.

#### Commission's View

The Commission has considered revenue on the basis of the revised approved sales and at existing tariffs. The Commission has considered the FPPPA charges at 0.12/kWh, as considered at the time of the MYT Order. Further, incremental income from the new tariff category has not been considered as the expected consumers who 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 provided inTable 95 below:

Gujarat Electricity Regulatory Commission



Table 95: Projected Revenue for FY 2010-11

	Revenue FY 2010-11			
	Approved as per MYT Order for FY 2010-11	Revised Estimates submitted by DGVCL for FY 2010-11	Revised Approved for FY 2010-11	
LT Consumers				
Residential	57399	66045	57312	
Commercial	28059	32100	28400	
Industrial LT	120428	136775	119623	
Public Water Works	2877	3637	2973	
Agriculture	7039	12599	6953	
Street Light	992	1240	1042	
LT Total	216793	252396	216303	
HT Consumers				
Industrial HT	178790	205100	181115	
Railway Traction	14993	16349	14523	
HT Total	193783	221448	195639	
TOTAL	410576	473844	411942	

#### 4.15. Non-Tariff Income

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

## Petitioner's submission

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

#### Commission's views

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

Gujarat Electricity Regulatory Commission



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

(Rs. Lakhs)

Particulars	Approved as per MYT Order for FY 2010-11	Revised Estimates submitted by DGVCL for FY 2010-11	Revised Approved for FY 2010-11
Non Tariff Income	3883	9522	9522

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

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

#### Petitioner's submission

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

#### Commission's views

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

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

(Rs. Lakhs)

Particulars	Approved as per MYT Order for FY 2010-11	Revised Estimates submitted by DGVCL for FY 2010-11	Revised Approved for FY 2010-11
Other Income	7655	7802	7802



## 4.17. Subsidy for FY 2010-11

#### Petitioner's submission

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

#### Commission's views

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

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

Table 98: Subsidy for FY 2009-10

(Rs. Lakhs)

Particulars	Approved as per MYT Order for FY 2010-11	Revised Estimates submitted by DGVCL for FY 2010-11	Revised Approved for FY 2010-11
% Share in Unmetered Agriculture Sales	5.87%	4.91%	4.91%
Share of Agriculture Subsidy	6459	5398	5398
Other Subsidies (Write back of C.C. / Grants)	3717	0	0
Total	10176	5398	5398

Gujarat Electricity Regulatory Commission

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

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

Table 99: Total Revenue for FY 2010-11

(Rs. Lakhs)

Particulars	Approved as per MYT Order for FY 2010-11	Revised Estimates submitted by DGVCL for FY 2010-11	Revised Approved for FY 2010-11
Revenue from sale of power at Current Tariff	410576	473844	411942
Other Income (Consumer related)	7655	7802	7802
Agriculture Subsidy	6459	5398	5398
Other Subsidies	3717	0	0
Total Revenue including Subsidy	428407	487043	425141

# 4.19. Estimated Revenue Gap for FY 2010-11

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

Table 100: Estimated revenue gap during FY 2010-11

(Rs. Lakhs)

Particulars	Approved as per MYT Order for FY 2010-11	Revised Estimates submitted by DGVCL for FY 2010-11	Revised Approved for FY 2010-11
Revised ARR	467762	546356	445447
Revenue from Sale of Power	410576	473844	411942
Other Income (Consumer-related)	7655	7802	7802
Total Revenue before Subsidy	418231	481646	419744
Agriculture Subsidy	6459	5398	5398
Other Subsidies	3717	0	0
Total Revenue After Subsidy	428407	487043	425141
Gap/(Surplus)	39355	59312 (#)	20306

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



Gujarat Electricity Regulatory Commission



# 5. Compliance of Directives

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

# 5.1. Compliance of Earlier Directives

# **Directive 1**

#### Consumption by agricultural pump sets

A realistic consumption by agricultural pump-sets could be obtained only by providing meters at distribution transformers and properly noting LT losses on the LT network below distribution transformers. The progress on this is very poor. Only 19316 transformers are metered out of the target of 35924 transformers. The metering of distribution transformers should be expedited. Wherever meters are provided at the distribution transformers, the consumption by the pump sets under these transformers may be assessed and furnished to the Commission by reading the meters regularly. A report for the year FY 2008-09 may be furnished by May 2009.

#### Compliance:

The Petitioner has stated that it is facing stiff resistance from existing Agriculture consumers as well as Kisan Sangh for providing meters for existing consumers. However The Petitioner is using every opportunity to provide meters to existing consumers. It is submitted that out of total 87514 connections, 41552 connections are provided with meters. Further GUVNL has entrusted the work of study & analysis of consumption by Agriculture metered and unmetered consumers to M/s Feedback Venture Limited. The final outcome of this study and conclusion thereon by M/s Feedback Venture Limited is awaited.

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

The Petitioner is directed to submit the number of agriculture consumers metered till now and a realistic, time-bound plan of completion of metering of the remaining consumers. The Commission feels that the progress on the same is very poor and the Petitioner should expedite the metering process and complete the same at the

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

# **Directive 2**

#### **Distribution loss**

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

# Compliance:

The Petitioner has submitted that the loss trajectory till FY 2010-11 was as approved by the Commission under tariff Order dated 17.01.2009. In FY 2009-10, the revised estimate for distribution losses of the Petitioner is 14.53% as against the approved level of 13.45%. The actual distribution losses for H1 of FY 2009-10 are 15.29%.

During the H1 it is observed that the sentout units of agriculture dominant feeders have increased by about 63.5% as power supply fed to agriculture dominant feeder was higher during July, August and September 2009 as per the directives of Government of Gujarat. Due to this the incremental units sent out increased by 114.176 MUs in H1 as compared to H1 of the previous year. Further, 5.4 MUs are due to release of 2490 connections which were released between April to September 2009, thus 108.75 MUs was the excess supply of electricity to farmers during drought period i.e. July, August and September 2009.

However, considering 4.75% rise in sent out units (load growth) for the whole year 2009-10 and 4.67% rise in sold out units, the revised projections for the distribution loss will be 14.53% for the year 2009-10, out of which 1.08% increase in loss is due to increase of 108.752 MUs to agriculture Sector, which otherwise would have been 13.45% (14.53% - 1.08% = 13.45%) which is as approved by the Commission.

Category- wise distribution losses of the company for last three years are as under:



Category	2006-07	2007-08	2008-09	2009-10
				(Upto November)
Industrial	7.47 %	5.81 %	5.64 %	4.43 %
GIDC	1.62 %	1.36 %	1.90 %	0.85 %
Urban	25.41 %	21.92 %	20.39 %	18.45 %
Jyotigram	60.39 %	60.65 %	58.35 %	56.35 %
Total	16.11 %	15.04 %	14.48 %	14.43 %

Looking to the above, Distribution losses in Jyotigram feeders are very high and in this particularly category, the average losses are 58.90%.

