JOINT ELECTRICITY REGULATORY COMMISSION
for the State of Goa and Union Territories

Petition No. 13 /2010

Date of Order 1st November, 2010

Aggregate Revenue Requirement (ARR) and Retail Tariff for the Electricity Department, Government of Daman & Diu for the Financial Year 2010-11

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C O N T E N T S

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Abbreviations

1.	A&G	Administration and General
2.	Act	Electricity Act, 2003
3.	ARR	Aggregate Revenue Requirement
4.	CAGR	Compounded Annualized Growth Rate
5.	CAPEX	Capital Expenditure
6.	CEA	Central Electricity Authority
7.	CERC	Central Electricity Regulatory Commission
8.	CGS	Central Generating Station
9.	Ckt. Km.	Circuit Kilometer
10.	CPSU	Central Public Sector Undertaking
11.	D/C	Double circuit
12.	DD	Daman & Diu
13.	DNH	Dadra & Nagar Haveli
14.	DVC	Damodar Valley Corporation
15.	ED-DD	Electricity Department, Daman & Diu
16.	ED-DNH	Electricity Department, Dadra & Nagar Haveli
17.	FC	Fixed charges
18.	FSTPS	Farakka Super Thermal Power Station
19.	FY	Financial Year
20.	GFA	Gross Fixed Assets
21.	GGPS	Gandhar Gas Power Station
22.	HP	Horse Power
23.	HT	High Tension
24.	JERC	Joint Electricity Regulatory Commission for Goa and UT.
25.	KAPS	Kakrapur Atomic Power Station
26.	KGPS	Kawas Gas Power Station
27.	KHSTPS	Kahalgaon Super Thermal Power Station
28.	KSTPS	Korba Super Thermal Power Station
29.	kVA	Kilo Volt Ampere
30.	kVAh	Kilo Volt Ampere Hour
31.	kWh	Kilo Watt hour
32.	LT	Low Tension
33.	MOP	Ministry of Power

34.	MU	Million Units
35.	MVA	Mega Volt Ampere
36.	MW	Mega Watt
37.	MYT	Multi-Year Tariff
38.	NHPC	National Hydro Power Corporation
39.	NSPCL	NTPC-SAIL Joint Power Corporation Limited
40.	NTPC	National Thermal Power Corporation
41.	O&M	Operation and Maintenance
42.	O/H	Over head
43.	OIDC	Omnibus Industrial Development Corporation
44.	PGCIL	Power Grid Corporation of India Limited
45.	PPCA	Power Purchase Cost Adjustment
46.	R&M	Repairs and Maintenance
47.	RE	Revised Estimates
48.	REA	Regional Energy Accounting
49.	RLDC	Regional Load Despatch Centre
50.	RoE	Return on Equity
51.	S/C	Single circuit
52.	SBI CAPS	SBI Capital Market Limited
53.	SBI PLR	SBI Prime Lending Rate
54.	SS	Sub-station
55.	TAPS	Tarapur Atomic Power Station
56.	TSTPS	Talcher Super Thermal Power Station
57.	U/G	Under ground
58.	UI	Unscheudled Interchange
59.	VC	Variable charges
60.	VSTPS	Vindyachal Super Thermal Power Station
61.	WRLDC	Western Regional Load Despatch Centre
62.	WRPC	Western Regional Power Committee

Before the

Joint Electricity Regulatory Commission for the State of Goa and Union Territories
Gurgaon-122 016

CORAM

Dr. V.K. Garg (Chairperson)

Shri. R.K. Sharma FIE (Member)

Petition No. - 13 / 2010

In the matter of

Aggregate Revenue Requirement (ARR) and Retail Tariff for
the Union Territory of Daman and Diu
for the Financial Year 2010-11

And In the matter of

Electricity Department Daman and Diu Petitioner

ORDER

1.1 INTRODUCTION

1.1.1 In exercise of the powers conferred by the Electricity Act 2003 the Central Government constituted a Joint Electricity Regulatory Commission for all Union Territories except Delhi to be known as "Joint Electricity Regulatory Commission for Union Territories" as notified on 2nd May 2005. Later with the joining of the State of Goa, the Commission came to be known as "Joint Electricity Regulatory Commission for the State of Goa and Union Territories" as notified on 30th May 2008.

The Commission is a two-member body designated to function as an autonomous authority responsible for regulation of the power sector in the state of Goa and Union Territories of Andaman & Nicobar Islands, Chandigarh, Dadra & Nagar Haveli, Daman & Diu, Lakshadweep and Puducherry. The powers and the functions of the Commission are as prescribed in the Electricity Act, 2003. The Head Office of the Commission presently is located in the district town of Gurgaon, Haryana and falls in the National Capital Region.

The Joint Electricity Regulatory Commission for the State of Goa and Union Territories started to function with effect from August 2008 with the objectives and purposes for which the Commission has been established.

The Electricity Department, Daman and Diu a deemed licensee under Section 14 of Electricity Act, 2003 is carrying on the business of distribution and retail supply of Electricity in Daman and Diu (Union Territory).

1.2 ADMISSION OF PETITION AND PUBLIC HEARING PROCESS:

Electricity Department, DD had filed its petition for approval of Aggregate Revenue Requirement and determination of retail tariff for the year 2010-11 on 27th March 2010 according to the Conduct of Business Regulations of JERC. The Commission observed that the ARR filed by the petitioner was incomplete and lacking some critical and vital data / information. Many of the formats prescribed in JERC (Terms and Conditions for Determination of Tariff) Regulation 2009 were not submitted with the ARR and Tariff petition. There were many deficiencies in the data given in the formats.

The Commission held a hearing on 14/05/2010 with the utility on the ARR and Tariff Petition filed for the year 2010-11. The petitioner was granted 3 weeks time to file all the supporting documents i.e., on or before 07/06/2010. The petition was posted for hearing on 14/06/2010.

The Commission held another hearing on 14/06/2010 and the ARR and Tariff Petition was admitted on 14/06/2010 (Petition No. 13 of 2010) to avoid delay in processing the ARR though the additional information submitted by the utility did not meet the requirement.

The unfilled gaps in information required was indicated to the utility on 14/06/2010. The ED- DD has submitted some additional information on 30/06/2010.

The ED-DD was asked for making a presentation before the Commission on 13/07/2010 on the rational and philosophy of the various tariff proposals in the ARR for the Year 2010-11. The Department has made the presentation as scheduled.

The ED-DD submitted the data / information / clarifications in various references listed below:

1. The ED - DD letter No. ED/EE/T-JERC/2010-11/ nil dated 7.06.2010.
2. The ED - DD letter No. ED/EE/T-JERC/2010-11/850 dated 30.06.2010.
3. The ED - DD letter No. ED/EE/T-JERC/2010-11/1124 dated 26.07.2010.
4. The ED - DD letter No. ED/EE/T-JERC/2010-11/1570 dated 06.09.2010.
5. The ED - DD letter No. ED/EE/T-JERC/2010-11/1647 dated 21.09.2010.
6. The ED - DD letter No. Nil dated 04.10.2010.
7. The ED - DD letter No. Nil dated 08.10.2010.

The additional information and revised / corrected figures submitted by the ED-DD in the above references are taken into consideration while analyzing the ARR and Tariff Petition in the order.

1.2.1 The Commission directed the utility to publish its application for ARR in the abridged form and manner as approved in accordance with Section 64 of the Electricity Act, 2003 to ensure public participation

The Public Notice was published by ED-DD in the following newspapers:

S.No	News Paper	Language	Date of Publication
1	Times Nation	English	02.07.2010
2	Asli Azadi	Hindi	01.07.2010
3	Vartaman Pravah	Gujarati	01.07.2010

Through the public notice, the public were invited to forward their objections and suggestions on the petition upto 28.07.2010.

1.2.2 The Commission has received two (2) written objections within the due date on the petition filed by ED-Daman and Diu. The Commission considered the objections received and sent them to ED-DD for communicating their response to the objectors. ED-DD submitted their comments / response on the objections to the respective objectors.

The Commission sent a communication to the objectors and also directed ED-DD to publish a notice for public hearing on or before 1st August 2010 in local news papers having wide circulation in the jurisdiction of Union Territory of Daman and Diu intimating the date, time and venue as given below and inviting them to take part in public hearing process for presenting their views.

Date	Venue of Hearing	Time & Category
18.08.2010	Swami Vivekananda Auditorium, Government College, Nani Daman	11.00 AM to 2.00 PM For all consumers – Focus on domestic / non-domestic (Commercial) and LT Industries and LT Industries 3.00 PM to 6.00 PM For all consumers - Focus on HT Industries
20.08.2010	Conference Hall, PHC, Ghogla, Diu	11.00 AM to 2.00 PM For all consumers-Focus on domestic / non-domestic (Commercial) and LT Industries. 3.00 PM to 6.00 PM For all consumers – Focus on HT Industries

The Commission held public hearings on ARR and Tariff proposals of ED-DD as scheduled.

During the public hearing each objector was provided with a time slot on the day of public hearing for presenting his views on the petition of ED-Daman and Diu before the Commission. The general public and stake holders other than those who had earlier sent their written objections were also given an opportunity to express their views/objections/suggestions.

The details of organizations / individuals who filed their objections on the petition are given in Annexure-1.

The names of objectors / organizations who presented their views in the public hearing and those general public who expressed their views are given in Annexure-2(i).

The main issues raised by the objectors in respect of the petition along with the response of the ED-DD and comments of the Commission are briefly given in Chapter-4.

Subsequently the ED-DD, while submitting the additional data / information requested the Commission to accept their revised projections mainly on power purchase which is due to reduced availability of power from central generating stations on account of revised reduced allocation made with effect from 6.5.2010. The Commission decided to hold a hearing and directed the ED-DD to make a presentation with the revised projections so that the consumers / stakeholders will be aware of the same and to give them an opportunity to express their objections / suggestions. Commission arranged to publish a notice in newspapers having wide circulation in the Daman & Diu UT area stating that there will be a public hearing on ARR petition of Daman & Diu at JERC's Court Hall on 8.10.2010 at 11 AM. As scheduled the public hearing was held. The ED-DD gave a presentation with revised projections on ARR and tariff petition. The consumers / representatives of consumer organizations responded and expressed their objections / suggestions on the presentation given. The objections raised were mostly repetitive of the objections / suggestions already raised by them during the public hearing held at Daman on 18.8.2010. of the objectors /organizations who presented their views in the said public hearing are given in Annexure 2(ii)

1.3 HIGHLIGHTS OF THE ORDER:

The Commission has examined the data furnished in the ARR and the tariff petition submitted on 27th March 2010 and subsequent submission, referred in para 1.2 above and has passed this order. The highlights of the order are as under:

Sl.No.	Item	As projected by the ED-DD	As approved by the Commission
1 (a)	Energy sales (MU)	1541	1541
(b)	Sale of Surplus Power	215	208
2	ARR Net (Rs. crore)	608.40	545.20
3	Revenue at existing tariffs (Rs. crore)	458.35	495.75
4	Revenue Gap (Rs. crore)	150.05	49.45
5	Average cost (Rs./kWh)	3.46	3.12

2. Summary of Daman and Diu Petition for Annual Revenue Requirement

2.1 The Electricity Department of Daman and Diu (ED-DD) in its petition has submitted Aggregate Revenue Requirement (ARR) for the year 2010-11 for meeting its expenses, the estimated Revenue with the existing tariffs and the revenue gap as shown in Table-1 below. The ARR for the years 2008-09 and 2009-10 are also given in Table-1 below for information.

Table-1

Aggregate Revenue Requirement and Gap Projected by ED-DD for the years 2008-09, 2009-10 and 2010-11

(Format 27 of ARR)

(Rs. in crore)

Sl.No.	Particulars	2008-09 (Actuals)	2009-10 (Actuals)	2010-11 (Projected)
1.	Cost of power purchase	468.34	492.66	535.44
2.	Employee cost	4.63	4.85	5.09
3.	O&M expenses	2.00	4.31	2.20
4.	Administration and General expenses	2.98	0.19	3.68
5.	Depreciation	13.55	13.55	15.76
6.	Interest charges (including interest on working capital)	19.94	19.94	22.26
7.	Return on NFA/equity	21.14	21.14	23.14
8.	Provision for bad debts	5.33	5.33	6.08
9.	Total revenue requirements	537.91	561.97	613.65
10.	Less Non tariff income	5.00	10.69	5.25
11.	*Net revenue requirement (9-10)*	*532.91*	*551.28*	*608.40*
12.	Revenue from existing tariff	486.56	496.44	399.09
13.	Revenue from sale of surplus power	74.04	104.49	59.26
14.	*Gap (11-12-13)*	*(27.70)*	*(49.65)*	*150.05*

2.2 The Electricity Department has requested the Commission to:

"

- *Approve the aggregate revenue requirement of FY 2010-11 as well as the tariff revision proposal for FY 2010-11.*
- *Make the proposed Retail Supply Tariffs applicable from April 1, 2010.*
- *And pass such other and further orders as are deemed fit and proper in the facts and circumstances of the case.*"

3. Power Sector in Daman and Diu – An Overview

3.1 The Electricity Department of Union Territory of Daman and Diu (ED-DD) is responsible for distribution and supply of Electricity in the Union Territory.

The Administration of Daman and Diu is a deemed licensee under the provisions of Electricity Act 2003 for distribution of electricity in the Union Territory. It operates in an area of 104 sq. kms. The total population of Union Territory is around 220 lakhs as per 2001 censes, spread over 2 towns and 26 villages.

3.2 POWER SUPPLY

Daman and Diu does not have its own generation. The power supply requirements of the Union Territory are met from its share in Central Generating Stations based on the allocation by Ministry of Power, Government of India. The allocation for 2010-11 as on 1.3.2010 is given in Table-2 below:

Table-2

Allocation from Central Generating Stations (Format No.4 of ARR)

Sl.No.	Station	Allocation (MW)
1.	KSTPS	65.93
2.	VSTPS-I	23.63
3.	VSTPS-II	17.97
4.	VSTPS-III	20.12
5.	KGPS	30.99
6.	GGPS	31.31
7.	SIPAT	19.12
8.	NTPC-SAIL	70.00
9.	KAPS	6.84
10.	TAPS 3 & 4	21.33
11.	FSTPS	0
12.	TSTPS	0
13.	KHSTPS-I	0
14.	KHSTPS-II	2
	Total	**309.24**

Any short fall in the supply is met by open market purchase through power exchange etc.

3.3 TRANSMISSION AND DISTRIBUTION

Daman and Diu owns and operates the transmission and distribution network as on 31st March 2010 as given in Table-3 below:

Table-3

Transmission and Distribution Network as on 31.3.2010

Sl. No.	Voltage	Transmission Lines (Ckt. Km)	Substations Nos.	Transformers Capacity (mVA)
	Transmission			
1	220 kV (D/C)	19.25	1	350
2	66 kV (D/C) 66kV (S/C)	52.0 28.7	7	347
	Distribution			
3	11 KV (O/H) 11kV (U/G)	347 83.6		
4	LT (OH) LT (U/G)	659.7 131.19		
	Distribution Transformers			
5	11 kV / 400V		491	110.92

3.4 TRANSMISSION AND DISTRIBUTION (T&D) LOSSES

The transmission and distribution (T&D) losses of Daman and Diu system were 11.48% during the year 2008-09 and 11.25% during the year 2009-10. The technical and commercial losses of the system have not been segregated.

3.5 CONSUMER PROFILE

Electricity Department, Daman and Diu serves 58,569 consumers as on 31.3.2010. The number of consumers and categories and the energy sales during the year 2009-10 are given in Table-4 below:

Table-4

Consumer Profile and Energy Sales – 2009-10

(Format 28 of ARR)

Sl.No.	Consumer Category	No. of Consumers		Energy Sales (MU)	
1	Domestic	43712	(74.63%)	57.92	(3.94%)
2	Commercial	8782	(14.99%)	27.73	(1.89%)
3	Industrial				
	a) Low and Medium	3425	(5.85%)	139.12	(9.47%)
	b) HT- General	772	(1.34%)	1236.51	(84.17%)
	c) HT – Ferro	11			
4	Agriculture	1609	(2.75%)	2.53	(0.17%)
5	Public Lighting	181	0.44%)	4.36	0.36%
6	Public water works	77		0.88	
	Total (Net)	**58569**		**1469.05**	

3.6 DEMAND AND SUPPLY POSITION

The demand of Union Territory of Daman and Diu was about 230 MW during the year 2009-10 and its allocation from various central generating stations was about 309 MW, leaving a marginal surplus.