JGY Category loss has large contribution to overall loss of the Company and, therefore, reduction in JGY Losses is the prime task of the Company. Company has taken up this task in a phased manner, whereby, high losses feeders have been assigned to various officers for close monitoring. Due to enhanced vigilance activity and intensive efforts JGY category losses have seen a downward trend. It is emphasized on JGY and also Urban category to reduce the losses by implementing following actions.

Road Map of reduction of losses is shown below by planning of following measures.

- 1. Reducing losses by providing new substations in tribal area. Bifurcation of the feeders through new sub-stations. Providing of Aerial Bunch Conductors.
- 2. Providing HVDS
- 3. Removing lungarias (direct hooking from LT lines) by effective checking drive.
- 4. Rectification of old consumers.

For the year 2010-2011, the Company has planned to provide the fund under SI scheme of Rs.107 Crores. With this it is targeted that the Distribution losses for the next coming three years will be brought down at lower level as under.

Year	% losses
2009-10	14.53
2010-11	13.45
2011-12	12.45

Further investments required to reduce tech. & comm. Losses:



The Petitioner has planned the investment for the reduction of technical & commercial losses under System Improvement Scheme as well as under R-APDRP Scheme. The future plan along with its estimated expenditure is as under:

#### System Improvement Scheme

Sr. no.	Year	No. of Feeders Covered	Estimated Expenditure (Rs. Cr)	Projected Savings (MUs)
1.	2009-10	79 nos.	44.00	50
2.	2010-11 & 2011-12	316 nos.	107.70	80

#### R-APDRP Scheme

Sr. no.	Year	No. of Feeders covered	Estimated Expenditure (Rs. Cr)	Projected Savings (MUs)
1.	2010-11	116	43	24.39
2.	2011-12	116	43	24.39

Details of utilization of APDRP funds till date

The expenditure incurred in APDRP is Rs. 185.25 Crores. The details of utilization of APDRP funds till date circle wise and feeders involved are as under:

Particulars	Surat	Valsad	Bharuch
Feeders in Nos.	106	82	13
2005-06 (Rs. Lakhs)	6456.66	4361.77	2871.68
2006-07 (Rs. Lakhs)	2545.81	1093.81	1197.03
Total Expenditure (Rs. Lakhs)	9002.47	5455.58	4068.71

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

The Commission has noted compliance regarding utilization of APDRP funds and regarding further investments required to reduce technical and commercial losses. It is directed to the Petitioner to submit the actual expenditure incurred as against the planned expenditure mentioned above in the next APR exercises. Further, the Petitioner shall also demonstrate the incremental impact on the distribution loss due to incurring of the said capital expenditure especially the impact on JGY feeders.

#### **Directive 3**



#### Effective metering, billing and revenue realization

A report on action to be taken to improve meter reading and billing shall be submitted.

## Compliance:

The company has appointed M/s. Sterling Transformers vide Work Order dated 09.10.2009 for carrying out meter reading work of 32 Sub-Divisions of DGVCL having average monthly consumers 5,82,200 to ensure the meter reading and billing to the consumers in the prescribed time limit. The company has introduced stringent penalty clause for the delay in meter reading and any mal-practices in the meter reading and billing to the consumers.

Each Sub-Division is preparing Spot Billing Programme in advance for Cycle-05 to be completed during 15<sup>th</sup> to 20<sup>th</sup> of the relevant month and balance cycles are to be completed from 20<sup>th</sup> of the relevant month to 10<sup>th</sup> date of next month. Such programme is handed over to Agency/Departmental Staff in advance for timely billing work as per the Schedule of GERC i.e. monthly bills are to be issued within 30 days from past bill for monthly billing and within 60 days from previous billing in by-monthly billing with variation of maximum two days.

Where the Meter Reading Agency lacks in completing the meter reading work, the Division/ Sub-Division head arranges for deployment of departmental staff for timely billing.

Circle wise timely billing during the month of Dec-20009 was as under:

In the Valsad Circle, timely billing was 100% in all categories of consumers, In the Surat Circle, timely billing was 88.56%, 97.83%, 98.95%, 97.01% and 99.92% in Residential, Commercial, Industrial, Street Lights and Agricultural categories of consumers respectively, In the Bharuch Circle, timely billing was 85%, 95%, 95%, 90% and 92% in Residential, Commercial, Industrial, Water Works and Street Lights categories of consumers respectively.

The company has introduced LT billing through Hand Held Equipment to ensure that there is no calculation error in bills. In Surat Circle, 70.86% (604078 consumers out of 852425 of metered consumers) are billed through Hand Held Equipments. In Valsad Circle, 71.83% (499472 consumers out of 695313 metered consumers) are



billed through Hand Held Equipments and in Bharuc Circle, 7.66% (34182 consumers out of 446316 metered consumers) are billed through Hand Held Equipments. Automatic Meter Reading facility results in accurate, timely billing besides savings in time and expenses. Circle wise Automatic Meter Reading facility provided to HT consumers as on today is shown in table below.

Table 101: Table showing the % of HT Consumers having AMR facility

Name of Circle	Nos. of HT Consumers	Nos. of HT Consumers provided with Automatic Meter Reading facility	Percentage
Surat	962	826	86%
Valsad	705	524	74%
Bharuch	503	288	57%

The company has installed ATP Machines for bill collection for 24.00 Hrs. in Urban (City) area. Recently, the company has also appointed "e-Gram Panchayats" as Bill Collecting Agencies for collection of bills of DGVCL. This is in addition to the deployment of various Bill Collecting Agencies appointed by DGVCL including post offices to collect the bills issued by DGVCL.

#### Commission's comments

The Commission has also noted the action to be taken to improve meter reading and billing.

## **Directive 4**

### Cent percent metering

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

# Compliance



# Status of metering:

Sr. No.	Description	% Completed
1	11KV/22 KV Feeders	100%.
2	Distribution Transformer on Agriculture dominant feeders	39.94%
3	Distribution Transformer on other than Agriculture dominant feeders	56.63%
4	Individual Consumers other than Agriculture Consumer	100%
5	Agriculture Consumers	45.74%

The Petitioner has submitted that it has provided panel meters on all 257 Agriculture feeders.

#### Commission's comments

The metering on Agriculture dominated feeders shall be accorded priority and expedited.

### **Directive 5**

#### **Business Plan**

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

## Compliance

Five copies of the Business Plan have been submitted to GERC on 01.02.2010 vide letter no. DGVCL/C&R/ APR Pet./Pub.-Notice/10/01442 dated 30.01.2010.

## Commission's comments

The compliance by the Petitioner on this directive is noted.

### **Directive 6**

#### **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 7**

#### **Distribution Transformer failure**

The Commission has directed that the DISCOM should take measures to reduce the transformer failures and adhere to the provision of standards of performance. It shall henceforth provide the failure rate for the year under review in every APR petition.

#### Compliance

All necessary efforts are being made to further reduce the failure rate of Transformers. The table below indicates the reducing trend of Transformer failure rate.

Table 102: Table showing the Transformer failure rate

Year	Failure (%)
FY 2006-07	16.68
FY 2007-08	15.81
FY 2008-09	14.10

Further, the details of the failure rate for the current year as under shows the reducing trend of Transformer failure rate has been continued compared to that of the previous years.

Gujarat Electricity Regulatory Commission



Year	Number of Transformers	Failed Transformers	Failure (%)
FY 2009-10 (upto Dec)	45938	5255	11.44

Company is taking all possible measures to reduce the Distribution Transformer Failure rate by way of stringent maintenance viz.

- Reviewing loading of existing Distribution Transformer Centers under System Improvement Scheme, etc.,
- Reactivation of earthing,
- Providing M-seal to HT and LT side Bushings to prevent inrush of water during monsoon on all higher capacity transformers,
- Providing adequate size of fuse in distribution Box,
- Providing Lugs in HT/LT wiring,
- Providing proper size of cable considering loading on transformer,
- By regular maintenance work like checking of oil level and topping of oil leakage, cleaning, greasing of studs on distribution transformers, etc.
- Measuring phase wire load by deputing vigilance staff and carrying out balancing of load,
- LT line maintenance work like restringing of conductor and carrying out trimming of trees.

Additionally, Company has adopted a High Voltage Distribution System particularly for new Agricultural consumer which will further reduce the Transformer failure rate.

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

The compliance by the Petitioner on this directive is noted.

## **Directive 8**

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

# Compliance



The spot billing work is carried out departmentally by the Utility staff or by engaging outsourcing agency for meter reading and issuance of bills to consumers at site. The spot billing work is bifurcated in total 5 cycles and in monthly and bimonthly billing. The billing of cycle 05 is monthly billing and balance cycles are bimonthly billing. The monthly billing is done with interval of 30 days and bi-monthly billing is done with interval of 60 days period.

The spot billing work of cycle 05 is started from 15<sup>th</sup> date of relevant month and completed on 20<sup>th</sup> date of relevant month. Balance cycles are billed during 20<sup>th</sup> date of relevant month and completed before 10<sup>th</sup> date of next month. The meter reading programme of various cycles is being planned in advance and handed over to concerned departmental staff or outsourcing agency for timely commencement & completion of billing programme.

As far as meter reading by departmental staff is concerned, the meter reading staff is being rotated for prevention of malpractices. The energy bills are personally handed over to consumers by departmental meter reader or staff of the agency. The meter reader is given meter reading programme in advance and the meter reader gives energy bills to consumer by taking meter reading through hand held equipment by visiting every premise personally.

After completion of daily meter reading programme, the meter reader or the agency hands over the energy bill data / book to billing section of the concerned sub-division on the same day or on the next day. The Deputy Superintendent Accounts / Senior Assistant (Billing) monitors the meter reading programme whether the same is being done timely as per the programme given and wherever there is a delay in meter reading programme for any reason, staff from other sub-division / division is being deployed and it is being ensured that meter reading programme is being completed timely.

The Deputy Engineer of sub-division or the Billing staff of sub-division surprisingly checks the meter reading taken by the concerned meter reader or agency on random basis to ensure that there is no malpractice. The billing data which has been uploaded and the bill books which have been submitted at sub-division are checked by Jr. Assistant in Billing Section and thereafter it is submitted to data processing agency engaged by the Petitioner for final data entries and billing process.

If any complaint is received from a consumer regarding the energy bill issued to him, the same is sorted out / resolved after proper checking and wherever required by



personally visiting the consumer premises either by the Deputy Engineer of the subdivision or Billing staff of the sub-division.

For ensuring that correct bills are being issued to consumers, the Petitioner has provided hand held equipment to all the meter readers and the meter reading agency which has been outsourced has also been mandated to take meter reading through hand held equipment only.

#### Commission's comments

The compliance by the Petitioner on this directive is noted.

# **Directive 9**

The Commission directed the Petitioner 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.

#### Compliance

The Petitioner has submitted the achievement of replacement of static meters as against the target for FY 2009-10. It has submitted that due to the process of procurement of the static meters, the progress of replacement of meters during the current year remained low.

Table 103: Table showing the Meter replaced by the Petitioner

Name of Circle	Target FY 2009-10	Achievement upto Dec-2009
Surat	70000	20758
Bharuch	65000	24181
Valsad	40000	16099
Total	175000	61038

It is submitted that in the Petitioner's area, the implementation of the work of providing static meters in industrial HT/LT connections was started since last eight years by erstwhile GEB and the same was continued by the Company and as on today all the industrial connections are provided with static meters. During the last five years, the Company has provided high precision energy meters in domestic/commercial connections. Out of total 20,21,258 domestic/commercial



connections, 14,94,665 connections are provided with high precision energy meters and 35,500 connections are provided with static meters.

The Company replaces on an average 1.25 Lakh faulty meters per annum. The present load growth observed for new connections is about 1.1 Lakh per annum. Hence, keeping in view of the consumer strength, the Company has planned to replace about 2.25 Lakh meters per annum in the next coming years and will reach the target of replacement of all the old meters by the FY 2019-20.

Total nos. of consumers of the Company during the FY 2008-09 were 1935568 and as per Table 35 of the APR Petition number 993 of 2010, considering total nos. of consumers may be 2084641 at the end of the FY 2009-10. Assuming year wise growth of 6.5% thereafter the number of new connections will be as shown below.

No. of consumers **Target Projected New** FY projected escalated @ Replacement of Connections old meters 6.5% 2010-11 2220143 144309 177738 2011-12 2364452 153689 225000 2012-13 251814 163679 225000 2013-14 2681820 174318 225000 2014-15 2856139 185649 225000 2015-16 3041788 197716 225000 2016-17 3239504 210567 225000 2017-18 224255 225000 3450071

3674326

3913157

Table 104: Table showing the future plan for replacement of old meters

From 2011 onwards only static meters will be provided. During FY 2010-11, the procurement of static meters will be completed and thereafter all the meters will be replaced by static meters only and also the new connections will be released with static meters only.

238831

254355

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

2018-19

2019-20

The Commission has noted the progress on Automatic Meter Reading facility and observes that progress is slow and needs to be expedited. The Petitioner shall continue the practice of submitting, in advance, the number of old meters it plans to replace in every ARR petition along with the progress achieved for the same.



Gujarat Electricity Regulatory Commission

225000

225000

# **Directive 10**

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

# Compliance

Details of number of theft cases reported under section 135-126 of the Electricity Act-2003, status of penal action taken and the total amount recovered from such consumers during the year 2008-09 and 2009-10 (up to November-2009) are as under:

Table 105: Details of the cases detected Under Section 135

Cases detected u/s.135						
Name of Circle	No. of cases	Assessment amount (in Rs Lakhs)	Recovery (in Rs Lakhs)	No. of FIRs	compoundir recovered	s from whom ng charges are l u/s 152 (Rs. ikhs)
					Nos.	Rs. Lakhs
Surat	4586	1061	361	46	4380	94
Valsad	2509	252	172	59	2610	30
Bharuch	1460	232	188	113	1285	31
Total	8555	1545	721	218	8275	155

Table 106: Details of the cases detected Under Section 126

Cases detected u/s.126					
Name of Circle  No. of Assessment amount (in Recovery (in Factorial					
Surat	438	61	31		
Valsad	365	44	28		
Bharuch	451	34	18		
Total	1254	139	76		

## **Commission's comments**

The compliance by the Petitioner on this directive is noted.