3.6.1 Power Supply Position

The power supply from various generating stations during the years 2008-09 and 2009-10 was as given in Table-5 below:

Table-5

Power Supply from Central Generating Stations

(MU)

Sl.No.	Source / Station	2008-09	2009-10
	NTPC STATIONS		
1.	KSTPS	514	523
2.	VTPS-I	165	179
3.	VTPS-II	136	140
4.	VTPS-III	138	161
5.	KGPS	113	155
6.	GGPS	83	109
7.	SIPAT	63	142
8.	NTPC-SAIL	-	327
	NPCL		
9.	KAPS	63	23
10.	TAPS 3&4	22	68
	NTPC (Eastern Region)		
11.	FSTPS	26	21
12.	TSTPS	19	15
13.	KHSTPS-I	0	0
14.	KHSTPS-II	18	16
	Total	**1360**	**1879**

3.6.2 Energy Balance

The supply and demand during the year 2008-09 and 2009-10 were as given in Table-6 below:

Table-6

Energy Balance

(Table-4 of ARR)

(MU)

Sl.No.	Energy Sales	2008-09	2009-10
1.	Energy sales - LT	226.30	233.80
2.	Energy Sales HT	1099.10	1238.30
	Total sales	**1325.40**	**1472.10**
3.	T&D losses	172 (11.48%)	187 (11.25%)
4.	Total energy requirement	1497	1659
	Energy Available at the periphery	1497	1858
	Energy surplus / deficit	**0**	**199**

4. Brief Summary of Objections Raised, Response from the Department and Commission's Comments

4.1 PUBLIC RESPONSE TO THE PETITION

On admitting the ARR and tariff petition for 2010-11, the Commission directed the ED-DD to make available copies of the petition to the general public, post the petition on their website and also publish the same in news papers in abridged form and invite comments / objections from them.

The petition evoked responses from the consumers and their representative bodies / organizations in UT.

Public hearings were held in Daman on August 18th, 2010 and in Diu on August 20th, 2010 respectively, where the respondents were given an opportunity to put forth their comments and suggestions on the ARR and Tariff Petition to the Commission.

4.2 The objections received from the public in response to the public notice and public hearings at Daman and Diu, the response of Electricity Department, Daman & Diu (ED-DD) to the objections and the views of the Commission thereon are briefly given below. Most of the objections are general and suggestive in nature and have been duly taken into account, considered / incorporated wherever appropriate. All the written objections received were forwarded to the ED-DD by the Commission as and when they were received and ED-DD was asked to offer its response to the consumers / Commission in respect of the objections raised. The replies as given by ED-DD thereon have also been noted. In a bid to address these observations, the Commission has issued many directives to ED-DD as are included in this order in a separate chapter. It is important to note that, that there has not been any revision of tariff for last two years and this process of tariff fixation is the first experience of ED-DD and consumers under Electricity Act, 2003. While being guided by Electricity Act 2003, National Electricity Policy, National Tariff Policy and JERC's Tariff Regulations and the suggestions of the stakeholders, the Commission has taken a pragmatic view in the direction of achieving the various objectives of the Act and other policies there under.

4.3 The list of the consumers/organizations who filed their objections / suggestions are listed in Annexure-1.

The list of objectors who responded in public hearings held at Daman and Diu are given in Annexure-2(i).

Industry Association / Consumers who expressed their views and additional information during the Public hearing on 8th October 2010 are given in Annexure 2(ii).

4.4 All the objections and response by the ED-DD thereto and the comments of the Commission are briefly given in the Annexure-3.

5. Annual Revenue Requirement - 2010-11 – Commission's Analysis and Decisions

5.1 The original ARR and Tariff Petition filed by the ED-DD was incomplete as many of the formats required under JERC (Terms and Conditions for Determination of Tariff) Regulations, 2009 were not submitted. With reference to various queries from the Commission the utility has submitted additional data / clarification / information in the following references.

1. The ED-DD letter No.ED/EE/T-JERC/2010-11/ nil dated 7.06.2010.
2. The ED-DD letter No. ED/EE/T-JERC/2010-11/850 dated 30.06.2010.
3. The ED-DD letter No. ED/EE/T-JERC/2010-11/1124 dated 26.07.2010.
4. The ED-DD letter No. ED/EE/T-JERC/2010-11/1570 dated 06.09.2010.
5. The ED-DD letter No. ED/EE/T-JERC/2010-11/1647 dated 21.09.2010.
6. The ED-DD No. Nil letter dated 04.10.2010.
7. The ED-DD No. Nil letter dated 08.10.2010.

The additional information and revised / corrected figures submitted by the ED - DD in the above references are taken into consideration while analyzing the ARR & Tariff Petition in the order.

5.2 CONSUMER CATEGORIES

Electricity Department – Daman and Diu (ED-DD) serves 58,569 consumers as on 31st March 2010 in its area of operation and the consumers are broadly categorized as under:

LT

- Domestic
- LIG/Kutir Jyoti
- Commercial
- LT Industry
- Agriculture
- Public Lighting
- Public water works

HT / EHT

A. HT – General Industries / motive power / non-industrial consumers having a contacted demand of 100 kVA and above.

B. HT – Ferro Metallurgical

C. HT – Rolling Mills

The ED-DD serves consumers at different voltages at which the consumers avail supply. All consumers except low-income group households are metered. The consumption of low-income group households with 2x40 W lamps is assessed by the ED-DD.

5.2.1 PROJECTED CONSUMER GROWTH

ED-DD has furnished the category-wise consumers (actuals) over the last six years (2004-05 to 2009-10) and projected the consumer base for the year 2010-11. The category wise number of consumers actuals for FY 2004-05 to 2009-10 vide ED-DD letter dated 30.6.2010 and projection for FY 2010-11 as per the utility are given in Table-7 below:

Table-7

Consumer base category-wise

(Numbers)

Sl. No.	Category	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11 as per ARR
	LT							
1.	Domestic	38354	39435	40502	41652	42952	43712	43103
2.	LIG Kutir Jyothi							
3.	Commercial	8026	8182	8297	8560	8730	8782	8369
4.	Agriculture	1396	1441	1484	1536	1589	1609	1537
5.	Industrial (LT)	3128	3227	3264	3390	3411	3425	2995
	HT/EHT							
6.	Industry –							
	General	790	708	750	770	776	783	755
	Ferro	-	-	-	-	-	-	-
7.	Public lighting	136	156	159	168	176	181	165
8.	Public water works	77	77	77	77	77	77	-
	Temporary supply / Others	98	-	-	-	-	-	-
	Total	**52005**	**53226**	**54533**	**56153**	**57711**	**58569**	**56924**

The number of consumers projected by the Department for FY 2010-11 is 56924 in the ARR petition against actual consumers of 58569 to end of 2009-10. The Department has not furnished any reasons for decrease in the number of consumers during FY 2010-11. The ED-DD has revised these category-wise consumers to

60220 subsequently in their letter dated 6th September 2010 as given in Table-8 below.

Table – 8

Consumers category wise as per ARR and revised by Department in letter dated 06/09/2010 (Format 28 of ARR)

Sl. No.	Category	2010-11 as per ARR	2010-11 Proj. As revised in letter dated 06/09/2010
	LT		
1.	Domestic	43103	44662
2.	LIG Kutir Jyothi		
3.	Commercial	8369	9157
4.	Agriculture	1537	1639
5.	Industrial (LT)	2995	3555
	HT/EHT		
6.	Industry –		
	• General	755	922
	• Ferro	-	12
7.	Public lighting	165	193
8.	Public water works	-	80
9.	Temporary supply / Others	-	-
	Total	**56924**	**60220**

5.2.2 ENERGY SALES

Reasonable projection of category-wise energy sales is essential to determine the energy required to be purchased and the likely revenue by sale of electricity. The category-wise sales projected by the Electricity Department – Daman and Diu in its petition for approval of the ARR are examined in following section.

5.3 OVERALL APPROACH TO SALES PROJECTIONS

The Electricity Department – Daman and Diu has projected the category-wise energy sales for the year 2010-11 based on the past sales over the 5-year period (FY 2004-05 to 2008-09). It has considered CAGR over 4-year period and the growth is applied over the computed consumption of the year 2009-10 based on actual consumption during the first three quarters to various categories and projected for the fourth quarter on pro-rata basis. It is stated that since energy sales in each category depends upon a number factors like growth in economy, climate, government policies etc., normalization in sales has been undertaken in order to provide for reducing uncertainty of wide fluctuations.

It is stated that a four year CAGR has been considered for estimation of sales in domestic, commercial, LT industry and public lighting categories.

Since stabilization or minor decline in sales is observed in the categories of Kutir Jyoti, agriculture and public water works consumers, no growth has been considered while projecting the sales for FY 2010-11.

In the HT/EHT category large variation has been observed in year-to-year growth over the years ranging from 2.92 to 17.5%. The high growth observed over the last few years will not be at the same pace in the ensuing year. Hence 5% growth has been considered by the ED-DD for projecting the sales for FY 2010-11 against 4.3% CAGR shown in Table-1 of the petition.

5.4 PROJECTED ENERGY SALES – 2010-11

ED-DD has furnished the category-wise energy sales in the past and the projected sales for the year 2010-11 based on CAGR over 4 year period (FY 2004-05 to 2008-09) and normalization undertaken and they are given in Table-9 below:

Table-9

Past trend in Category-wise sales and sales projected for 2010-11

(Table 1 of ARR)

S.N	Energy Sales (MUs)	FY 04-05	FY 05-06	FY 06-07	FY 07-08	FY 08-09	CAGR	Adjusted CAGR
		Actual	**Actual**	**Actual**	**Actual**	**Actual**	**(4 year)**	
1.	Domestic	41.6	45.1	34.9	51.3	56.4	*7.9%*	***7.9%***
2.	LIG/ Kutir Jyoti	0.1	0.1	0.0	0.1	0.1	*-12.0%*	***0.0%***
3.	Commercial	23.5	23.3	20.7	25.4	26.4	*3.0%*	***3.0%***
4.	Agriculture	2.6	3.0	0.2	0.3	2.5	*-1.6%*	***0.0%***
5.	LT Industry	132.8	139.0	140.1	140.7	134.9	*0.4%*	***0.4%***
6.	HT/EHT Industry	794.4	871.3	1,023.9	1,053.8	1,099.1	*8.5%*	***4.3%***
7.	Public Lighting	3.5	4.0	6.9	4.3	4.3	*5.8%*	***5.8%***
8.	Public Water Works	1.1	1.9	0.6	0.8	1.1	*-1.2%*	***0.0%***
9.	Temp. Supply	0.3	0.4	4.3	0.4	0.6	*16.4%*	***16.4%***
	Total Sales	**999.8**	**1,088.0**	**1,231.6**	**1,276.9**	**1,325.4**	***7.3%***	

The ED-DD has projected the energy sales for the year 2010-11 applying the above adjusted CAGR as detailed in the table given below:

Table-10

Projected Sales for 2010-11
(Table 2 of ARR)

S.N	Energy Sales (MUs)	FY 08-09	FY09-10	FY 10-11
		Actual	Proj.	Proj.
1.	Domestic	56.4	60.2	65.0
2.	LIG/ Kutir Jyoti	0.1	0.1	0.1
3.	Commercial	26.4	27.9	28.7
4.	Agriculture	2.5	2.4	2.4
5.	LT Industry	134.9	137.4	137.9
6.	HT/EHT Industry	1,099.1	1,238.3	1,300.2
7.	Public Lighting	4.3	4.4	4.6
8.	Public Water Works	1.1	0.9	0.9
9.	Temp. Supply	0.6	0.6	0.7
	Total Sales	**1,325.4**	**1,472.1**	**1,540.5**

5.6 ANALYSIS OF ENERGY SALES PROJECTED AND COMMISSION's VIEW

The ED-DD has projected the category-wise energy sales for the year 2010-11 based on past trends over a period of four years (2004-05 to 2008-09). The forecast based on CAGR of past sales is a tried and tested method and is extensively used across the states and CEA for normal period. However, there could be abnormalities in some years. In such cases the growth is normalized by considering the growth during the last two to three years and also growth due to new consumers and factors causing abnormality leading / emerging.

The ED-DD has considered CAGR of 4 years. (2004-05 to 2008-09). The ED-DD has projected the energy sales of the year 2009-10 based on the actuals for three quarters and projected the sales for the fourth quarter. ED-DD applied the four-year CAGR on the projected sales of 2009-10 to arrive at the sales for the year 2010-11. The actuals for the year 2009-10 are since obtained vide Department letter dated 26th July 2010 and the CAGR for five-year period (FY 2004-05 to 2009-10) is applied over the energy sales of the year 2009-10 (actuals) to arrive at energy sales for the year 2010-11.

The CAGR for 5-year period (2004-05 to 2009-10) and sales for FY 2010-11 based on the 5 year CAGR are given in Table-11 below:

Table-11

Growth in Energy Sales over the period 2004-05 to 2009-10 and the Projected sales for 2010-11

S.No	Energy Sales (MUs)	FY 04-05	FY 05-06	FY 06-07	FY 07-08	FY 08-09	FY 09-10	5 Year CAGR (%)	FY 2010-11
A	**LT**	**Actual**	**Actual**	**Actual**	**Actual**	**Actual**	**Actual**		**Projection**
1	Domestic	41.6	45.1	34.9	51.3	56.4	57.92	**6.84**	**61.88**
2	LIG / Kutir Jyoti	0.1	0.1	0	0.1	0.1	0.1	**0.00**	**0.10**
3	Commercial	23.5	23.3	20.7	25.4	26.4	27.73	**3.37**	**28.66**
4	Agriculture	2.6	3	0.2	0.3	2.5	2.53	**-**	
5	LT Industry	132.8	139	140.1	140.7	134.9	139.12	**0.93**	**140.42**
6	Public Lighting	3.5	4	6.9	4.3	4.3	4.36	**4.49**	**4.56**
7	Public Water Works	1.1	1.9	0.6	0.8	1.1	0.88	**-**	
B	HT / EHT								
8	Industry	794.4	871.3	1023.9	1053.8	1099.1	1236.51	**9.25**	**1350.89**
9	Temp. Supply	0.3	0.4	4.3	0.4	0.6		**18.92**	**0.11**
	Total Sales	**999.8**	**1088.0**	**1231.6**	**1276.9**	**1325.4**	**1469.15**	**8.00**	**1586.62**

The consumption by each category of consumers is discussed below to arrive at reasonable estimation of energy sales for the year 2010-11.

1. Domestic

ED-DD has projected energy sales of 65 MU to this category at a growth of 7.9% based on 4 years CAGR (2004-05 to 2008-09) and applied this growth rate on the energy sales (projected) of 2009-10.

Energy sales estimated by CEA in 17th EPS is 67 MU which is marginally high.

The Commission approves the energy sales at 65 MU for the year 2010-11 as proposed by ED - DD.

2. LIG / Kutir Jyoti

The energy sales is projected by ED-DD at 0.1 MU for this category for FY 2010-11 with no growth over earlier year. Since the consumption is assessed and is stable without any increase in sales, the sales for this category are considered at 0.1 MU for the year 2010-11.

The Commission approves the energy sales of 0.1 MU for this category of LIG / Kutir Jyoti during 2010-11 as proposed by ED - DD.

3. Commercial

ED-DD has projected energy sales of this category at 28.7 MU for the year 2010-11 at a growth of 3% based on 4 years CAGR and applied the growth rate on energy sales (projected) of the year 2009-10.

The actual sales for the year 2009-10 for the commercial category as obtained from the Department was 27.73 MU.

A five-year CAGR is arrived as per Table-11 considering the actual sales for the years 2004-05 to 2009-10. The five-year CAGR is 3.37% against 4 year CAGR of 3.0%.