# **Directive 11**



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

# Compliance

The fresh directive no.4 has been noted and now all future APR & ARR petitions will be prepared in the unit of Rupees Crores.

#### Commission's comments

The Commission has noted the submission and directs the Petitioner to adhere to its submission made above in it compliance.

#### 5.2. Fresh Directives

# **Directive 1**

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

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

#### **Directive 2**

The Petitioner has calculated the depreciation by applying the new rates on the total gross assets without segregating the assets as mentioned in Clause 17 of Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009. The Petitioner is directed to submit the recomputed depreciation as per Clause 17 during the truing-up of FY 2010-11.

#### **Directive 3**

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



# 6. Fuel and Power Purchase Cost Adjustment

# **Submission by Petitioner**

# **Submission by Petitioner**

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

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

Where.

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

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

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

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

Gujarat Electricity Regulatory Commission



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

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

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

Where,

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

# Commission's view:

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

Gujarat Electricity Regulatory Commission



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

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

Table 107: Base Power Purchase cost for Calculation of FPPPA for FY 2010-11

Sr. No.	Power Stations	Capacity (MW)	Fixed Cost (Rs. Lakhs)	Energy Purchase (MU)	Variable Cost (Rs/Kwh)
	GSECL				
1	Ukai TPS	850	30417	5014	1.50
2	Ukai Hydro	305	2519	637	-
3	Gandhinagar I to IV	660	28544	1156	1.75
4	Gandhinagar V	210	9237	1540	1.47
5	Wanakbori I to VI	1,260	43781	4081	1.73
6	Wanakbori VII	210	9049	1540	1.64
7	Sikka TPS	240	10848	422	1.99
8	Kutch Lignite I to III	215	16492	1190	1.07
9	Kutch Lignite IV	75	6768	461	0.98
10	Dhuvaran oil	220	7532	644	3.76
11	Kadana Hydro	242	6820	189	0.00
12	Utran Gas Based	135	5117	313	2.16
13	Dhuvaran Gas Based - Stage-I	107	4944	245	2.21
14	Dhuvaran Gas Based - Stage-II	112	6982	258	2.22
15	Utran Extension	375	24841	757	1.86
16	Sikka Extension			0	0.00
	Total of GSECL Plants	5,216	30417	18447	
	IPPs				
17	ESSAR	300	11106	535	2.01
18	GPEC	655	45919	1203	2.47

Gujarat Electricity Regulatory Commission



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

OTHERS	Capacity (MW)	MU	Energy Purchase (MU)	Variable Cost (Rs/Kwh)
Reliance Industries LTD. Naroda	23	161	23	2.34
United Phosphorous LTD. Jhagadia	-	0	0	0.00
Gujarat Alkalis & Chemical LTD. Baruch	8	54	8	1.97

Gujarat Electricity Regulatory Commission





ONGC Anlkeshwar	6	44	6	1.90
ONGC, Hazira	2	16	2	1.90
Adani Exports (Philips Carbon)	8	54	8	2.00
Arvind Mills LTD	-	0	0	0.00
Wind Farms	Capacity (MW)	Fixed Cost (Rs. Lakhs)	Energy Purchase (MU)	Variable Cost (Rs/Kwh)
Wind Farms (Old Policy)	24	24	48	1.75
Wind Farms (New Policy)	701	0	1411	3.37
Bagasse Plants				
Bagasse	15.9	15.9	97	3
Competitive Bidding				
APPL	1000	91209	7008	1.479
Aryan	200	21866	227	0.2084



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

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

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

# 7.1. Transmission Charges

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

#### Rates:

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

Rs. 81600/MW/Month

Plus

Energy loss in kind at 4.20%

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

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

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

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

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

Gujarat Electricity Regulatory Commission





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

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

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

# 7.2. Wheeling Charges

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

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



#### Plus

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

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

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

# 7.3. Cross-Subsidy Surcharge

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



# 8. Tariff Philosophy and Category-Wise Tariffs

# 8.1. Introduction – Tariff Philosophy

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

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

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

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

- Reduction in number of Slabs: In order to simplify the current multiple-slabs structure (up to five slabs in some categories) the Commission has reduced number of slabs in Residential category. The Commission feels that this will bring more clarity and will simplify the tariff structure.
- Removing ambiguity with respect to applicability of tariff: The Commission has
  observed that in respect to HT categories there is a lot of ambiguity with respect to
  applicability of tariff to certain category of consumers. Also, there are several cases
  in courts. The Commission feels that huge amount of money and valuable time is
  wasted in fighting the cases in courts by consumers as well as the utility. Doing away
  with such ambiguity has been the key focus of this rationalization. The Commission
  has tried to bring clarity in applicability of HT tariff and has merged some existing HT
  categories in HTP-I category.



Addressing of Consumer Grievances: During the course of public hearing, several
recommendations with respect to change in existing tariff were suggested to the
Commission. The Petitioner was also given an opportunity to present its views on the
same and in a few cases the Petitioner has agreed to the suggestions made by
consumers. The Commission has decided to incorporate those suggestions in this
tariff order.

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

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

- Huge Revenue Gap: The Commission noted that the gap of Rs. 550 crore is estimated for FY 2010-11. The Commission is of the opinion that some tariff increase is essential to cover the huge revenue gap of the Utilities. Gradual tariff increase would safeguard consumers in the long term from any tariff shock which might arise given the current revenue deficit situation.
  - It must be noted here that the Petitioner instead of asking for tariff-hike to fill the huge revenue gap has prayed to the Commission to treat the gap as a 'Regulatory Assets' and permit its recovery over a period no longer than three years. As per the Tariff Policy, considering revenue gap as 'Regulatory Assets' should be exceptional. It further provides that the recovery of 'Regulatory Assets' should be time bound and preferably within the control period.
- Rationalization will lead to Moderate tariff Increase: As discussed above, the
  Commission has tried to rationalize the present tariff structure in order to remove
  practical difficulties of implementation. In view of this rationalization, there is
  moderate tariff hike.
- Impact of Tariff hike is neutralized by reduction in FPPPA: It is expected that the consumer will not be affected adversely due the said tariff hike as there is reduction



in FPPPA charges during recent quarters (i.e from 91 paise per unit to 62 paise per unit) which can neutralize the impact of tariff hike.