The growth of the year 2009-10 over the year 2008-09 is 5.0% and 2008-09 over 2007-08 is 3.9%. The 4 year CAGR from 2005-06 to 2009-10 is 4.5%. Considering the above growth, it is appropriate to consider a growth of 3.37%. The energy sales at a growth of 3.37% over 27.73 MU would be 28.7 MU.

The estimated energy consumption as per 17th EPS of CEA is 53 MU hich is very high and hence cannot be considered.

The Commission approves the energy sale of 28.7 MU for commercial category for the year 2010-11 as proposed by ED - DD.

4. Agriculture

ED-DD has projected the energy sales of 2.4 MU for the year 2010-11 at zero growth based on 4 year CAGR. Even 5 year CAGR gives zero growth.

The sales for the category had been widely varying between 0.2 MU to 3.00 MU over the last 6 years. The sales during the year 2008-09 was 2.5 MU during 2009-10 it was 2.53 MU. It is considered that the energy sales of 2.4 MU projected by ED-DD is reasonable.

The Commission approves the energy sales of agriculture at 2.4 MU for the year 2010-11 as proposed by ED - DD.

5. Public Lighting

ED-DD has projected the energy sales to this category 4.6 MU for the year 2010-11 at a growth of 5.8% over the sales (projected) during 2009-10. The 5-year CAGR is 4.5%.

The growth in sales during the year 2009-10 over 2008-09 was 1.4% and it was zero for the year 2008-09 over 2007-08. The energy consumption by this category over the last six years was in the order of 3.5 to 4.3 MU with a sudden increase to 6.9 MU during 2006-07 which appears to be a volatility phenomena.

The estimated consumption as per 17th EPS of CEA is 10 MU as in the other categories the estimated consumption appears to be high. The projected consumption of 4.6 MU appears to be reasonable considering the past consumption level.

The Commission approves the sales to the category of public lighting at 4.6 MU for the year 2010-11 as proposed by ED - DD.

6. Public Water Works

ED-DNH has projected energy sales 0.9 MU to this category for the year 2010-11 at zero growth.

The energy sales to this category were in the order of 0.6 to 1.9 MU during the last six years.

The Commission approves the energy sales of public water works at 0.9 MU for the year 2010-11 as proposed by ED - DD.

7. LT Industry

ED-DD has projected the energy sales of 137.9 MU for the year 2010-11 at a growth of 0.4% over the energy sales of 137.4 MU (projected) for the year 2009-10. The growth in sales for the category during the year 2009-10 over the year 2008-09 was 1.85% and the year 2008-09 over the year 2007-08 was negative. The 5-year CAGR is 0.93%. The energy consumption projected by CEA in 17th EPS is 297, which is high and cannot be achieved. The sales of 137.9MU projected by the utility seems to be reasonable.

The Commission approves the energy sales of LT industry at 137.9 MU for the year 2010-11 as proposed by ED - DD.

8. High Tension (HT) / EHT Industry

HT/EHT category covers general industry, furnace and steep re-rolling loads.

The 5 year CAGR for this category is 9.25% as given in Table 12. But the growth of sales under this category in the year 2009-10 over the year 2008-09 was 12.5% and this was 4.3% during the year 2008-09 over the year 2007-08. The 3 year CAGR (Years 2007-08 to 2009-10) was 6.5%. The ED-DD has submitted that the growth in sales quantum witnessed in this particular category in the last few years will not be at the same pace in the ensuing years and projected the sales at 1300.2MU for the year 2010-11 with the growth rate of 5%. The commission accepts the sales to HT/EHT industry at 1300.2 MU as projected by the Utility.

The Commission approves the energy sales of HT/EHT industry at 1300.20 MU for the year 2010-11 as proposed by ED - DD.

9. Temporary Supply

ED-DD has projected energy sales under the category of Temporary Supply at 0.7 MU for the year, against 0.6 MU during the years 2009-10 and 2008-09. This is approved. The ED-DD is directed to discourage sales under this category.

Commission feels that the projection of various categories as given in 17th EPS of CEA are much beyond those proposed by ED–DD which are based on site conditions prevalent and as per their capacity to handle the additions and are therefore more realistic. As a result, the fore cast as given by CEA in 17th EPS have not been considered for the purpose of the ARR unless they are discussed under any category.

5.6.1 Overall Sales Projections

The sales to industry under HT as well as LT category of industry is about 93% of the total sales. The sale for HT industry alone is also 84%. There are two sub-categories HT (General) and HT-B (Furnace Loads). The Commission has obtained the actual sales during the five month period from April to August 2010 during the year 2010-11 and corresponding five month period during the year 2009-10 sub-category-wise. The actual growth under HT general is about 15% and the growth under HT-B there is a negative growth of (-)18%. However, the overall growth under HT is about 12.7%. the ED-DD has projected a growth rate of 5% for the HT industry. The Commission considered the growth as projected by the utility, as reasonable keeping above in view, the commission accepts the over all increase in consumption taking all categories by 5% i.e. 1541 mu as proposed by ED-DD.

5.7 CATEGORY-WISE ENERGY SALES

The category-wise energy sales for the year 2010-11 as discussed above and the energy sales approved by the Commission as against the sales projected by ED-DD are given in Table-12 below:

Table-12

Category-wise Energy Sales – 2010-11

(MU)

Sl. No.	Consumer Category	Energy sales Projected by ED-DD	Energy Sales Approved by the Commission
	LT Consumers		
1.	Domestic	65.0	65.00
2.	LIG/Kutir Jyoti	0.1	0.10
3.	Commercial	28.7	28.70
4.	Agriculture	2.4	2.40
5.	LT Industry	137.9	137.9
6.	Public lighting	4.6	4.60
7.	Public water works	0.9	0.90
8.	HT/EHT Industry	1300.2	1300.20
9.	Temporary supply	0.7	0.70
	Total	**1540.5**	**1540.50**

5.8 TRANSMISSION AND DISTRIBUTION (T&D) LOSSES

It is submitted by ED-DD that it has achieved significant reduction in transmission and distribution loss during recent years by implementing system improvement works under the plan schemes which resulted in reduction of loss as under:

2008-09 - 11.48%

2009-10 - 11.25%

2010-11 - 11.00%

While furnishing additional information the ED-DD has provided loss reduction trajectory for the year 2010-11 and 2012-13 as under:

2010-11 - 11.00%

2011-12 - 10.25%

2012-13 - 9.50%

While Commission approves the loss at 11.00% for the year 2010-11, the ED-DD shall carry out energy audit through an accredited agency, authenticate the losses and submit the report with the Commission by 31.12.2010.

5.9 ENERGY REQUIREMENT

The total energy requirement to meet the demand of the system would be the sum of estimated energy sales and the system losses (Transmission and Distribution losses) as approved by the Commission. The estimated energy requirement for the year 2010-11 would be as given in Table-13 below:

Table-13

Energy Requirement for the year 2010-11
(Table 6 of ARR)

(MU)

Sl. No.	Particulars	As projected by ED-DNH	As approved by the Commission
1	Estimated energy sales	1541	1541
2	Distribution loss in MU and Percentage Loss	190 (11.00%)	190 (11.00%)
3	Energy requirement at state periphery	1731	1731

5.10 ALLOCATION OF POWER FROM CENTRAL GENERATING STATIONS AND ENERGY AVAILABLE TO ED-DD

5.10.1 As mentioned earlier Union Territory of Daman and Diu does not have its own generation. It depends entirely on the allocation of power from central generating stations and purchases from the market in case of shortfall. ED-DD has been allocated power from various central generating stations of NTPC in Western and Eastern regions, Nuclear Power Corporation of India (NPCIL) and NTPC-SAIL Power Corporation Limited (NSPCL).

For the year 2010-11, ED-DD has considered the firm allocation and infirm power from central generating stations of NTPC, NPCIL as per the allocation specified in the notification No: WRPC/Comml/1/6/Alloc/2010 / dated 26th February 2010 of Western Regional Power Committee. In addition Daman and Diu has been allocated 70 MW from the 2x250 MW station of NTPC-SAIL at Bhilai.

The allocation from various central generating stations for the year 2010-11 as on 1-3-2010 is shown in Table-14 below:

Table-14

Allocation of Power from Central Generating Station (CGS)
(Format 4 of ARR)

(MW)

Sl.No.	Name of the Power Station	Capacity of the Station	Allocation to Daman and Diu
1.	KSTPS	2100	65.93
2.	VSTPS-I	1260	23.63
3.	VSTPS-II	1000	17.97
4.	VSTPS-III	1000	20.12
5.	KGPS	656	30.99
6.	GGPS	657	31.31
7.	SIPAT	1000	19.12
8.	NTPC-SAIL	500	70.00
9.	KAPS	440	6.84
10.	TAPS 3&4	1080	21.33
11.	FSTPS	1600	0.00
12.	TSTPS	1000	0.00
13.	KHSTPS-I	840	0.00
14.	KHSTPS-II	1500	2.00
	Total		**309.24**

5.10.2 ED-DD has adopted the following methodology to estimate the energy availability from central generating stations.

- Average PLF of past three years has been considered for coal based stations of NTPC and stations of NPCIL.
- An average PLF of 85% has been considered for NSPCL (NTPC-SAIL) station at Bhilai (new station) in line with CERC Tariff Regulations 2009-14.
- For gas based stations at KAWAS (KGPS), Gandhar (GGPS) average generation of 2007-08 and 2008-09 has been considered.
- Auxiliary consumption of 9% for coal based stations and 3% for gas based stations has been considered.
- It is stated that actual external transmission losses (PGCIL loss) on power purchase for the year 2008-09 was 5.12% and ten months of 2009-10 was 5.19% of gross power purchase, the ED-DD has considered the external transmission loss at 5.19% on the gross power purchase for the year 2010-11.

Based on the above methodology / assumptions ED-DD has estimated the energy entitled from CGS at 2053 MU for the year 2010-11 Ex-bus (Generation-Auxiliary Consumption). The summary of power purchase during the years 2008-09, 2009-10 and 2010-11 (projected) as furnished by ED-DD is given in Table-15 below:

Table-15

Summary of Power Purchases
(Table 5 of ARR)

(MU)

S.No	**Source**	**FY 08-09 (Actual)**	**FY 09-10 (Actual)**	**FY 10-11 (Proj.)**
1	KSTPS	514	520	507
2	VSTPS-I	165	177	177
3	VSTPS-II	136	139	134
4	VSTPS- III	138	160	150
5	KGPS	113	139	163
6	GGPS	83	156	186
7	SIPAT	63	144	135
8	NTPC SAIL	-	313	474
9	KAPS	22	25	20
10	TAPS 3&4	63	63	99
11	FSTPS	26	21	-
12	TSTPS	19	15	-
13	KHSTPS-I	0	0	0
14	KHSTPS-II	18	18	7
	Power purchase from Other Sources			
	Power purchase from Indian Energy Exchange	0	5	0
	UI drawal	218	66	0
	Gross Power Purchase	**1,578**	**1,960**	**2,053**
	External Losses (PGCIL etc)	81	102	107
	Power available at the State Periphery	**1,497**	**1,858**	**1,946**

It is later indicated by ED-DD in their presentation to the Commission on 14th July 2010 that the WRPC had revised the power allocation w.e.f 6.5.2010 and as per the revised allocation, the quantum of power is reduced from 304 MW to 264 MW.

5.10.3 Energy Balance

The energy balance as estimated/projected by ED-DD for the years 2008-09, 2009-10 and 2010-11 is as furnished in Table-16 below:

Table-16

Energy Balance
(Table 6 of ARR)

(MU)

Particulars	**FY 08-09**	**FY 09-10**	**FY10-11**
	Actual	**Estimated**	**Projected**
Energy Sales	1,325	1,472	1,541
Add: Losses	172	187	190
T&D Losses	***11.48%***	***11.25%***	***11.00%***
Energy required at state Periphery	1,497	1,659	1,731
Energy Available (Table 16)	1,497	1,858	1,946
Surplus / (Deficit) Power	**-**	**199**	**215**

COMMISSION'S ANALYSIS

5.10.4 Entitlement of Energy to ED-DD

As mentioned in para 5.10.1 above, ED-DD has considered the quantum of power from Central Generating Stations based on allocation notified by Western Regional Power Committee (WRPC) w.e.f. 01.03.2010 and the availability of energy at the same level as in the year 2009-10.

Subsequently while giving presentation to the Commission on 14th July 2010, ED-DD has revised the quantum of power availability stating *" WRPC had revised the allocation w.e.f 06.05.2010 and the allocation form various CGS has been reduced from 304 MW to 264 MW resulting in a deficit scenario"*. On verification it is noted that the allocations are revised w.e.f 23.04.2010 and further revised w.e.f 06.05.2010 which are as given below in Table-18. In the revised allocation the quantum of power from Central Generating Stations is reduced from 309.24 MW as on 01.03.2010 to 239.56 MW as on 06.05.2010 as given in Table-17 below. Details of allocation of share are given in Annexures-4.

Table-17

Allocation of Power from CGS

S.No	Station	W.E.F 1.3.2010	W.E.F 23.4.2010	W.E.F 6.5.2010
1	KSTPS	65.93	56.07	49.38
2	VSTPS-I	23.63	16.55	11.99
3	VSTPS-II	17.97	12.28	8.64
4	VSTPS-III	20.12	14.37	10.70
5	KGPS	30.99	30.99	30.99
6	GGPS	31.31	31.31	31.31
7	SIPAT	19.12	13.37	9.70
8	NTPC-SAIL	70.00	70.00	70.00
9	KAPS	6.84	5.00	3.69
10	TAPS-3&4	21.33	15.12	11.16
11	FSTPS	0	0	0
12	TSTPS	0	0	0
13	KHSTPS-I	0	0	0
14	KHSTPS-II	2.00	2.00	2.00
	Total	**309.24**	**267.05**	**239.56**

The energy entitlement during the year 2010-11 is arrived at by the Commission based on scheduled energy from NTPC stations for the months April 2010 to August 2010 i.e., for 5 months as per the REA accounts of WRPC and as on pro-rata of projection for the months of September 2010 to March 2011 i.e., for 7 months as given in Table-18 below.

Table-18

Statement with details of Energy Availability 2010-11

MU

Sl No.	Station	Actuals for 5 months from April to August 2010	Projected for balance 7 months based on actuals of past 5 months	Total for the year (3+4)
(1)	(2)	(3)	(4)	(5)
1.	KSTPS	160.64	224.90	385.54
2.	VSTPS-I	43.92	61.49	105.41
3.	VSTPS-II	34.88	48.83	83.71
4.	VSTPS-III	40.45	56.63	97.08
5.	KGPS	90.13	126.18	216.31
6.	GGPS	101.36	141.90	243.26
7.	SIPAT	38.31	53.63	91.94
8.	NTPL - SAIL	317.56	444.58	762.14
9.	KAPS	3.10	4.34	7.44
10.	TAPS 3 & 4	22.88	32.03	54.91
11.	FSTPS	0.00	0.00	0.00
12.	TSTPS	0.00	0.00	0.00
13.	KHSTPS-I	0.00	0.00	0.00
14.	KHSTPS-II	3.61	5.05	8.66
15.	**Total**	**856.84**	**1199.56**	**2056.40**

From the above it is observed that on the basis of first five months scheduling of the year 2010-11, ED – DD have drawn more than their allocation from NTPC-SAIL. From Tarapore and Kakarpara Nuclear stations, they have drawn less power than their allocation. Same trend continues on the projections of balance months of the year. NTPC-SAIL power is more expensive than Nuclear power. If they purchase more from Nuclear or other cheaper stations there will be effective saving in the purchase cost. Therefore they are directed to purchase power in merit order as per their allocation from different power stations and they shall also strive to get their allocations restored to March 2010 level. How ever for the present purpose of ARR, the purchase cost has been taken as Rs. 541.22 given in table 31 below.