# 8.4. Changes in the Tariff Schedule

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

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

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

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

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

- Marginal increase in energy charges for each slab. I.e. LFD I Residential Premises, LFD – II Commercial Premises (except the last slab) , LFD – III Educational and Other Institutions.
- 4. For Motive power services (LTP tariff) increase of Rs 0.10/Unit and Rs 0.15/Unit in LTP-I Motive Power Service for installation having contracted load upto and including 10 BHP and contracted load exceeding 10 BHP respectively. Increase of Rs 0.10/Unit in LTP-II Educational Institutions and Research Laboratories.
- 5. Energy charges for Street lighting increased by Rs 0.05/Unit.

**Gujarat Electricity Regulatory Commission** 



- 6. In the existing tariff structure different energy charges are applied to Water Works and Sewerage Pumps operated by Gram Panchayat and Municipalities / Nagarpalikas. (Rs 2.40/Unit and Rs 2.70/Unit respectively) As the nature of demand and load profile are similar, tariff for both the slabs is revised to Rs 2.50/Unit.
- 7. It may be noted here that tariff for agriculture category has not increased since ten years (last revision of agriculture tariff was made in FY 2000-01). At this juncture where moderate tariff hike is proposed across the board, the Commission feels that tariff in agriculture category should also be increased in order to ensure that level of cross- subsidy is maintained if not reduced. Also, incremental revenue from increased tariff will help the Petitioner to clear the back-log of pending agriculture connections.

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

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

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

# 8.5. Impact of Electricity Duty

Gujarat Electricity Regulatory Commission

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



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

# 8.6. Revised Gap

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

Table 108: Net Gap for FY 2010-11

(Rs Lakhs)

Particulars	Approved as per MYT Order for FY 2010- 11	Revised Estimates submitted by DGVCL for FY 2010-11	Revised Approved for FY 2010-11	Estimated Gap for FY 2010-11 with Revised Tariff
Revised ARR	467762	546356	445447	445447
Revenue with Existing Tariff	410576	473844	411942	419386
Other Income (Consumer related)	7655	7802	7802	7802
Total Revenue excluding subsidy	418231	481646	419744	427188
Agriculture Subsidy	6459	5398	5398	5398
Other Subsidies	3717	0	0	0
Total Revenue including subsidy	428407	487043	425141	432585
Gap / (Surplus)	39355	59312	20306	12862

The total revenue based on the existing tariff for FY 2010-11 was Rs 20306 Lakhs. The net gap calculated with the revised tariff is Rs 12862 Lakhs. Regarding the plea of the Petitioner for creation of regulatory asset for the gap in respect of FY 2009-10, the Commission has decided that it will revisit the same when the audited data would be made available to the Commission.



# **COMMISSION'S ORDER**

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

Table 109 : Revised Approved ARR for FY 2010-11

(Rs. Lakhs)

Particulars	Revised Approved ARR for FY 2010-11
Cost of Power Purchase	414037
Operations & Maintenance Expenses	17820
Employee Cost	11652
Repair & Maintenance	3248
Administration & General Charges	2920
Depreciation	11406
Interest & Finance Charges	6543
Interest on Working Capital	3895
Other Debits	109
Extraordinary Items	150
Provision for Bad Debts	412
Net Prior Period Expenses / (Income)	0
Other Expenses Capitalized	(5107)
Sub-Total	449265
Return on Equity	5647
Provision for Tax / Tax Paid	58
Total Expenditure	454970
Less: Non-Tariff Income	9522
Aggregate Revenue Requirement	445447

Gujarat Electricity Regulatory Commission



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

Sd/- Sd/-

DR. P K MISHRA Chairman SHRI PRAVINBHAI PATEL
Member

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

March 2010

# **TARIFF SCHEDULE**

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

# Effective from 1st April 2010

#### **GENERAL**

- 1. The tariff figures indicated in this tariff schedule are the tariff rates payable by the consumers of unbundled Distribution Licensees of the erstwhile GEB.
- These tariffs are exclusive of Electricity Duty, tax on sale of electricity, taxes and other charges levied by the Government or other competent authorities from time to time which are payable by the consumers, in addition to the charges levied as per the tariff.
- 3. All these tariffs for power supply are applicable to only one point of supply.
- 4. The charges specified are on monthly basis. Distribution Licensee may decide the period of billing and adjust the tariff rate accordingly.
- 5. The energy supplied under these tariffs can be utilized only within the compact area of the premises not intervened by any area/road belonging to any person or authority other than the consumer.
- Except in cases where the supply is used for the purpose for which the Distribution Licensee has permitted lower tariff, the power supplied to any consumer shall be utilized only for the purpose for which supply is taken and as provided for in the tariff.
- 7. Meter charges shall be applicable as prescribed under 'GERC (Licensee's Power to Recover Expenditure incurred in providing supply and other Miscellaneous Charges) Regulations, 2005 as in force from time to time.
- 8. Fuel Cost and Power Purchase Adjustment Charges shall be applicable in accordance with the Formula approved by the Gujarat Electricity Regulatory Commission from time to time.

Gujarat Electricity Regulatory Commission



- Payment of penal charges for usage in excess of contract demand / load for any billing period does not entitle the consumer to draw in excess of contract demand / load as a matter of right.
- 10. Delayed payment charges for all consumers:

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

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

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



# PART - I

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

# 1. RATE LFD-I:

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

Single-phase supply (aggregate load upto 6 kW)

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

## 1.1. Fixed Charges/Month:

Range of Connected Load: (Other than BPL Consumers)

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

# For BPL Household Consumers:

Fixed charges	Rs.5/- per month

#### **PLUS**

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

**Gujarat Electricity Regulatory Commission** 



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

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

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

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

# 1.4. Minimum bill (excluding meter charges)

Payment of fixed charges as specified in 1.1 above.

# 2. RATE LFD-I (Rural):

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

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

Single-phase supply (aggregate load upto 6 kW)

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

### 2.1. Fixed Charges/Month:

Range of Connected Load: (Other than BPL Consumers)

Gujarat Electricity Regulatory Commission



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

#### For BPL Household Consumers:

Fixed charges	Rs.5/- per month

#### **PLUS**

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

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

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

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

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

# 2.4. Minimum bill (excluding meter charges):

Payment of fixed charges as specified in 2.1 above.

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

Gujarat Electricity Regulatory Commission



# 3.0 RATE LFD-II (For Commercial Premises)

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

# 3.1 Fixed Charges:

# Range of Connected Load:

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

#### **PLUS**

#### 3.2 Energy charges:

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

# 3.3 Minimum Bill (excluding meter charges):

Payment of fixed charges as specified in 3.1 above.