5.10.6 The Commission approves the purchase of power from various central generating stations and NTPC-SAIL as given in Table-19 below:

Table-19

Power Purchase approved by the Commission – 2010-11

Sl. No	Name of the Station	Energy available from CGS to ED-DD
1.	KSTPS	386
2	VSTPS-I	105
3	VSTPS-II	84
4	VSTPS-III	97
5	KGPS	216
6	GGPS	243
7	SIPAT	92
8	NTPC-SAIL	762
9	KAPS	7
10	TAPS	55
11	FSTPS	0
12	KHSTPS-I	0
13	TSTPS	0
14	KHSTPS-II	9
	Total	**2056**

5.11 Energy Balance

5.11.1 The summary of energy balance projected by ED-DD and approved by the Commission are given in Table-20 below:

Table-20

Energy Balance for FY 2010 - 11

(MU)

Sl. No	Particulars	Projected by ED-DD in ARR	Approved by the Commission
	Energy Requirement		
1	Energy sales	1541	1541
2	Distribution losses (MU)	190	190
	Distribution losses (%)	11 %	11 %
3	Energy requirement at the state periphery (energy input to DD system) (1+2) (Ref. Table-14)	1731	1731
4	Pool losses in PGCIL and GETCO system	107 (5.21%)	*117 (5.7%)
5	Energy required to be purchased by ED-DD.	1838	1848
6	Energy available from C.G.S (to be purchased by ED-DD) (Ref. Format 4)	2053	2056
7	Energy Surplus / (Deficit) (to be purchased from other sources)	215	208

* The pool losses are considered at 5.7 % against 5.21 % projected by ED-DD. The losses at 5.7 % is considered based on actuals for 2009-10.

As approved by the Commission the surplus would be 208 MU.

Department may make good of this surplus energy to improve the energy sales, especially in industrial category in the Union Territory.

5.12 GROSS FIXED ASSETS

The ED-Daman and Diu has projected the gross fixed assets at Rs. 279.26 crore to end of March 2010.

The gross fixed assets from FY 2007-08 to FY 2010-11 (projection) given in the ARR are detailed in the Table-21 below:

Table-21

Gross Fixed Assets and additions during 2007-08 to 2010-11

(Table 15 of ARR)

(Rs. crore)

Year	Opening GFA	Additions during the year	Closing GFA
FY 2007-08	254.22	6.08	260.30
FY 2008-09	260.30	5.93	266.23
FY 2009-10	266.23	13.03	279.26
FY 2010-11	279.26	70.39	349.65

The ED-Daman and Diu has submitted that based on the Asset Register the Department had gross fixed assets of the value of Rs. 260.30 crore in the year 2007-08 and the assets capitalized during the year 2008-09 and 2009-10 are given at Rs. 5.93 and Rs. 13.03 crore respectively. For the year 2010-11 the Department has proposed a capital expenditure of Rs. 90.65 crore and 60% of the capital expenditure i.e Rs. 70.39 crore is proposed to be capitalized during the year 2010-11.

With reference to a query from the Commission, the ED-Daman & Diu has clarified, in their letter no. dated 30/06/2010 that the accounts of the utility are not audited as the utility is part of Administration of Union Territory of Daman & Diu, Government of India. It is informed that the Department maintains the Asset Register internally and updates the same during the year. This is submitted to Administration of Union Territory of Daman and Diu. A copy of such Asset Register containing about 4 pages statement has been submitted to the Commission in June 2010.

The statement of assets has been analyzed. The broad classification of assets is provided in the statement for two years i.e 2008-09 and 2009-10. The assets at the beginning of the year, addition during the year and cumulative total of assets are given for two years. The assets that were completely depreciated and withdrawn after serving their useful life are not indicated in the statement. The asset values given in the statement do not match with the opening GFA shown in Table – 21 above.

The ED-Daman and Diu has clarified in their letter no dated 26/07/2010 that there has not been any deletion of asset in the past years. In the case of replacement of assets, if any, the old assets have been repaired and used at other locations. It is further clarified that in the absence of annual account being maintained by the Department, the age and other details of withdrawn / fully depreciated assets are not available.

Commission's Analysis and Decisions

The entire capital expenditure has been funded by the Government of India through budgetary support without any external borrowings. The ED-DD has not prepared any proforma accounts. The Electricity Department has not prepared and maintained the statements of accounts viz Profit & Loss account, balance sheet etc. The statement of assets for FY 2008-09 and FY 2009-10 submitted by the Department is not audited. The Department has mentioned that in the absence of annual account being maintained the age and other details of withdrawn / fully depreciated assets are not available.

Regulation 22 (2) of JERC (Terms and Conditions for Determination of Tariff) Regulations, 2009 reads as follows:

"Investments made prior to and upto 31st March immediately preceding the date of the notification of these regulations or date of receipt of a petition of tariff determination whichever is earlier shall be considered on the basis of audited accounts or approvals already granted by the Commission".

In the absence of audited Asset Register the depreciation registers and the audited annual accounts the gross block assets, projected by the ED-Daman and Diu in the ARR and Tariff Petition and subsequent submissions with reference to the data gaps pointed out, cannot be considered for the purpose of arriving at the capital base and allowing depreciation and return on capital base.

The Commission directs the ED-Daman and Diu to prepare and maintain Asset Register, depreciation registers in complete shape, the annual statement of accounts for the regulated business, get them audited.

5.13 CAPITAL EXPENDITURE PLAN FOR 2010-11

The ED-Daman and Diu has projected the capital expenditure at Rs. 90.65 crore for the year 2010-11. The proposed schemes and the costs estimated are given in the Table-22 below:

Table-22

Capital expenditure projected by ED-Daman and Diu for 2010-11
(Table 13 of ARR)

(Rs. crore)

Proposed scheme	Amount
System strengthening scheme	**15.50**
Scheme of strengthening of 66kV transmission line network in Daman UT and strengthening of 66/11kV SSs	8.00
Augmentation of 66/11kV existing SS at Daman / Diu	4.50
Providing and strengthening of power supply network & communication, MRT facilities and special tools and plants / workshops in Daman & Diu	3.00
Network strengthening scheme	**49.00**
Scheme for establishment of 1X100 MVA 220/66/11kV SS at Ringanwada, Daman along with associated 220 kV D/C line from 220kV Ambheti SS of PGCIL to Ringanwada in Daman	41.00
Scheme for establishment of 66/11kV, 2X15 MVA SS along with associated line at Bhimpore, Daman	4.00
Scheme for establishment of 66/11kV, 2X15 MVA SS along with associated line at Zari, Daman	4.00
Other schemes	**26.15**
Normal development works and release of service connections	3.50
Electrification of tribal area and providing street lighting in village road in Daman	0.30
Providing underground power distribution system in Daman &Diu city / rural areas and extension of the scheme to industrial estates	6.00
Renovation of existing, old power distribution and providing improved metering system and providing prepaid metering system and indexing and digitalization in Daman and Diu	11.50
Direction and Administration	4.85
Total capital expenditure	**90.65**

The ED-Daman and Diu has explained that the existing transmission and distribution infrastructure is insufficient to cater to the present load and it does not have adequate standby source arrangement for restoring the power supply in case of major breakdown. Further significant capital expenditure needs to be under taken for system augmentation to ensure better quality of supply and network reliability to the consumers to cater additional loads and reduction in T&D losses.

One of the major schemes proposed for investment during FY 2010-11 is the establishment of 1X100MVA 220/66/11kV SS at Ringanwada, Daman along with associated 220kV DC line from 220kV Ambheti SS of PGCIL to Ringanwada. This scheme is envisaged to provide another 220kV power source and help in improving the voltage regulation of the electrical system and reduce the line losses. This scheme would enable the UT to shift its whole power load from GETCO network to

PGCIL. The other schemes include strengthening of 66kV transmission line network and 66/11kV SSs and other normal development works etc.

The ED-Daman and Diu has submitted the capital expenditure plan for the years 2008-09, 2009-10 and 2010-11 as detailed in the Table-23 below:

Table-23

Annual Capex Plan for 2008-09 to 2010-11 (Table 12 of ARR)

(Rs. crore)

S.N	Particulars	2008-09	2009-10	2010-11
1.	New schemes	10.31	40.18	61.5
2.	Ongoing schemes	17.37	21.20	29.15
	Total Capex	**27.68**	**61.38**	**90.65**

It is further submitted by the utility that capitalization of the new schemes have been considered at 60% of the planned capital expenditure in the same year while the balance 40% has been considered for capitalization in the subsequent year.

The capital expenditure and capitalization for the year 2009-10 and 2010-11 proposed by the utility in the ARR is given in the Table-24 below:

Table-24

Capital expenditure and capitalization for 2009-10 and 2010-11
(Table 14 of ARR)

(Rs. crore)

S.N	Particulars	2009-10	2010-11
1.	Capital expenditure	40.00	90.65
2.	Asset capitalization	13.03	70.39
3.	Capital works in progress	26.98	20.26

When the utility has been asked to provide the actual Capex incurred scheme wise during the years 2008-09 and 2009-10 the ED-DD has submitted vide their letter no. dated 30.6.2010 the revised capital expenditure plan for the year 2008-09 and 2009-10 as detailed in the Table-25 below:

Table-25

Revised Capital expenditure plan submitted by ED-Daman and Diu
(Department letter dated 30.6.2010)

(Rs. crore)

Particulars	2008-09	2009-10
Proposed Capital expenditure	27.68	61.38
Actual Capex incurred	13.88	21.29

It is explained that the actual capital expenditure incurred during the year was lower as against the proposed requirement because of lesser funds allocated by Government of India.

The actual scheme wise capital expenditure incurred and the sources of funding during the years 2008-09 and 2009-10 are obtained by the Commission and the details are summarized in the Table-26 below:

Table-26

Scheme wise Capex and sources of funding during 2008-09
(Format 5 of ARR)

(Rs. crore)

Nature of project	Internal Accrual (from free reserves and surplus)	Equity infused**	Capital subsidies / grants component	Consumer contribution	Actual expenditure
Establishment of 220/66kV SS at Ringanwada, Daman along with associated 220kV D/C line from 220kV Ambethi to Ringanwada in Daman					
Strengthening of 66kV Transmission line network in Daman UT					
Establishment of 66/11kV 2X15 (30 MVA) SS along with associated line at Bhimpore, Daman					
Normal development works & release of service connection in Daman and Diu			2.95		2.95
Providing & strengthening of power supply network in Daman and Diu and Comm. MRT facilities and special tools and plants / workshop			3.08		3.08
Under ground cable power distribution system in Daman and Diu city area, rural area & industrial area			4.44		4.44
Strengthening / augmentation of 66/11kV SS			0.22		0.22
Renovation of existing old power distribution system and providing improved metering system			0.03		0.03
Augmentation of existing 66kV Dabhel Dalwada & Kachigam SC line from dog conductor under the scheme for strengthening of 66kV transmission system network Daman			1.58		1.58
Strengthening of ED., Direction & Administration			1.58		1.58
Total			**13.88**		**13.88**

Note: The amount has been shown under the grant as the funds has been allocated by GOI

Table-27

Scheme wise Capex and sources of funding during 2009-10
(Format 5 of ARR)

(Rs. crore)

Nature of project	Internal Accrual (from free reserves and surplus)	Equity infused **	Capital subsidies / grants component	Consumer contribution	Actual expenditure
Establishment of 220/66kV SS at Ringanwada, Daman along with associated 220kV D/C line from 220kV Ambethi to Ringanwada in Daman			0.86		0.86
Strengthening of 66kV Transmission line network in Daman UT					
Establishment of 66/11kV 2X15 (30 MVA) SS along with associated line at Bhimpore, Daman					
Normal development works & release of service connection in Daman and Diu			5.10		5.10
Providing & strengthening of power supply network in Daman and Diu and Comm. MRT facilities and special tools and plants / workshop			4.81		4.81
Under ground cable power distribution system in Daman and Diu city area, rural area & industrial area			8.13		8.13
Strengthening / augmentation of 66/11kV SS			0.30		0.30
Renovation of existing old power distribution system and providing improved metering system			2.09		2.09
Strengthening of ED., Direction & Administration					
Total			**21.29**		**21.29**

Note: The amount has been shown under the grant as the funds has been allocated by GOI

During the presentation made by the utility on 13th July 2010 the actual capital expenditure incurred during the years 2008-09 and 2009-10 is given as Rs. 13.99 and Rs. 21.41 crore and for the year 2010-11 the funds allocated for Capex are given at Rs. 21.53 crore against the projected Capex of Rs. 90.65 crore for the year 2010-11. When the Utility has been asked to substantiate this and quantify the benefits of Capex incurred during the last 3 years, it has clarified in their letter dated 26/07/2010 that ED has proposed Rs. 90.65 crore for the year 2010-11 to the Government of India for sanction at the time of ARR preparation but after filing the ARR the Government approval has been accorded for Rs. 21.53 crore only and requested the Commission to consider a capital expenditure of Rs. 21.53 crore for the year 2010-11 and consider adequate amount for capitalization.

The ED-Daman and Diu has submitted that some of the schemes undertaken have been primarily for augmentation of transmission and distribution capacity. Others have been in the form of improvement of voltage regulation, reduction in loss levels standby feeding arrangements ensuring stable power supply meeting future growth load etc.

The Commission accordingly takes into consideration the capital expenditure projection at Rs.21.53 crore for FY 2010-11 and Rs.12.92 crore towards 60% capitalization out of the proposed capital expenditure of Rs. 21.53 crore.

5.14 REVENUE REQUIREMENT – 2010-11

ED-DD has projected a total expenditure of Rs.590.51 crore and a return on equity of Rs. 23.14 crore for the year 2010-11. The summary of expenses under each head are given in Table-28 below:

Table-28

Expenses projected for 2010-11
(Format 27 of ARR)

(Rs. crore)

Sl. No	Particulars	Expenses Projected by ED-DD
1	Power purchase cost	535.44
2	Employee cost	5.09
3	Administration and general expenses	3.68
4	O&M expenses	2.20
5	Depreciation	15.76
6	Interest charges including interest on working capital	22.26
7	Provisions for bad debts	6.08
8	**Total expenses**	**590.51**
9	Return on Equity	23.14
10	**Total ARR (8+9)**	**613.65**

The expenses projected by ED-Daman and Diu under each head and the Commission's analysis and decisions are discussed below:

5.15 Power Purchase Cost

The allocation of power from Central Generating Stations, the parameters adopted by ED-DD to arrive at the entitlement of energy from Central Generating Stations and the estimated availability of energy for purchase for the year 2010-11 are discussed in para 5.10.

It is stated by ED-DD that the cost of power purchase from central generating stations is based on actual power purchase bills and these costs for 2010-11 have been arrived at as under:

- The fixed cost for the year 2010-11 has been projected considering a 10% escalation over the estimated fixed costs for various stations for FY-2009-10 to cover the anticipated increase in employee cost etc.
- The variable cost from each of the NTPC generating stations for FY 2010-11 has been projected based on the average variable cost and fuel price adjustment per unit for the year 2009-10 (10 months) actuals. An escalation of 5% has been assumed for projecting the variable cost for FY 2010-11 keeping in view the recent coal price hike by Coal India Limited (CIL) in fuel cost, inflation etc.
- For Nuclear Plants i.e. KAPS and TAPS (units 3 and 4) single part tariff with 5% escalation on the actual per unit charge for FY 2009-10 has been considered.
- For NTPC-SAIL station at Bhilai Unit 1 and 2 single part tariff has been considered since the generating units are commissioned during the year 2009-10. Per unit charges have been considered for the station with an escalation of 5% for any increase in fuel cost, fixed charges other charges etc.

Based on the above assumptions, ED-DD has estimated the power purchase cost at Rs. 535.44 Crore including transmission charges for the year 2010-11 on the given power purchase of 2053 MU as given in Table-29 below:

Table-29

Power Purchase cost for 2010-11
(Format 4 of ARR)

(Rs. in crores)

Sl. No	Source	FY 10-11 (Projected)						
		Units	Fixed Cost	Variable Cost	FPA charges	Other Charges	Total	Rs. per Unit
1	KSTPP	507	21.09	38.75	-	2.17	62.02	1.22
2	VSTPP-I	177	16.70	12.44	-	3.10	32.23	1.82
3	VSTPP-II	134	13.97	13.34	-	0.65	27.95	2.08
4	VSTPP- III	150	17.71	16.46	-	1.43	35.61	2.37
5	KGPS	163	10.11	44.88	-	7.82	62.81	3.85
6	GGPS	186	13.94	48.14	-	2.04	64.12	3.44
7	SIPAT	135	13.49	11.97	-	0.79	26.25	1.95
8	NTPC-SAIL unit-I	237	-	72.88	-	-	72.88	3.07
	Unit-II	237	-	72.88	-	-	72.88	3.07
9	KAPS	20	-	2.89	-	-	2.89	1.43
10	TAPS 3&4	98	-	37.08	-	-	37.08	3.76
11	FSTPS	-	-	-	-	-	-	-
12	TSTPS	-	-	-	-	-	-	-
13	KHSTPP-I							
14	KHSTPP-II	7	-	1.45	-	-	1.45	2.06
	Power Purchase Cost from Other Sources							
	Power purchase from Indian Energy Exchange	-	-	-	-	-	-	-
	UI	-	-	-	-	-	-	-
	Subtotal	-	-	-	-	-	-	-
	Gross Power Purchase	2,053	107.01	373.15	-	18.00	498.16	2.43
	Transmission charges to PGCIL & other charges						37.28	
	Total	**2,053**	**107.01**	**373.15**	**-**	**18.00**	**535.44**	**2.61**

In the above Table, ED-DD has not proposed any drawal under UI and purchase in market.

Transmission and Other Charges

In addition to the power purchase costs from Central Generating Stations and other sources given above, ED-DD has projected the inter-state transmission chargers payable to the PGCIL and RLDC at Rs. 33.43 crore for FY 2009-10 based on actual transmission charges for ten months of the year 2009-10 and pro-rata allocation of the same for the remaining two months. The ED-DD has taken 10% escalation for the year 2010-11 over the estimated transmission charges for FY 2009-10. The other charges are projected at Rs. 0.51 crore for FY 2009-10 and FY 2010-11 as well.

Commissions Analysis

The source wise actual power purchase cost and average per unit cost during the year 2009-10 as given by ED-DD in their letter no. dated 06.08.2010 are given below in Table-30.

Table-30

Cost of Power Purchase (actual) of ED-DD FY – 2009-10
(Format 4 of ARR)

S.No	Source	Power Purchase (MU)	FC (Rs.crore)	VC (Rs.crore)	Others (Rs.crore)	Total (Rs.crore)	Average Unit Cost (Rs. / kWh)
I	**NTPC Stations**						
1	KSTPP	523	19.19	37.85	2.57	60	1.14
2	VSTPP-I	179	27.23	20.32	3.20	51	2.84
3	VSTPP-II	140	10.58	10.95	0.54	22	1.58
4	VSTPP-III	161	13.42	13.86	1.19	28	1.77
5	KGPS	155	10.55	36.09	6.52	53	3.43
6	GGPS	109	14.26	39.00	1.69	55	5.04
7	SIPAT	142	12.18	12.71	0.85	26	1.81
7	7Bhilai Unit - I (NTPC)	327	49.66	53.12	1.66	104	3.19
	Bhilai Unit - II (NTPC)		0.00		0.00	0	
	Sub-Total	**1736**	**157.07**	**223.90**	**18.22**	**399**	2.30
II	**NPCIL**						
9	KAPS	23	25.70	0.00	-2.20	24	10.22
10	TAPS 3&4	68	2.93	0.17	0.19	3	0.48
	Sub-Total	**91**	**28.63**	**0.17**	**-2.01**	**27**	2.94
III	**Eastern Region**						
11	FSTPS	21	1.08	2.85	0.13	4	1.93
12	TSTPS	15	1.53	0.00	0.00	2	1.02
13	KHSTPP-II	16	2.74	0.46	0.16	3	2.10
	Sub-Total	**52**	**5.35**	**3.31**	**0.29**	**9**	1.72
	Total (1+2+3)	**1879**				**435**	2.32
IV	**Power Purchase from others**						
1	Power purchase from Indian Energy Exchange	5	0.00	1.23		1	2.46
2	UI	66	0.00	22.99		23	3.48
	Sub-Total	**71**	**0.00**	**24.22**	**0.00**	**24**	3.41
	Power Purchase Cost	1950	191.05	251.60	16.50	459	2.35
V	**Transmission Charges**					0	
1	PGCIL Charges & Other Charges					34	
	Grand Total	**1950**				**493**	

Commission has obtained the copies of power purchase bills, station-wise, claimed by CGS and other stations for energy supplied during the months of April to August 2010 and the weighted average cost of each station for the month has been adopted to arrive at the power purchase cost for the year 2010-11.

The commission has not considered the 10% escalation on Power Purchases of the year 2009-10 for arriving at power purchase cost for the year 2010-11 as proposed by ED-DD as commission has considered actuals of April to August 2010 and there pro-rated projection for the balance period of the year 2010-11.

The power purchase source wise from central generating stations as approved in Table-19 and to meet the gap in availability and requirement as shown in Table-20 and cost for the year 2010-11 as approved by the Commission are given in Table-31 below:

Table-31

Power Purchase Cost approved for FY 2010-11

S.No	Station	Energy Purchase (MU)	Average Cost during FY 2009-10 (Rs. / KWH)	Power Purchase Cost (Rs. crore)
	NTPC			
1	KSTPS	386	1.17	45.16
2	VSTPS-I	105	2.03	21.32
3	VSTPS-II	84	2.20	18.48
4	VSTPS-III	97	2.49	24.15
5	KGPP	216	2.98	64.37
6	GGPP	243	3.13	76.06
7	SIPAT	92	1.95	17.94
8	NTPC - SAIL	762	2.88	219.46
9	KAPP	7	2.17	1.52
10	TAPP 3 & 4	55	2.73	15.02
11	FSTPS	0	2.79	0.00
12	TSTPS	0	1.72	0.00
13	KHSTPS-I	0	2.51	0.00
14	KHSTPS-II	9	3.11	2.80
	Sub-Total	**2056**		**506.27**
	Other Sources			
15	UI	0	-	0.00
17	Energy Exchange (IEX) and Other Sources	0	-	0.00
18	PGCIL & Other Charges		0.17	34.95
	Total	**2056.00**		**541.22**

The Commission approves the power purchase cost of Rs. 541.22 crore for purchase of 2056 MU (gross) for FY 2010-11.

5.16 OPERATION AND MAINTENANCE (O&M) EXPENSES

The O&M expenses comprise the employee cost, Repairs & Maintenance (R&M) expenses and Administration and General (A&G) expenses.

It is mentioned by ED-Daman and Diu that the petitioner has not maintained segregation between the three cost elements for the purpose of accounting and booked all costs including salaries, medical expenses, office expenses, repairs, supply of materials etc under the operation and maintenance expense.

The ED-Daman and Diu has projected the overall O&M expenses at Rs. 10.97 crore for the year FY 2010-11. The utility also furnished the actual O&M expenses from FY 2004-05 to 2008-09 estimates for FY 2009-10 and projection for FY 2010-11 as detailed in the Table-32 below:

Table-32

O&M expenses projected by ED/Daman and Diu

(Table 10 & 11 of ARR)

Year	Rs. crore
2004-05 (Actual)	6.31
2005-06 (Actual)	6.43
2006-07 (Actual)	7.02
2007-08 (Actual)	6.47
2008-09 (Actual)	8.47
2009-10 (Estimated)	9.61
2010-11 (Projected)	10.97

The ED-Daman and Diu has mentioned that the O&M expenses for FY 2008-09 registered an increase of over 30% over FY 2007-08 and this increase was primarily due to payment of Sixth Pay Commission arrears to the employees of Daman and Diu during FY 2008-09. The petitioner has not submitted the break up of O&M costs for the previous years. In their letter dated 30/06/2010 the Department has submitted that the ED is not maintaining the head wise detailed booking of expenses in the existing system and that Department would undertake adequate steps to maintain such records and submit the same in the subsequent filings.

The above O&M expenses are discussed head wise in the following paras.

5.16.1 Employee Cost

The ED-Daman and Diu has projected the employee cost at Rs. 5.09 crore for the year 2010-11.

It is stated by the utility that employee expenses estimated comprise of all the costs related to employees like basic salary, dearness allowance, medical expenses cost, leave, travel allowances, honorarium etc. It is also stated that the petitioner does not maintain cost related to leave salary contribution, pension and terminal benefits of the employees in the employee cost. The petitioner has also mentioned that the ED-Daman and Diu will claim these expenses at an appropriate time when the respective cost items become payable.

It is submitted by the petitioner that based on various expenses related to employee expenses booked during the ten months period of FY 2009-10 the employee cost has been estimated at Rs. 4.63 crore and projected at Rs. 5.09 crore for FY 2010-11 with 10% escalation over FY 2009-10 (estimated) and requested the Commission to approve the employee cost as projected by the utility. The ED-Daman and Diu has not submitted the component wise details of employee cost for the previous years i.e 2008-09, 2009-10 (estimate) and FY 2010-11 projection. When the details are insisted upon the utility has furnished the component wise details of employee cost actuals for the FY 2008-09 and FY 2009-10 and projection for the FY 2010-11 in Format-16 with their reference No. 3/15/2010-JERC dated 02/07/2010. The details are given in the Table-33 below:

Table-33

Employee cost actuals for 2008-09 and 2009-10 and projection for 2010-11
(Format 16 of ARR)

(Rs. crore)

S.N	Particulars	2008-09 (Actual)	2009-10 (Actual)	2010-11 (Projections)
	Salaries & Allowances			
1.	Basic pay	2.10	2.61	2.66
2.	Dearness pay	0.53	0.77	0.62
3.	Dearness allowance	0.63	0.89	1.17
4.	Hose rent allowance	0.16	0.26	0.28
5.	Fixed medical allowance	-	-	-
6.	Medical reimbursement charges	0.01	0.01	0.01
7.	Over time payment	-	-	-
8.	Other allowances			
a.	Washing allowance	0.00	0.00	0.00
b.	Transport allowance	0.15	0.21	0.21
c.	L.T.C.	0.00	0.01	0.01
d.	Children Education allowance	0.00	0.02	0.03
e.	Family Planning allowance	0.01	0.01	0.01
9.	Generation incentive	-	-	-
10.	Bonus	0.08	0.07	0.08
11.	**Total**	**3.67**	**4.85**	**5.09**
	Terminal Benefits			
12.	Leave encashment			
13.	Gratuity	-	-	-
14.	Commutation of pension	-	-	-
15.	Workmen compensation	-	-	-
16.	Ex-gratia	-	-	-
17.	**Total**	-	-	-
	Pension payments	-	-	-
18.	Basic pension	-	-	-
19.	Dearness pension	-	-	-
20.	Dearness allowance	-	-	-
21.	Any other expenses	-	-	-
22.	**Total**	-	-	-
23.	**Total (11+17+22)**	**3.67**	**4.85**	**5.09**
24.	Amount capitalized	-	-	-
25.	Net amount	-	-	-
26.	Add prior period expenses	-	-	-
27.	**Grand Total**	**3.67**	**4.85**	**5.09**

The Commission has analyzed the employee cost. The employee cost for the FY 2009-10 estimated in the ARR as Rs. 4.63 crore. The utility has submitted the details of employee cost, the actuals for FY 2009-10 are given at Rs. 4.85 crore against Rs. 4.63 crore estimated in the ARR. The projection for the year FY 2010-11 is Rs. 5.09 crore and the increase is 5% over the actual for FY 2009-10. As submitted by the utility the increase in employee cost is mainly on account of Sixth Pay Commission recommendations.

The actual employee cost incurred during FY 2009-10 was Rs. 4.85 crore and the projection for FY 2010-11 is Rs. 5.09 crore with an escalation of about 5% which is quite reasonable.

The Commission approves the employee cost at Rs. 5.09 crore for the year 2010-11.

5.16.2 Repairs and Maintenance (R&M) Expenses

The R&M expenses comprise expenses on repairs and maintenance of electrical equipments, buildings, transmission and distribution network, vehicles, furniture and fixtures, office equipment etc.

The ED-Daman and Diu has projected the R&M expenses at Rs. 2.20 crore for the year 2010-11 against the estimated amount of Rs. 2.00 crore for the year 2009-10. The increase projected for FY 2010-11 over FY 2009-10 is 10%. It is mentioned by the ED-Daman and Diu that R&M costs for most of the utilities are in the range of 2-2.5% of Gross Fixed Assets and stated that the R&M expenses claimed by the utility is lower than 1% of the Gross Fixed Assets.

The utility has requested the Commission to approve the R&M expenses without any disallowance as the same is necessary for proper maintenance and strengthening of the system and quality of supply in the region to ensure consumer satisfaction.

The ED-Daman and Diu has not furnished the component wise details of R&M expenses as required in Format 14 in the ARR. The department has mentioned in their letter dated 30/06/2010 that the utility is not maintaining the head wise detailed booking of expenses in the existing system and the Department would undertake adequate steps to maintain such records and submit the same in their subsequent filings. In the Format 14 submitted with letter dated 30/06/2010 only the total amount required under R&M is indicated as Rs. 2.20 crore without any details. The actual

R&M expenses for FY 2009-10 are given at Rs. 4.31 crore. The Electricity Department has submitted copies of monthly progress report of non-plan expenditure for the FY 2009-10 originally submitted to the Deputy Director, Planning and Statistics by the EE/ED- Daman. The component wise details of R&M expenses for Rs. 4.31 crore for the year 2009-10 are given in the monthly progress report. The actuals are checked with the figures furnished in the monthly progress report and found to be correct. The ED-DD has been directed separately to take steps to build credible and accurate data base as required in JERC (Terms and Conditions of Tariff) Regulations, 2009.

The ED-DD has projected the gross fixed assets at Rs. 279.26 crore to the end of the year 2009-10 in Table 15 of ARR. The projection of Rs. 2.20 crore for the year works out to about 0.79% of the projected gross fixed assets. The projection towards R&M expenses is quite reasonable.

The Commission, accordingly approves the R&M expenses at Rs. 2.20 crore for the year 2010-11 as projected by the ED-Daman and Diu.

5.16.3 Administration and General (A&G) Expenses

The A&G expenses comprise rates and taxes, insurance, communication, legal charges, audit fees, consultancy charges, technical fees, conveyance and travel charges, fees payable to Regulatory Commission and other professional charges.

The ED-Daman and Diu has projected the A&G expenses at Rs. 2.18 crore for 2010-11 against the estimated amount of Rs. 1.98 crore for the year 2009-10. The increase projected for the year 2010-11 over 2009-10 is 10%. It is mentioned by the ED that an amount of Rs. 1 crore has been estimated for the year 2009-10 on account of various charges payable to the Regulatory Commission as per the JERC (Conduct of Business) Regulations, 2009 and this is projected at Rs. 1.5 crore towards Regulatory fees and charges.

The ED-Daman and Diu has not furnished the component wise details as required in Format 17. The utility has been asked to furnish the component wise details actuals for the year 2008-09 and 2009-10 and projections for the year 2010-11 vide Commission's letter dated 14th June 2010. The utility has submitted the details in Format 17 with their letter dated 30/06/2010. It is mentioned by the utility that Electricity Department would like to bring to the notice of Hon'ble Commission that the Department is not maintaining the head wise detailed booking of expenses in the existing system and certain A&G expenses were booked under different heads of expenses and that the ED would undertake adequate steps to maintain such records and submit the same to the Hon'ble Commission in the subsequent filings.