# 4.0 RATE LFD-III

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

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

# 5.0 RATE-LTP

This tariff shall be applicable for motive power services

**Gujarat Electricity Regulatory Commission** 



# 5.1 RATE LTP-I

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

# 5.1.1 Fixed charges per month:

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

#### **PLUS**

# 5.1.2 Energy charges:

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

# PLUS

# **5.1.3 Reactive Energy Charges:**

For installation having contracted load of 50 BHP and above for all reactive units (KVRAH) drawn during the month	10 Paise per KVARH
---	--------------------

# 5.1.4 Minimum bill per installation per month for consumers other than Seasonal Consumers:

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



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

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

# 5.2 RATE LTP-II

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

#### 5.2.1 Energy Charges



For all units consumed during the month	410 Paise per Unit
---	--------------------

# **NOTE:**

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

#### 5.3 RATE LTP-III

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

# 5.3.1 Fixed charges:

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

# **PLUS**

#### 5.3.2 Energy charges:

For the entire consumption during the month	405 Paise per Unit

#### **PLUS**

#### 5.3.3 Reactive Energy Charges:

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

Gujarat Electricity Regulatory Commission



#### 5.3.4 Billing Demand

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

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

#### 5.3.5 Minimum Bill

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

#### **NOTE:**

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

#### 5.4 RATE LTP-IV

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

#### 5.4.1 Fixed Charges per month:

Fixed charges specified in RATE LTP-I above.

**PLUS** 

#### 5.4.2 Energy Charges:

Gujarat Electricity Regulatory Commission



For entire consumption during the month	200 Paise per Unit

#### 5.4.3 Reactive Energy Charges:

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

# NOTE:

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

# 5.5 RATE LTP-IV (A)

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

#### 5.5.1 Fixed Charges per month:

Fixed charges specified in RATE LTP-III above.

#### **PLUS**

#### 5.5.2 Energy Charges:

For entire consumption during the month	200 Paise per Unit

Gujarat Electricity Regulatory Commission



#### 5.5.3 Reactive Energy Charges:

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

#### NOTE:

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

# 5.5 RATE LTP-V

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

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

### 6.0 RATE WW (Water Works)

Gujarat Electricity Regulatory Commission



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

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

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

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

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

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

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

# 6.4 Time of Use Discount:

Applicable to all the water works consumers having connected load of 50 HP and above for the Energy consumption during the Off-Peak Load Hours of the Day.

**Gujarat Electricity Regulatory Commission** 



For energy consumption during the off-peak period, viz., 1100 Hrs to 1800 Hrs.		
For energy consumption during night hours, viz., 2200 Hrs to 0600 Hrs. next day	75 Paise per Unit	

# 7.0 RATE-AG (Agricultural)

This tariff is applicable to motive power services used for irrigation purposes only excluding installations covered under LTP-V category.]

- 7.1 The rates for following group are as under:
- 7.1.1 HP Based Tariff:

For entire contracted load	Rs.160/BHP/month

#### **ALTERNATIVELY**

# 7.1.2 Metered Tariff:

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

#### 7.1.3 Tatkal Scheme:

Fixed Charges	Rs.10 per BHP per month	
Energy Charges:	70 Paise per Unit per month	
For entire consumption	701 also per offic per month	

<u>NOTE:</u> The consumers under Tatkal Scheme shall be eligible for normal metered tariff as above, on completion of five years period from the date of commencement of supply.

7.2 No machinery other than pump water for irrigation will be permitted under this tariff. Any other machinery connected in the installation governed under this tariff shall be charged separately at appropriate tariff for which consumers shall have to take separate connection.

Gujarat Electricity Regulatory Commission



- 7.3 Agricultural consumers who desire to supply water to brick manufacturing units shall have to pay Rs. 100/HP per annum subject to minimum of Rs. 2000/- per year for each brick Mfg. Unit to which water is supplied in addition to existing rate of HP based / metered agricultural tariff.
- 7.4 Such Agricultural consumers shall have to pay the above charges for a full financial year irrespective of whether they supply water to the brick manufacturing unit for full or part of the Financial Year.

Agricultural consumers shall have to declare their intension for supply of the water to such brick manufacturing units in advance and pay charges accordingly before commencement of the financial year (i.e. in March every year).

# 8.0 RATE SL (Street Lights)

#### 8.1 Tariff for Street Light for Local Authorities and Industrial Estates:

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

# 8.1.1 Energy Charges:

For all the units consumed during the month: For streetlights operated by	335 Paise per Unit
industrial estates and local authority	333 Faise per Offit

#### 8.1.2 Minimum Charges:

The minimum energy consumption is prescribed for consumer with more than 50 street lights within a village or an industrial estate, as the case may be, as equivalent to 2200 units per annum per kilo watt of connected load during the year.

# 8.1.3 Renewal and Replacements of Lamps:

Gujarat Electricity Regulatory Commission



The consumer shall arrange for renewal and replacement of lamp at his cost by person authorised by him in this behalf under Rule-3 of the Indian Electricity Rules, 1956 / Rules issued by CEA under the Electricity Act, 2003.

# 8.2 Tariff for power supply for street lighting purposes to consumers other than the local authorities and industrial estates:

# 8.2.1 Fixed Charges:

Rs. 20 per kW per month	

#### 8.2.2 Energy charges:

For all units consumed during the month	335 Paise per kWh
---	-------------------

#### 8.2.3 Renewal and Replacement of Lamps:

The consumer shall arrange for renewal and replacement of lamp at his cost by person authorised by him in this behalf under Rule-3 of the Indian Electricity Rules, 1956 / Rules issued by CEA under the Electricity Act, 2003.

#### 8.2.4 Maintenance other than Replacement of Lamps:

Maintenance of the street lighting system shall be carried out by Distribution Licensee.

# 9.0 RATE TMP (Temporary):

This tariff is applicable to services for temporary supply at the low voltage.

# 9.1 Energy Charges:

For the supply used for the purposes stipulated in respective tariff for permanent supply:

(a)	Rate LFD-I (for residential premises) & LFD-I (Rural)	435 Paise/Unit
(b)	Rate LFD-II (for non-residential premises)	480 Paise/Unit
(c)	Rate LFD-III (for educational and other institutions)	480 Paise/Unit
(d)	Rate LTP-I, LTP-II and LTP-III	640 Paise/Unit

Gujarat Electricity Regulatory Commission





# 9.2 Minimum charges:

(	(a)	For the purpose stipulated in LFD:	Rs.20/- per day
(	(b)	For the purpose stipulated in Rate LTP-I	Rs.200/- per BHP per month
(	(c)	For the purpose stipulated in Rate LTP-III	Rs.225/- per kW per month

<u>NOTE</u>: Payment of bill is to be made within seven days from the date of issue of the bill. Supply would be disconnected for non-payment of dues on 24 hours notice.



# **PART-II**

# TARIFFS FOR SUPPLY OF ELECTRICITY AT HIGH TENSION (3.3 KV AND ABOVE, 3-PHASE 50 C/S), AND EXTRA HIGH TENSION

The following tariffs are available for supply at high tension for large power services for contract demand not less than 100 kVA

# 10.0 **RATE HTP-I**:

This tariff will be applicable for supply of electricity to HT consumers contracted for 100 kVA and above for regular power supply and requiring the power supply for the purposes not specified in any other HT categories.