The component wise details of A&G expenses actuals for the years 2008-09 and 2009-10 and projection for 2010-11 submitted by the utility are given in the Table-34 below:

Table-34

A&G expenses projected by ED-Daman and Diu for 2010-11
(Format 17 of ARR)

(Rs. crore)

S.N	Sub-head	2008-09 (Actual)	2009-10 (Actual)	2010-11 (Projections)
1.	Rent, rates & taxes	0.00	0.00	0.00
2.	Insurance	-	-	-
3.	Telephone, posts & telegraphs	0.04	0.05	0.06
4.	Regulatory and Consultancy fees	-	0.00	2.18
5.	Technical fees	-	-	-
6.	Other professional charges	-	-	-
7.	Conveyance & travel expenses	-	0.01	0.01
8.	Electricity & water charges	0.00	0.00	0.00
9.	Others	0.13	0.13	0.19
10.	Freight	-	-	
11.	Consumer indexing	-	-	1.25
12.	**Total**	**0.17**	**0.19**	**3.68**
13.	Add/Deduct share of others (to be specified)	-	-	-
14.	**Total expenses**	**0.17**	**0.19**	**3.68**
15.	Less capitalized	-	-	-
16.	Net expenses	-	-	-
17.	Add prior period	-	-	-
18.	**Total expenses charged to revenue**	**0.17**	**0.19**	**3.68**

In the ARR petition the ED has estimated the A&G expenses for the year 2009-10 (estimate) at Rs. 1.98 crore which includes Rs. 1 crore on account of various charges payable to the Commission. It could be seen from the above table that the actual A&G charges incurred during the year 2009-10 were Rs. 0.19 crore. In the projection for the year 2010-11 the utility has claimed Rs. 2.18 crore towards Regulatory and consultancy fees and Rs. 1.25 crore towards consumer indexing. The utility in their submission dated 26/07/2010 has mentioned that the process of consumer indexing has been started and the work is expected to be completed by December 2010. As regards the provision of Rs. 2.18 crore towards regulatory and consultancy fees the utility has not furnished the details. The Commission feels that there is no justification for this provision.

The Commission approves the A&G expenses at Rs. 2.00 crore for 2010-11 against Rs.3.68 crore projected in the ARR.

5.17 DEPRECIATION

The Department has projected the depreciation charges at Rs. 15.76 crore for the year 2010-11.

The details of opening Gross Fixed Assets (GFA), addition of assets and depreciation for the years 2008-09 (actual), 2009-10 (projected) and 2010-11 (Projected) submitted by the utility are given in the Table-35 below:

Table-35

Depreciation projected for ED-Daman and Diu

(Table 16 of ARR)

(Rs. crore)

Particulars	FY 2008-09 (Actual)	FY 2009-10 (Projection)	FY 2010-11 (Projection)
Opening of GFA	260.30	266.23	279.26
Additions	5.93	13.03	70.39
Closing GFA	266.23	279.26	349.65
Average GFA	263.27	272.74	314.45
Depreciation amount	13.05	13.55	15.76
Average depreciation rate	4.96%	4.97%	5.01%

The ED-Daman and Diu has submitted that depreciation is charged on the basis of straight line method on the gross fixed assets in use at the beginning of the year and addition of assets during the financial year. The depreciation has been computed applying the depreciation rates as specified by the CERC in the Tariff Regulations for FY 2009-14 on the gross fixed assets and 50% of the asset capitalized during the year.

The ED-DD has projected the capital expenditure of Rs. 90.65 crore for the year 2010-11 and proposed to capitalize i.e., add to the fixed assets base, Rs. 70.39 crore during the year 2010-11 out of the projected capital expenditure for Rs. 90.65 crore. The utility has revised the proposed capital expenditure to Rs. 21.53 crore based on the funds received by the Department. As dealt with in para 5.13 the capitalization considered for 2010-11 is Rs. 12.92 crore. Regulation 26 of the JERC (Terms and Conditions for Determination of Tariff) Regulations, 2009 specifies that depreciation for the assets shall be calculated annually at the rates specified by CERC from time to time. The effective rate of depreciation for distribution assets is 5.28% vide Appendix III (Depreciation schedule of CERC (Terms and Conditions of Tariff) Regulations, 2009. The depreciation for the year 2010-11 has been worked out at Rs. 0.34 crore as detailed in the Table-36 below:

Table-36

Depreciation for 2010-11 approved by the Commission

(Rs. crore)

S.N	Particulars	2010-11
1.	Gross fixed assets as on 01/04/2010	-
2.	Addition during the year 2010-11	12.92
3.	Gross fixed assets at the end of the year 2010-11	12.92
4.	Average assets	6.46
5.	Rate of depreciation	5.28%
6.	Depreciation for the year	0.34

The Commission, accordingly approves the depreciation charges at Rs. 0.34 crore on an average asset capitalization of Rs.6.46 crore for the FY 2010-11 against Rs. 15.76 crore projected by ED-Daman and Diu.

5.18 INTEREST AND FINANCE CHARGES

The ED-Daman and Diu has projected the interest on long term loans at Rs. 16.91 crore. The details are given in the Table-37 below:

Table-37

Interest on long-term loans projected by ED-Daman and Diu

(Table 17 of ARR)

(Rs. crore)

Particulars	FY 2009-10 (Projected)	FY 2010-11 (Projected)
Opening GFA (net of consumer contribution)	260.30	
Opening loan (50% of the opening GFA)	130.15	126.25
Addition in loan (70% of asset capitalization)	9.12	49.27
Repayment of loan (10% of opening balance)	13.02	13.93
Closing loan amount	**126.25**	**161.60**
Average loan	128.20	143.93
Interest Rate on loan	11.75%	11.75%
Total interest cost on long term loans	**15.06**	**16.91**

The ED-Daman and Diu has furnished the gross fixed assets at Rs. 260.30 crore as on 01/04/2010 and assumed 50% of this gross fixed assets as opening balance of loans and 50% as equity contribution and 70% of the addition of assets during the years 2009-10 and 2010-11 as debt and 30% towards equity on notional basis and arrived at the average notional loan of Rs. 143.93 crore for the year 2010-11. The Department claimed interest of Rs. 16.91 crore @ 11.75% on the average loan of Rs.143.93 crore.

The ED-DD has submitted the following:

1. The entire capital expenditure has been funded by the Central Government through Budgetary support each year upto 2008-09 and the department has no loan liabilities.
2. The department is now migrating from a Government owned utility to a Commercial Utility under the EA 2003. It has been assumed to work as a Commercial Utility from 1st April 2009 and would be under the various Regulations issued by JERC for Conduct of Electricity Business and Tariff Determination. Therefore, the determination of quantum of opening debt and equity is not possible.
3. In the case of Damodar Valley component normative debt equity of 50:50 was allowed for the purpose of tariff determination.
4. Similar approach has been adopted in the case of determination of tariff for various Central Power Sector Under takings viz NTPC, NHPC, PGCIL etc.
5. The Department has considered a 50:50 debt equity ratio for all the assets created before 1st April, 2009 and considered 50% of the opening GFA in 2009-10 to be funded through normative debt and the repayment in 10 equal annual instalments.
6. Assets capitalized during the years 2009-10 and 2010-11 have been considered based on the normative debt equity ratio of 70:30 as per JERC (Terms and Conditions for Determination of Tariff) Regulations, 2009.
7. Interest rate of 11.75% has been considered for computation of interest charges which is similar to SBI Prime Lending Rate.

As mentioned by the utility the entire capital expenditure has been funded through budgetary support from GOI.

Regulation 25 of JERC (Terms and Conditions for Determination of Tariff) Regulations, 2009 lays down

(1) For existing loan capital interest and finance charges on loan capital shall be computed on the outstanding loans, duly taking into account the rate of interest and schedule of repayment as per the terms and conditions of relevant agreements.

(2) Interest and finance charges on loan capital for new investments shall be computed on the loans, duly taking into account the rate of interest and the schedule of repayment as per the terms and conditions of relevant agreements.

The rate of interest shall, however, be restricted to the prevailing Prime Lending Rate of the State Bank of India.

The ED-Daman and Diu has not borrowed any loans in the past upto 31/03/2010 and has not proposed to borrow any loans to meet the capital expenditure for the year 2010-11. The interest charges projected by the utility for 2010-11 are on the basis of notional loan without external borrowings.

The Commission, therefore, does not consider any interest charges projected by the ED-Daman and Diu for the year 2010-11.

5.19 INTEREST ON WORKING CAPITAL

The ED-Daman and Diu has projected the interest on working capital at Rs. 5.35 crore for the year 2010-11 as detailed in the Table-38 below:

Table-38

Interest on working capital projected by ED-Daman and Diu for 2010-11
(Table 18 of ARR)

(Rs. crore)

Particulars	2009-10 (Projected)	2010-11 (Projected)
One month's Power Purchase Cost	39.03	44.62
One month's employee costs	0.39	0.42
One month's R&M Cost	0.17	0.18
One month A&G expenses	0.25	0.31
Two months fuel cost	-	-
Total working capital requirement	**39.83**	**45.53**
Rate of interest	12.25%	11.75%
Interest on working capital	4.88	5.35

The ED-Daman and Diu has computed the interest on working capital based on normative basis as per the JERC (Terms and Conditions for Determination of Tariff) Regulations, 2009.

The rate of interest is considered at 12.25% for the year 2009-10 and 11.75% for the year 2010-11 the SBI short term PLR as on 1st April of the respective year.

Regulation 29 (3) of the JERC (Terms and Conditions of Tariff) Regulations, 2009 specified that subject to prudence check, the working capital for integrated utility shall be the sum of one month requirement for meeting:

(a) Power purchase cost
(b) Employee cost
(c) Administration and General expenses
(d) Repair and Maintenance expenses
(e) Sum of two months requirement for meeting fuel cost

The ED-Daman and Diu has no generation facility and therefore no fuel cost is involved. In terms of the parameters as per Regulations the interest on working capital, works out to Rs. 5.39 crore for the year 2010-11 as detailed in the Table-39 below:

Table-39

Interest on working capital approved for 2010-11 (Rs. crore)

S.N	Particulars	2010 - 11
1.	One month power purchase cost	45.10
2.	One month employee cost	0.42
3.	One month Adm & Gen. Charges	0.17
4.	One month R&M expenses	0.18
5.	Two months fuel cost -	-
6.	**Total working capital**	**45.87**
7.	Rate of interest on working capital	11.75%
8.	**Interest on working capital**	**5.39**

The Commission accordingly approves the interest on working capital at Rs. 5.39 crore against Rs. 5.35 crore projected by ED-Daman and Diu for the year 2010-11.

5.20 PROVISION FOR BAD DEBTS

The ED-Daman and Diu has projected the provision for bad and doubtful debts at Rs. 6.08 crore for the year 2010-11as detailed in the Table-40 below:

Table-40

Provision for bad and doubtful debts projected
(Table 20 and Format 18 of ARR)

(Rs. crore)

Particulars	2009-10 (Projected)	2010-11 (Projected)
Annual revenue requirement	532.91	608.40
Provision for bad & doubtful debts as % of receivables	1%	1%
Provision for bad & doubtful bets	5.33	6.08

The ED-Daman and Diu has submitted that the provision for bad and doubtful bets has been considered at 1% of the receivables in the reserve requirement.

The ED-Daman and Diu has furnished the category wise arrears due from consumers at the end of March 2009 and March 2010 as Rs. 40.24 crore and Rs. 48.36 crore respectively in their additional submission dated 2nd July 2010. Later the arrears outstanding as on 31st March 2010 have been revised to Rs. 36.67 crore vide their letter dated 26/07/2010.

The category wise details of arrears outstanding from consumers as on 31st March 2010 are given in the Table-41 below:

Table-41

Category wise arrears as on 31st March 2010

Category	Permanent disconnection		Existing consumer	
	No. of consumers	**Total Amount (Rs. crore)**	**No. of consumer**	**Total amount (Rs. crore)**
Domestic	900	2.37	15935	1.64
LIG / KJP	36	0.01	0	0
Commercial	922	2.74	3742	6.23
LT industrial	407	1.30	494	1.67
HT industrial	52	1.26	60	16.32
LT agriculture	58	0.10	216	0.18
Public water works and sewerage pumping	0	0	1	0.09
Public lighting (No. of street lights)	0	0	18	1.36
Temporary	146	0.08	29	0.02
Water works	4	0.02	21	1.26
Total	**2525**	**7.89**	**20516**	**28.78**

The ED-Daman and Diu has explained that the debtors outstanding at the end of the financial year is primarily on account of billing cycle and lag between issuance of bill and collection. The Commission has obtained the details of consumers with arrears more than Rs. 1 lakh and above.

The category wise number of consumers and the dues are given in the Table-42 below:

Table-42

Details of arrears (above 1 lakh) as on 31.03.2010

Category	No. of consumers	Amount (Rs.)
Domestic	174	38,887,361
Commercial	106	74,104,306
LT industrial	35	10,385,458
HT industrial	43	147,452,302
LT agriculture	13	1,858,924
Public water works	10	18,638,016
Total	**381**	**291,326,367**

The arrears outstanding as on 31/03/2010 i.e Rs. 36.67 crore is quite substantial for a small utility. The arrears work at about 24 days revenue.
Regulation 28 on bad and doubtful debts reads as follows:

”The Commission may, after the generating company / licensee gets the receivables audited, allow a provision for bad debts upto 1% of receivables in the revenue requirement of the generating company / licensee”.

The receivables obviously mean the debts for electricity supplied i.e arrears outstanding but not the receivables equivalent to the ARR. These receivables are to be duly audited for considering any provision for bad debts.

The arrears have not been audited. The Commission considers a provision of 0.5% of the arrears outstanding as on 31/03/2010 towards bad and doubtful debts as the arrears given by the utility are un audited figures.

The ED-Daman and Diu is directed to get the arrears, receivable from various consumers audited and take adequate and effective steps to realize the arrears from consumers specially consumers who owe Rs. 1 lakh and above and intimate the action plan for collection of arrears in the next ARR on 31.12.2010 whichever is earlier.

The Commission, accordingly, approves the provision for bad and doubtful debts at Rs. 0.18 crore @ 0.5% of the outstanding as on 31/03/2010 against Rs. 6.08 crore projected by the ED-Daman and Diu.

5.21 RETURN ON CAPITAL BASE / RETURN ON EQUITY

The ED-Daman and Diu has projected the return on equity at Rs. 23.14 crore for the year 2010-11. The details of computation of ROE are given in the Table-43 below:

Table-43

Reasonable return projected by ED-Daman and Diu

(Table 19 of ARR)

(Rs. crore)

Particulars	**2009-10 (Projected)**	**2010-11 (Projected)**
Opening GFA (Net of consumer contribution)	260.30	-
Opening normative equity (50% of the opening GFA)	130.15	134.06
Addition in equity (70% of Asset capitalization)	3.91	21.12
Closing equity amount	134.06	155.17
Average equity	132.10	144.62
Rate of return on equity	16%	16%
Return on equity	21.14	23.14

The ED-Daman and Diu has submitted that it is entitled for a Return on Equity as per the JERC (Terms and Conditions for Determination of Tariff) Regulations, 2009. It has mentioned that return on equity is claimed at 16% based on CERC revised Tariff Regulations FY 2009-14 and other SERCs who are allowing a ROE of 16% for distribution business. The ED-DD has considered 50% normative equity for opening GFA for the year 2009-10 and 30% normative equity towards additional capitalization during the years 2009-10 and 2010-11 and claimed that it is in line with the JERC (Terms and Conditions for Determination of Tariff) Regulations, 2009.

The attention of the utility has been drawn to the proviso under Regulation 23 of JERC (Terms and Conditions for Determination of Tariff) Regulations, 2009 which specified that in the case of an integrated utility till the time it remains integrated utility, it shall be entitled to return on its capital base as per Schedule VI to the repealed Electricity (Supply) Act, 1948 in vide reference No. 3/15/2010, JERC dated 14th June 2010. In the reply the ED-Daman and Diu has submitted that this is the first year of regulatory regime and the petitioner has not been maintaining adequate information and requested the Commission to consider the return on equity while approving the ARR for 2010-11.

Commission's Analysis

The ED-Daman and Diu is an integrated utility in its present form as defined in Regulation 2 (9) of the JERC (Terms and Conditions for Determination of Tariff) Regulations, 2009. The ED-Daman and Diu is not restructured and corporatised. As of now it is an integrated utility and it is entitled to return on capital base under the provisions of Schedule VI of the repealed Electricity (Supply) Act, 1948 vide proviso under Regulation 23 of JERC (Terms and Conditions for Determination of Tariff) Regulations, 2009.

The basic requirement for consideration of either return on capital base or return on equity is the audited annual accounts and registers of assets and depreciation. The ED-Daman and Diu has not prepared the statement of accounts viz profit and loss account, balance sheet etc. As admitted by the Department the petitioner has not been maintaining adequate information.

The Department has no separate audited accounts for the regulated business, there are no assets and depreciation registers. Till such time the Department prepares and maintains the assets register and depreciation registers and get them duly audited it is not feasible for the Commission to consider return on equity or return on capital base in accordance with Regulations 23 and 24 of JERC (Terms and Conditions for Determination of Tariff) Regulations, 2009.

5.22 NON-TARIFF INCOME AND OTHER INCOME

The ED-Daman and Diu has projected the non-tariff and other income as Rs. 5.25 crore for the year 2010-11.

The non-tariff income includes rent / service line rentals, recovery of penalty for theft of power / mal practices, miscellaneous charges from consumers and other income includes interest on staff loans and advances, delayed payment charges from consumers, interest on advances to suppliers / contractors and miscellaneous receipts.

The ED-DD has submitted that it has estimated the non-tariff income at Rs. 5 crore for the year 2009-10 based on actual non-tariff income received in the previous years and assumed 5% escalation over 2009-10 for the year 2010-11. The component wise details on non-tariff income required in Format 21 have not been submitted in the ARR and Tariff Petition. With reference to a query from the Commission the Department has submitted that the utility is not maintaining the details required under Format 21 and furnished the Format 21 mentioning that the format has been filled with the best of all the information available with the Department vide ED/Daman and Diu letter dated 30/06/2010.

The non-tariff income actuals for the years 2008-09 and 2009-10 and projection for the year 2010-11 are given in the Table-44 below:

Table-44

Non-tariff income projected by ED/Daman and Diu
(Format 21 of ARR)

(Rs. crore)

S.N	Particulars	2008-09 (Actuals)	2009-10 (Actuals)	2010-11 (Projections)
1.	Meter / service rent	Break up not available		
2.	Late payment surcharge			
3.	Theft / pilferage of energy			
4.	Wheeling charges under			
5.	Open access			
6.	Interest on staff loans & Advance			
7.	Income from trading			
8.	Income from staff welfare activities			
9.	Investment and bank balances			
10.	Misc. receipts / income			
11.	Total income			
12.	Add prior period income			
13.	**Total non-tariff income**	**5.30**	**10.69**	**5.25**

The ED-DD has submitted a Demand, Collection and Balance (DCB) statement with their additional submission dated 30/06/2010 and some of the component wise details such as meter rent, delayed payment charge are given in the above DCB statement and therefore requested the Department to submit the details of non-tariff income component wise in Commission's letter dated 14th July 2010. The Department in their reference dated 26/07/2010 replied that the Delayed Payment Charge (DPC) and meter rent as part of total revenue and the same is not accounted for under non-tariff income. It is further submitted that under the head non-tariff income, the Department is maintaining the revenue comprising of service connection charges, meter testing fees, reconciliation charges, re-rating charges, tender fees and miscellaneous charges from consumers.

The actual non-tariff income for 2009-10 is given at Rs. 10.69 crore in the Format 21 against the estimated amount of Rs. 5 crore in the ARR. The Department assumed 5% escalation over 2009-10 for the year 2010-11 considering the same 5% escalation the Commission determines the non-tariff income at Rs. 11.22 crore for the year 2010-11.

The Commission, accordingly approves the non-tariff income at Rs. 11.22 crore for the year 2010-11 against Rs. 5.25 crore projected by the ED-Daman and Diu.

5.23 REVENUE FROM THE EXISTING TARIFF

The ED-Daman and Diu has furnished the revenue from existing tariff at Rs. 399.09 crore for the year 2010-11 while the revenue from existing tariff during the year 2009-10 (estimated) is given at Rs. 486.56 crore. The projected revenue of Rs.399.09 crore mentioned above is exclusive of revenue from sale of surplus power.

The revenue from sale of power projected by ED-Daman and Diu is detailed in the Table-45 below:

Table-45

Revenue from sale of power at existing tariff projected by ED-DD

(Rs. crore)

Sl. No.	Consumer categories	2009-10 (Estimated)	2010-11 (Projected)
1	Domestic	8.08	8.72
2	LIG / Kutir Jyoti	0.01	0.01
3	Commercial	6.64	6.84
4	Agriculture	0.14	0.14
5	LT industry	49.15	44.14
6	HT / EHT Industry	421.43	338.04
7	Public lighting	0.50	0.52
8	Public waterworks	0.32	0.32
9	Temporary supply	0.30	0.35
	Total revenue from consumers	**486.56**	**399.09**
10	Revenue from surplus power	74.04	59.26
	Total revenue	**560.60**	**458.35**

The ED-Daman and Diu has submitted that the estimated revenue for FY 2009-10 based on existing tariff is including the ‘power surcharge’ component being currently levied on industrial consumers in the Daman and Diu system. It is submitted by ED - DD that the surcharge levied on HT consumers during the year 2009-10 has been reduced from Rs. 1 / Unit to 50Pasie w.e.f. January 2010. The power surcharge for LT industry has been reduced from 50Paise to zero in the month of December 2010. The surcharge was introduced to meet the deficit during previous year and current year in the power purchase cost and sale rate.

In the revenue projection for the year 2010-11 the surcharge has not been taken into consideration for the industrial consumers (both HT & LT). The ED-DD has projected energy surplus to the tune of 215 MU and assumed to be sold at Rs. 2.75/Unit.

The ED-DD has not submitted the complete details of revenue from existing tariff for 3 year period viz, previous year, current year and ensuing year as required in the Format 28 of JERC (Terms and Conditions for Determination of Tariff) Regulations, 2009. With reference to a specific query from the Commission, the Department has submitted the Format 28 for the years 2008-09 and 2009-10 with partial information with their letter dated 30/06/2010. When full details are insisted upon it is stated that Electricity Department would maintain the slab wise information going further and requested the Commission in their letter dated 26.7.2010 to consider the information submitted in the petition and additional information / clarification submitted on 2nd July 2010 and 13th July 2010.

For a proper analysis and realistic estimation of revenue from existing tariff the particulars of number of consumers, sales, connected load / contracted demand category wise / sub category wise are essential.

In the absence of required data from the utility the average tariff rates as per the actuals for the year 2009-10 are taken into consideration category wise. Applying these average tariff rates of the year 2009-10 to the approved sales for the year 2010-11 the revenue from existing tariff has been computed at Rs. 495.75 crore as detailed in the Table-46 below:

Table-46

Revenue with existing tariff - FY 2010-11

S.No	Category	No of Consumers	Sales (MU)	Total Revenue (Rs. crore)	Avg. Unit rate (Rs./Kwh)
1	Domestic	44662	65.10	9.50	1.46
2	Commercial	9157	28.70	6.72	2.34
3	Agricultural	1639	2.40	0.17	0.70
4	Public Lighting	193	4.60	0.62	1.35
5	LT Industrial	3555	137.90	38.75	2.81
6	Public Water Works	80	0.90	0.25	2.81
7	HT Industrial				
A	HT General	922	1209.2	*332.52	2.75
B	HT Ferro	12	91.00	*33.23	3.43
8	Temporary Supply		0.70	0.28	4.00
9	Surplus power (Sale)		208.00	62.40	3.00
	Total	**60220**	**1748.50**	**495.75**	**-**

*Excluding the power surcharge being levied by Department

The Commission, therefore, arrives at the revenue from existing tariffs at Rs. 495.75 crore for the year 2010-11 against Rs. 458.35 crore projected by the Department.

5.24 REVENUE REQUIREMENT

The summary of the revenue requirement of the ED-Daman and Diu for the year 2010-11 as analyzed in the preceding paragraphs is given in the Table-47 below:

Table-47

Revenue requirement for the year 2010-11

(Rs. crore)

S.N	Particulars	Reference to para	2010-11 (Projected by ED/DD)	Approved by the Commission
1.	Cost of power purchase	5.15	535.44	541.22
2.	Employee cost	5.16.1	5.09	5.09
3.	R&M expenses	5.16.2	2.20	2.20
4.	A&G expenses	5.16.3	3.68	2.00
5.	Depreciation	5.17	15.76	0.34
6.	Interest and finance charge	5.18	16.91	-
7.	Interest on working capital	5.19	5.35	5.39
8.	Provision for bad debts	5.20	6.08	0.18
9.	Return on equity / capital base	5.21	23.14	-
10.	**Total revenue requirement**		**613.65**	**556.42**
11.	Less: Non tariff income	5.22	5.25	11.22
12.	**Net revenue requirement**		**608.40**	**545.20**
13.	Revenue from existing tariff includes sales of surplus power	5.23	458.35	495.75
14.	**Gap 2010-11 (12-13)**		**150.05**	**49.45**
15.	(a) Energy Sales (MU)	5.7	1541	1541
	(b) Sale of Surplus Power	5.11	215	208
16.	**Average cost (Rs/kWh)**		**3.46**	**3.12**

It can be seen from the above the revenue gap for the year 2010-11 is **Rs. 49.45** crore against the gap of **Rs. 150.05** crore projected by the Electricity Department / Daman and Diu in the ARR.

6. Directives

6.1 Annual Statement of Accounts

The Electricity Department, Daman & Diu (ED-DD) has repeatedly asserted while giving replies to the objections raised on the ARR and Tariff Petition that ED-DD is a part of the Administration of Union Territory of Daman & Diu and it is not required to maintain audited books of accounts. The electricity business has now come under Regulation under the provisions of Electricity Act 2003. The Electricity Department of Daman & Diu has not prepared the annual accounts of the department separately though it is required to prepare the annual accounts for the regulated electricity business. The prudency of the expenses could be checked only with reference to the audited accounts in the past and realistic projections in the ARR.

The ED-DD is directed to prepare 'Accounting Statement' which includes balance sheet, profit & loss account, report of the auditors, cost records etc along with supporting statements / schedules as per standard accepted practices and have them audited as required.

6.2 Preparation of Asset and Depreciation Registers

The ED-DD has mentioned that they maintain the Asset Register internally and updates the same during the year and submits this to the Administration of UT of Daman & Diu. The ED-DD has submitted one such statement for two years i.e 2008-09 and 2009-10 with broad classification of assets. On a perusal of this statement it is observed the assets that were completely depreciated and withdrawn after serving their useful life are not indicated. The ED-DD has clarified that in the absence of annual accounts being maintained in the Department, the age and other details of withdrawn / fully depreciated assets are not available.

The ED-DD is directed to arrange for the preparation of assets and depreciation registers, function wise and asset classification wise. Till such time the above registers are prepared and got audited the Commission can not consider the gross fixed assets and accumulated deprecation over the years to arrive at the capital base and allow the return there on as per JERC (Terms and Conditions of Determination of Tariff) Regulations, 2009.

6.3 Management Information System (MIS)

The ED-DD has not maintained proper data in respect of sales, revenue and revenue expenses as also the category wise / slab wise number of consumers, connected load / demand etc. for proper analysis of the past data based on actual and estimate of proper projections for consideration in the ARR and Tariff Petition. The Department consistently submitted that the sub category wise information is not available in the existing MIS maintained by the petitioner and the same would be provided in the filing of ensuing years.

The ED-DD is directed to take steps to build credible and accurate data base and management information system to meet the requirements for filing ARR & Tariff Petition as per regulatory requirement and which shall also suit the Multi Year Tariff principles which the Commission may consider at the appropriate time under Regulation 11 of JERC (Terms and Conditions for Determination of Tariff) Regulations, 2009. The formats software and hardware may synchronize with the Regulatory Information and Management System (RIMS) circulated by Central Electricity Regulatory Commission (CERC).

The ED-DD should get a study conducted on computerized data base, on electronic media and shall give a proposal as to how the department proposes to achieve this.

6.4 Collection & Billing Efficiency

In Format-2 wherein the details AT&C losses are given the collection efficiency is at 93.59%. This collection efficiency is out of the billing efficiency of 88%. The overall collection efficiency is only 82% when viewed at the energy available for sale.

The ED-DD is directed to initiate measures to improve the collection efficiency to hundred percent in a time bound manner they shall submit the action plan in respect of billing / collection by 31-12-2010.

6.5 Collection of Arrears

ED-DD is having substantial amount of arrears from various categories of consumers. The amount of arrears outstanding for collection as on 31/03/2010 is Rs. 36.67 crore and this is a substantial amount for a small utility.

There are 381 consumers from whom arrears are about Rs. 29.13 crore as on 31/03/2010 which includes 43 HT consumers who owe Rs. 14.75 crore towards arrears.

The ED-DD is directed to provide age wise analysis before the next ARR and initiate measures to liquidate the arrears and submit an action plan in this respect by 31st December, 2010.

6.6 Pilferage of Energy

The ED-DD has furnished the T&D losses at 11.25% during 2009-10 and projected the losses at 11% for 2010-11. The Department has not segregated the losses into technical and commercial losses. It is feasible that the losses projected may include commercial losses on account of pilferage.

Pilferage of energy may be by illegal tapings from electrical lines, tampering meters etc. The Commission feels that there is need to launch an extensive drive to revoke illegal connections, if any, check meter tampering and keep constant vigil so that corrective measures could be taken to reduce the AT & C losses. Requisite action may be taken as per the provisions under sections 135 and 138 of Electricity Act, 2003.

Commission directs that an energy audit through an accredited agency be carried out in order to find out the actual losses and remedial measures required to be taken as a result there of and submit an action plan including scope of work for energy audit shall be submitted by 31st December 2010.

6.7 Metering of Consumer Installations / Replacement of Non-Functional / Defective Meters

It is observed that LIG category of consumers are not metered and the consumption of the consumers with 2 lamps is charged on flat rate basis.

Under section 55 (1) of Electricity Act, 2003, no licensee shall supply electricity after expiry of two years from the appointed date except through installation of correct meter in accordance with the regulation to be made in this behalf by the Authority. Accordingly metering is required to be done in line with Central Electricity Authority (installations and operation of meters) Regulations 2006 to all consumers.

Electricity Department is directed to provide meters to all such consumers such as LIG consumer with 2 lamps etc., which are not metered for supply of electricity at present.

The present status of metering and action plan to meter the un-metered services, replacement of defective electromagnetic meters of the high value consumer etc shall be submitted to the Commission before 31st December 2010.

6.8 Augmentation of Transmission and Distribution System

ED-DD stated that a number of applications are pending from prospective industrial consumers which come under HT industrial category and the department is not able to extend supply to these consumers due to inadequacy of transmission and distribution network to serve the additional consumers.

It is necessary for the Department to augment the transmission and distribution system to meet the demand from new consumers to improve the quality of supply to existing consumers and reduce the losses.

The ED-DD is directed to conduct a Load flow study for optimization of the system and to prepare detailed project report for augmentation of the transmission and distribution system with cost benefit analysis, phasing of expenditure etc., and submit action plan by 31st December 2010.

6.9 Contribution of Consumers for Capital Investment

It is claimed by some of the consumers that the consumers are contributing for part of capital investment for providing electricity to their installations.

The fact of consumer contribution for capital investment is not brought out in the ARR and Tariff Petition.

The ED-DD is directed to furnish the details of contribution being collected from consumers. The amounts collected from the consumers towards capital investment shall be brought out in the accounts. The depreciation and Return on Equity / Capital Base should not be claimed on the amount contributed by the consumers towards capital investment.

6.10 Power Procurement

Daman & Diu does not have its own generation. It entirely depends on the allocation of power (firm and infirm) from central generating stations. During the last two years, particularly during 2008-09 the Department had to resort to procurement of power in the market and also draw power from the Western Regional system under UI at a high cost causing undue burden on the consumers by way of surcharge to recover the additional cost for power purchase.

Since the allocation of power from central generating stations is not a firm allocation, there may be exigencies of not getting adequate power to meet the demand resulting in load shedding for procurement of power at high cost to maintain continuous supply to consumers.

It is directed that ED-DD should get into long term power procurement arrangements so that uncertainties on account of their dependence on in firm power is reduced.

6.11 Consumers Bills

The commission feels under the present circumstances there is need of reformatting the electricity bills served on the consumers to accommodate data and information as considered essential by the utility / commission. A draft format be prepared and submit to the commission by 31st December 2010 for approval.

6.12 Demand Side Management and Energy Conservation

Demand side management and energy conservation are important areas, which should be in focus with ED-DD, as to reduce consumption of electricity particularly, in the context of peak load. Therefore the commission direct that a study be conducted by ED-DD through an accredited agency for efficient use electricity under demand side management and energy conservations means.