# 10.1 Demand Charges;

#### 10.1.1 For billing demand up to contract demand.

(a)	For first 500 kVA of billing demand	Rs.100/- per kVA per month
(b)	For next 500 kVA of billing demand	Rs.140/- per kVA per month
(c)	For next 1500 kVA of billing demand	Rs.210/- per kVA per month
(d)	For billing demand in excess of 2500 kVA	Rs.240/- per kVA per month

# 10.1.2 For Billing Demand in Excess of Contract Demand

For	billing	demand	in	excess	over	the	Rs.370 per kVA per month
con	tract der	mand					113.070 per KVA per month

# **PLUS**

# 10.2 Energy Charges

For entire consumption during the month					
(a) Upto 1000 kVA billing demand 390 Paise per Unit					
(b)	For 1001 kVA to 2500 kVA billing demand	410 paise per Unit			
(c)	Above 2500 kVA billing demand	420 Paise per Unit			

#### **PLUS**

Gujarat Electricity Regulatory Commission



#### 10.3 Time of Use Charges:

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

For energy consumption during the two peak periods, viz., 0700	75 Paise per Unit
Hrs to 1100 Hrs and 1800 Hrs to 2200 Hrs	75 Faise per Offit

#### 10.4 Billing Demand:

The billing demand shall be the highest of the following:

- (a) Actual maximum demand established during the month
- (b) Eighty-five percent of the contract demand
- (c) One hundred kVA

#### 10.5 Minimum Bills:

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

#### 10.6 Lighting and Non-Industrial Loads:

The consumption of lights and fans and other non-industrial loads of the factory building as also the consumption of creche, laboratory, stores, time keeper's office, yards, watch and ward, first aid centres, and dispensaries during a month registered at the main meter on HT side shall be charged at the energy charges specified above.

#### 10.7 Power Factor:

#### 10.7.1 Power Factor Adjustment Charges:

- (a) The power factor adjustment charges shall be levied at the rate of 1% on the total amount of electricity bills for the month under the head "Energy Charges" for every 1% drop or part thereof in the average power factor during the month below 90% upto 85%.
- (b) In addition to the above clause, for every 1% drop or part thereof in average power factor during the month below 85% at the rate of 2% on the total amount of electricity bill for that month under the head "Energy Charges", will be charged.

#### 10.7.2 Power Factor Rebate:

If the power factor of the consumer's installation in any month is above 95%, the consumer will be entitled to a rebate at the rate of 0.5% (half percent) in excess of 95% power factor on



the total amount of electricity bill for that month under the head "Energy Charges" for every 1% rise or part thereof in the average power factor during the month above 95%.

#### 10.8 Maximum Demand and its Measurement:

The maximum demand in kW or kVA, as the case may be, shall mean an average KW/KVA supplied during consecutive 30/15 minutes period of maximum use where such meter reading directly the maximum demand in KW/KVA have been provided.

#### 10.9 Contract Demand:

The contract demand shall mean the maximum KW/KVA for the supply, of which the supplier undertakes to provide facilities from time to time.

#### 10.10 Rebate for Supply at EHV:

On E	nergy charges:	Rebate @
(a)	If supply is availed at 33/66 kV	0.5%
(b)	If supply is availed at 132 kV and above	1.0%

#### 10.11 Concession for Use of Electricity during Night Hours:

For the consumer eligible for using supply at any time during 24 hours, entire consumption shall be billed at the energy charges specified above. However, the energy consumed during night hours of 10.00 PM to 06.00 AM next morning (recorded by a polyphase meter operated through time-switch) as is in excess of one third of the total energy consumed during the month, shall be eligible for concession at the rate of 75 Paise per unit. The polyphase meter and time switch shall be procured and installed by the consumer at his cost and sealed by the Distribution Licensee.

#### 10.12 Seasonal Consumers taking HT Supply:

- 10.12.1 The expression, "Seasonal Consumer", shall mean a consumer who takes and uses power supply for ice factory, ice-candy machines, ginning and pressing factory, oil mill, rice mill, salt industry, sugar factory, khandsari, cold storage plants (including such plants in fishery industry), tapioca industries manufacturing starch, pumping load or irrigation, white coal manufacturers etc.
- 10.12.2 A consumer, who desires to be billed for minimum charges on annual basis, shall intimate in writing in advance about the off-season during which energy consumption,



if any, shall be mainly for overhauling of the plant and machinery. The off-season period at any time shall be a full calendar month/months. The total period of off-season so declared and observed shall be not less than three calendar months in a calendar year.

- 10.12.3 The total minimum amount under the head "Demand and Energy Charges" payable by a seasonal consumer satisfying the eligibility criteria under sub clause 10.12.1 above and complying with provisions stipulated under sub clauses 10.12.2 above shall be Rs.4000/- per annum per kVA of the billing demand.
- 10.12.4 .4 The billing demand shall be the highest of the following:
  - (i) The highest of the actual maximum demand registered during the calendar year.
  - (ii) Eighty-five percent of the arithmetic average of contract demand during the year.
  - (iii) One hundred kVA.
- 10.12.5 Units consumed during the off-season period shall be charged for at the flat rate of 420 Paise per unit.
- 10.12.6 Electricity bills paid during off-season period shall not be taken into account towards the amount payable against the annual minimum bill. The amount paid by the consumer towards the electricity bills for seasonal period only under the heads "Demand Charges" and "Energy Charges" shall be taken into account while determining the amount payable towards the annual minimum bill.

### 11.0 RATE HTP-II

Applicability: This tariff shall be applicable for supply of energy to HT consumers contracting for 100 KVA and above, requiring power supply for Water Works and Sewerage pumping stations run by Local Authorities and GW & SB. GIDC Water Works.

#### 11.1 Demand Charges:

11.1.1 For billing demand upto contract demand.

(a)	For first 500 kVA of billing demand	Rs.90/- per kVA per month
(b)	For next 500 kVA of billing demand	Rs.130/- per kVA per month

Gujarat Electricity Regulatory Commission



(c)	For next 1500 kVA of billing demand	Rs.190/- per kVA per month
(d)	For billing demand in excess of 2500 kVA	Rs.220/- per kVA per month

#### 11.1.2 For billing demand in excess of contract demand

For	billing	demand	in	excess	over	the	Rs.335 per kVA per month
con	tract der	nand					Tis.oos per kv/v per mentin

#### **PLUS**

# 11.2 Energy Charges:

For entire consumption during the month				
(a) Upto 1000 kVA billing demand 390 Paise per Unit				
(b)	For 1001 kVA to 2500 kVA billing demand	410 paise per Unit		
(c)	Above 2500 kVA billing demand	420 Paise per Unit		

#### **PLUS**

# 11.3 Time of Use Charges:

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

For energy consumption during the two peak periods,	75 Paise per Unit
viz., 0700 Hrs to 1100 Hrs and 1800 Hrs to 2200 Hrs	75 Faise per Offit

- 11.4 Billing demand
- 11.5 Minimum bill
- 11.6 Power Factor
- 11.7 Maximum demand and its measurement
- 11.8 Contract demand
- 11.9 Rebate for supply at EHV

same as per HTP-I Tariff

# 12.0 RATE HTP-III:

This tariff shall be applicable to a consumer taking supply of electricity at high voltage, contracting for not less than 100 kVA for temporary period. A consumer not taking supply on

Gujarat Electricity Regulatory Commission



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

# 12.1 Demand Charges:

For billing demand upto contract demand	Rs.462/- per kVA per month
For billing demand in excess of contract demand	Rs.550/- per kVA per month

# **PLUS**

# 12.2 Energy Charges:

For all units consumed during the month	630 Paise per Unit

#### **PLUS**

# 12.3 Time of use charges:

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

Additional charge for the energy consumption during two peak	75 Paise per Unit
periods, i.e., 07.00 Hrs to 11.00 Hrs and 18.00 Hrs to 22.00 Hrs.	75 Faise per Offit

- 12.4 Billing demand
- 12.5 Minimum bill
- 12.6 Power factor
- 12.7 Maximum demand and its measurement
- 12.8 Contract demand
- 12.9 Rebate for supply at EHV

same as per HTP-I Tariff

# 13.0 RATE HTP-IV:

This tariff shall be applicable for supply of electricity to HT consumers opting to use electricity exclusively during night hours from 10.00 PM to 06.00 AM next day and contracted for regular power supply of 100 kVA and above.

# 13.1 Demand Charges:

Same rates as specified in Rate HTP-I

**PLUS** 

# 13.2 Energy Charges:

Gujarat Electricity Regulatory Commission



For all	units consumed during the month		200 Paise per Unit
13.3	Billing demand		
13.4	Minimum bill		
13.5	Power factor		same as per HTP-I Tariff
13.6	Maximum demand and its measurement	>	-
13.7	Contract demand		
13.8	Rebate for supply at EHV	J	

#### NOTE:

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

# 14.0 **RATE HTP- V**

# HT - Agricultural (for HT Lift Irrigation scheme only)

This tariff shall be applicable for supply of electricity to High Tension Agricultural consumers contracting for 100 kVA and above, requiring power supply for lifting water from surface water sources such as canal, river and dam, and supplying water directly to the fields of farmers for agricultural irrigation only.

### 14.1 Demand Charges:

Demand Charges Rs. 25 per kVA per Month
---

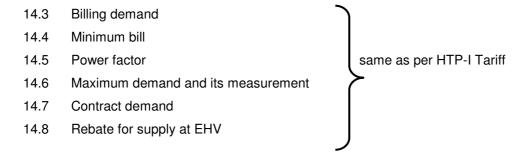
#### **PLUS**

#### 14.2 Energy Charges:

For all units consumed during the month	160 Paise per Unit
---	--------------------



Gujarat Electricity Regulatory Commission



# 15.0 **RATE – Railway Traction:**

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

# 15.1 Demand Charges:

(a) For billing demand upto the contract demand	Rs.160 per kVA per month		
(b) For billing demand in excess of contract demand	Rs.400 per kVA per month		

<u>NOTE</u>: In case of the load transfer for traction supply due to non-availability of power supply at preceding or succeeding point of supply or maintenance at Discom's level, excess demand over the contract demand shall be charged at normal rate at appropriate point of supply.

Normal Demand Charges will also apply in case of bunching of trains. However, Discoms shall charge excess demand charges while raising the bills and Railways have to give convincing details and documentary proof of bunching of trains if they want to be charged at the normal demand charges. If satisfactory proof of bunching of trains is provided, Discom shall consider that occasion for normal demand charges, otherwise excess demand charges will be applicable specified as above at 15.1(b).

#### **PLUS**

#### 15.2 Energy Charges:

	For all units consumed during the month		455 Paise per Unit	
15.3 15.4 15.5	Billing demand Minimum bill Power factor	sam	e as per HTP-I Tariff	
15.6	Maximum demand and its measurement	_		
15.7	Contract demand			
Gujara	at Electricity Regulatory Commission			Page 166



15.8 Rebate for supply at EHV



# **Annexure 1.1 – List of Objectors**

# List of Organizations and Individuals who filed objections/suggestions

1	Consumer Education and Research Society
2	Gondal Chambers of Commerce and Industires
3	Sh.Vipulbhai H. Raiyani
4	Dr. Vithal n. Kamat,CAER
5	M/S Suzlon Power Infra
6	Sh. Hasmukh R. Shah
7	Rajkot Engineering Association
8	Akhil Bhartiya Grahak Panchayat
9	Gujarat Krushi Vij Grahak Suraksha Sangh
10	Sh. Surendrabhai B. Mehta
11	Federation of Gujarat Industries
12	Sh. Sunil B. Oza
13	The Jahlod taluka Lift Irrigation Co.Op.Mandli
14	M/S Axis Ad Print Media Ltd.
15	M/S Arayan Packging
16	GEB Engineers Association



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

# List of participants in Public Hearing

1.	Consumer Education and Research Society
2.	Sh.Vipulbhai H. Raiyani
3.	Dr. Vithal n. Kamat,CAER
4.	M/S Suzlon Power Infra
5.	Sh. Hasmukh R. Shah
6.	Rajkot Engineering Association
7.	Akhil Bhartiya Grahak Panchayat
8.	Gujarat Krushi Vij Grahak Suraksha Sangh
9.	Sh. Surendrabhai B. Mehta
10.	Federation of Gujarat Industries
11.	Sh. Sunil B. Oza
12.	The Jahlod taluka Lift Irrigation Co.Op.Mandli
13.	M/S Axis Ad Print Media Ltd.
14.	Utility users Wellfare Association and Cosumer Protection Council



# **Annexure 1.3 – ARR for FY 2008-09**

The final ARR based on the audited figures for FY 2008-09 is as shown below:

Table 110: Table showing the Final ARR of FY 2008-09

Particulars	Approved as per MYT Order for FY 2008-09	Revised Estimates submitted by DGVCL for FY 2008-09	Approved as per Order dated 14- 12-2009	FY 2008- 09 (Audited)
Cost of Power Purchase	343201	395535	395252	395355
Operation & Maintenance Expenses	17658	19352	15310	19396
Employee Cost	12112	14897	11257	14721
Repair & Maintenance	2946	2014	2033	2033
Administration & General Charges	2600	2442	2020	2642
Depreciation	5816	5717	5813	5811
Interest & Finance Charges	7794	6220	5759	5759
Interest on Working Capital	3461	3972	3814	3931
Other Debits	99	401	99	433
Extraordinary Items	150	25	25	25
Provision for Bad Debts	387	408	0	0
Net Prior Period Expenses / (Income)	0	165	0	274
Return on Equity	5190	4758	4872	5326
Provision for Tax / Tax Paid	61	80	43	72
Less: Other Expenses Capitalized	(4545)	(3200)	0	(4085)
ARR	379272	433432	430987	432296
Non - Tariff Income	3456	4059	3853	8475
Total ARR	375816	429373	427134	423821