An action plan as the above including scope of the study shall be submitted to the commission by 31st December 2010.

6.13 POWER FACTOR IMPROVEMENT INCENTIVES

Presently for power factor improvement a penalty is being levied for causing poor power factor. As per Commission regulation on Supply Code a licensee is to incentivise these consumers who help to improve the power factor. ED – DNH shall examine the issue and putup a proposal for providing incentive for those consumers who help improving power factor beyond 90% as per the Commission regulations.

The above proposal shall be submitted by 31.12.2010.

6.14 GENERAL

In fore going paras the Commission has directed ED-DNH for many submissions. All these submissions shall be made through a single separate petition to be filed by 31.12.2010.

7. Tariff Principles, Tariff proposed by ED-Daman & Diu and Approved by the Commission

7.1 INTRODUCTION: TARIFF PRINCIPLES

7.1.1 In determining the annual revenue requirement of ED-Daman & Diu (ED-DD) and the retail supply tariff for the year 2010-11, the Commission is guided by the provisions of the Electricity Act 2003 and the JERC (Terms and Conditions for Determination of Tariff) Regulations. Section 61 of the Electricity Act lays down the broad principles, which should guide the determination of retail supply tariff. These principles are that the tariff should "progressively reflect cost of supply of electricity" and also "reduce cross subsidies" within a period to be specified by the Commission. The Act lays special emphasis on safeguarding of consumer's interest and also requires that the costs should be recovered in a reasonable manner.

The Act mandates that the tariff determination should be guided by factors, which *"encourage competition, efficiency, economical use of resources, good performance and optimum investment*".

In determining the tariff, the Commission is guided by the principles enshrined in Section 61 of the Electricity Act, 2003 the National Electricity Tariff Policy notified by the Government of India and the JERC (Terms and Conditions for Determination of Tariff) Regulations, 2009.

7.1.2 The NTP mandates that the Multi Year Tariff (MYT) framework be adopted for determination of tariff from 1st April 2006. However the Commission is not in a position to introduce MYT regime in the Union Territory of Daman & Diu mainly because of lack of requisite data. The present MIS and regulatory reports of ED-DD are totally inadequate for such an exercise. Under these circumstances it would not be practicable to implement the MYT framework. The Commission will introduce MYT when the requisite data for minimum appropriate period is available.

7.1.3 The Commission has considered the average cost of supply in the absence of relevant data for working out consumer category wise cost of supply.

7.1.4 **Section 8.3 of National Tariff Policy lays down the following principles for tariff design:**

"1. In accordance with the National Electricity Policy, consumers below poverty line who consume below a specified level, say 30 units per month, may receive a special support through cross subsidy. Tariffs for such designated group of consumers will be at least 50% of the average cost of supply. This provision will be re-examined after five years.

2. For achieving the objective that the tariff progressively reflects the cost of supply of electricity, the SERC would notify the roadmap, within six months with a target that latest by the end of the year 2010-11 tariffs are within ± 20% of the average cost of supply. The road map would have intermediate milestones, based on the approach of a gradual reduction in cross subsidy.

For example if the average cost of service is Rs.3 per unit, at the end of year 2010-11 the tariff for the cross subsidized categories excluding those referred to in para 1 above should not be lower than Rs.2.40 per unit and that for any of the cross subsidizing categories should not go beyond Rs.3.60 per unit.

3. While fixing tariff for agricultural use, the imperatives of the need of using ground water resources in a sustainable manner would also need to be kept in mind in addition to the average cost of supply. The tariff for agricultural use may be set at different levels for different parts of the state depending on the condition of the ground water table to prevent excessive depletion of ground water."

7.1.5 The provision of the Electricity Act, 2003, National Tariff Policy and the JERC Tariff Regulation 2009 require that there be a gradual movement towards reduction of cross subsidy. The Tariff Policy aims at bringing down cross subsidy to ± 20% of the average cost of supply by the year 2010-11.

Regulation 6 of JERC (Terms and Conditions for Determination of Tariff) Regulations 2009 specifies –

Cross Subsidy

"(1) 'Cross subsidy for a consumer category' in the first phase (as defined in sub-regulation 2 below) means the difference between the average realization per unit from that category and the combined average cost of supply per unit expressed in percentage terms as a proportion of the combined average cost of supply. In the second phase (as defined in sub-regulation 2 below) means the difference between the average realization per unit from that category and the combined per unit cost of supply for that category expressed in percentage terms as a proportion of the combined cost of supply of that category.

(2) The Commission shall determine the tariff to progressively reflect the cost of supply of electricity and also reduce cross subsidies within a reasonable period. To this purpose, in the first phase the Commission shall determine tariff so that it progressively reflects combined average unit cost of supply in accordance with National Tariff Policy. In the second phase, the Commission shall consider moving towards the category-wise cost of supply as a basis for determination of tariff."

7.1.6 The average tariff for each category of consumers, the average cost of supply, the average tariff as a percentage of average cost of supply and the consumer tariff within the range ± 20% of cost of supply for 2010-11 are given as under:

S.N	**Consumer category**	**Average tariff (Rs/kWh)**	**Average cost of supply per unit (Rs/kWh)**	**Average tariff as a percentage of average cost of supply (3/4) (%)**	**Unit rate ± 20% of average cost of supply (Ps/kWh)**
(1)	(2)	(3)	(4)	(5)	(6)
1.	Domestic	1.46	3.12	47	250 (-20%)
2.	Commercial	2.34	3.12	75	374 (+20%)
3.	Agriculture	0.70	3.12	22	250 (-20%)
4.	Public Lighting	1.35	3.12	43	250 (-20%)
5.	LT industries	2.81	3.12	90	374 (+20%)
6.	Public Water Works	2.81	3.12	90	374 (+20%)
7.	HT Industries	2.90	3.12	93	374 (+20%)

As seen the tariffs to all categories of consumers are less than the average cost of supply. Though the tariffs to various categories of consumers are lower than the average cost of supply, the department has been managing by levying power surcharge on HT consumers in the range of 100Ps to 50 Ps per unit during 2008-09

& 2009-10. Any attempt to bring the tariffs to ± 20% of average cost of supply as per tariff policy may result in tariff shock to most of the consumers. Hence an attempt is made to bring the tariffs nearer to average cost of supply in course of time. The numbers of consumer in HT/EHT Category constitute only a fraction of total consumer base but consuming 84 % of electricity. The tariff are being determined for ED-DD for the first time, therefore commission feel to rationalize the H.T Category consumer tariff in first instant and also envisage no major change in tariff of other categories being cross subsidized by HT/EHT Consumers presently & imbalance needs to be reduce gradually.

7.2 TARIFF APPROVED BY THE COMMISSION

7.2.1 The following is considered while arriving at category-wise tariff.

7.2.2 Revenue with exiting tariff including sales of surplus power comes out Rs. 495.75 Crore thus leaving a gap of Rs 49.45 Cr. Commission feels that there is a need to rationalise the various sub-categories under HT/EHT Industry as a whole. It is seen that on account of rationalization/adjustment in the HT/EHT category and the surcharge recovered up till now, no increase is required in the tariff of other categories. No surcharge shall be recovered after the issue of this order.

7.2.3 The tariff rates category-wise as proposed by Electricity Department, Daman & Diu are given in Table-48 & 49 below:

7.2.4 Based on the approval of Aggregate Revenue Requirement (ARR) the approved Tariff rates for supply of Energy in respect of different categories of Consumers in the Union territory of Daman & Diu are as per Table -50 & 51.

7.2.5 The terms & condition and tariff of various categories as approved by the commission are given as per Tariff schedule attached.

Table -48

The category wise tariff existing and proposed by ED-DD

S. N	Category / Sub category	Energy charges		Demand charges	
		Existing Energy charges (Rs/kWh)	Proposed energy charges (Rs/kWh)	Existing Demand charges (Rs/kVA/month or Rs./ consumer/ month) or Rs./HP/month	Proposed Demand charges (Rs/kVA/ month or Rs./ consumer/ month)or Rs./HP/month
1.	Domestic				
	Slab 0-50 units	1.00	1.00		
	51-200	1.60	1.60		
	201-400	2.00	2.00		
	401 & above	2.25	2.25		
	Low income group house (2x40 watts bulbs only)	-	-	10.00	10.00
2.	Commercial				
	0-100 units	2.05	3.00		
	100 and above	2.70	3.30		
3.	Industry (LT) Upto 99 HP per month (All units)	-	-		
	Upto 20HP or part thereof	2.50	3.00	-	-
	Above 20 HP or part thereof	2.60	3.30	25.00	25.00
4.	Agriculture & Poultry				
	Connected load upto 10HP	0.55	0.55		
	Connected load 10HP and upto to 99 HP	0.85	0.85		
5.	Public lighting	1.20	1.20	4.00/lamp	4.00/lamp
6.	HT-C General Industrial & Motive power - 11kV & 66kV				
	0-50,000 units	2.55	3.85	60.00	60.00
	Beyond 50,000 units	2.65	3.95		
		**8.00	**8.00	180.00*	180.00*
	HT-C Ferro				
	0-300 units / kVA	1.27	2.77	700	700
	Next 200 units / kVA	2.27	3.47		
	Above 500 units / kVA	2.77	4.07	700*	700*
	HT – C- Rolling Mills				
	First 200 units / kVA	1.27	2.77	450	450
	Next 100 nits /kVA	2.27	3.57		
	Above 300 / kVA	3.77	4.07	450*	450*
7	Temporary supply				
	Single phase supply	4.50	6.00		
	Three phase supply	4.50	6.00		

* Billing demand exceeding contract demand.

** Corresponding energy charges for exceeding contract demand.

Table - 49

Minimum Charges

S.N	Category	Existing	Proposed
1.	Domestic		
	First 500W or part there f	20.00	20. 00
	Every additional 500W or part thereof	15.00	15.00
2.	Commercial		
	Single phase		
	First 500W or part thereof	25.00	25.00
	For every additional 500W or part thereof	25.00	25.00
	Three phase per HP /kVA/kW per month or part thereof	35.00	35.00
3.	Industry (LT)		
	Per HP or part thereof	25.00	25.00
4.	Agriculture & Poultry per HP / M or part thereof Subject to a minimum of 3 HP	8.00	8.00
5.	Public lighting (Per lamp per month or part thereof)	4.00	4.00
6.	Temporary supply		
	Single phase		
	Per day of supply not exceeding 3 days	25.00	25.00
	Per day for supply exceeding 3 days	10.00	10.00
	Three phase 3 (HP or part thereof per period of supply)	35.00	35.00

Table – 50

The category wise tariff Approved by Commission

S.No	Category / Sub category	Energy charges Approved by Commission (Paise per KWH)	Demand charges Approved by Commission (Rs/kVA/month or Rs./ consumer/ month) or Rs./HP/month
1.	**Domestic**		
	Slab 0-50 units	100	
	51-200	160	
	201-400	200	
	401 & above	225	
	Low income group house (2x40 watts bulbs only)	-	10.00
2.	**Commercial**		
	0-100 units	205	
	100 and above	270	
3.	**Industry (LT)**	-	
	Upto 20HP or Connected Load	250	
	Above 20 HP or upto 90 HP or Connected Load	260	25.00
4.	**Agriculture & Poultry**		
	Connected load upto 10HP	55	
	Connected load above 10HP & upto to 99 HP	85	
5.	**Public lighting**	120	4/lamp
6. (A)	**HT - General** Industrial & Motive power-11kV &66kV		
	0-50,000 units	295	60.00
	50,001 – 5 lakhs units	305	
	Beyond 5 Lakhs	310	
	Penalty charges for Exceeding Contract Demand	**800	180.00*
(B)	**HT (Power Incentive)** Ferro Metallurgical/ Steel Melting/ Steel Rolling/ Power Intensive		
	0-300 units / kVA	205	450
	301-500 units / kVA	305	
	500 units & above	355	
	Penalty charges for Exceeding Contract Demand	**800	900*
7	**Temporary supply**		
	Single phase supply	600	
	Three phase supply	600	

* Billing demand exceeding contract demand.

** Corresponding energy charges for exceeding contract demand.

Table - 51

Minimum Charges Approved by Commission

S.No.	Category	Approved by Commission
1.	Domestic	
	First 500W or part there f	20. 00
	Every additional 500W or part thereof	15.00
2.	Commercial	
	Single phase	
	First 500W or part thereof	25.00
	For every additional 500W or part thereof	25.00
	Three phase per HP /kVA/kW per month or part thereof	35.00
3.	Industry (LT)	
	Per HP or part thereof	25.00
4.	Agriculture & Poultry per HP / M or part thereof Subject to a minimum of 3 HP	8.00
5.	Public lighting (Per lamp per month or part thereof)	4.00
6.	Temporary supply	
	Single phase	
	Per day of supply not exceeding 3 days	25.00
	Per day for supply exceeding 3 days	10.00
	Three phase 3 (HP or part thereof per period of supply)	35.00

COMMISSION'S ORDER

Having considered the petition No. 13/2010 of Electricity Department, Daman & Diu for approval of Annual Revenue Requirement (ARR) and determination of retail tariffs for the supply of energy, the Commission approves the Annual Revenue Requirement (ARR) and the Retail Tariff for ED-DD.

1.0 The break-up of the Annual Revenue Requirement approved for ED-DD for the year 2010-11given below.

(Rs. crore)

Sl. No.	Details	Year 2010-11
1	Cost of power purchase	541.22
2	Employee's cost	5.09
3	R&M expenses	2.20
4	A&G expenses	2.00
5	Depreciation	0.34
6	Interest and finance charge	-
7	Interest on working capital	5.39
8	Provision for bad debts	0.18
9	Return on equity / capital base	-
10	**Total Revenue requirement**	**556.42**
11	**Total Revenue from existing tariff**	**495.75**

2.0 The approved Retail Tariff for the supply of energy shall be in accordance with Tariff Schedule appended as Appendix 1 to this Order.

3.0 The order shall come into force from 1st November, 2010 & shall remain effective till revised / amended by the Commission.

sd/-	sd/-
Member	**Chairman**

Place : Gurgaon

Date : 1st November 2010

Appendix 1

TARIFF SCHEDULE

General Terms and Conditions:

1. These tariffs shall be applicable with effect from the date 1st November 2010.
2. The tariffs are exclusive of electricity duty, taxes and other charges levied by the Government or other competent authority from time to time which are payable by the consumers in addition to the charges levied as per the tariffs.
3. Unless otherwise agreed to these tariffs for power supply are applicable for supply at one point only.
4. Supply to consumers having contracted load between 100 kVA to 1500 kVA will be generally at 11 kV and for more than 1500 kVA at 66 kV. The consumer who required load more than 25000 kVA, the voltage of supply shall be at 220 kV level.
5. In case any dispute arises about the applicability of any tariff for any particular class of service or as to the interpretation of any clause of these tariffs, the decision of the Commission shall be final and binding.
6. The Department shall not permit installation of contracted load of 7 HP and above unless they are provided with the capacitors of adequate rating to comply with power factor conditions. The consumer has to provide appropriate capacitors for these instillations presently running on without capacitors with a stipulated period decided by the Commission.
7. If energy supplied for a specific purpose under a particular tariff is used for a different purpose not contemplated in the contract for supply and / or for which higher tariff is applicable, it will be deemed as misuse of energy and energy consumption bills already rendered for the service shall be revised by applying the appropriate higher tariffs from the date of connection unless convincing reasons are adduced thereof for adopting a different period. The imposition of this higher tariff shall not relieve the consumer from any penalties as per the law.
8. If the consumer fails to pay the energy bill presented to him within the stipulated period, the Department shall have the right to disconnect the supply either temporarily or permanently after serving seven days notice on such consumer.
9. Billing on all cases will be done on contracted load and meter rent will be in addition to minimum charges.

10. Minimum charges, fixed charges and demand charges, wherever applicable, will be charged for the whole month irrespective of the date of release of connection.
11. Demand charges, fixed charges and minimum charges, wherever applicable, will be double as and when bi-monthly billing is carried out, similarly slabs of energy consumption will also be considered in case of bi-monthly billing.
12. In case of exceeding the contract demand other than technical reasons, or adding additional load by the high tension consumers and sanctioned load by the low tension consumers by adding additional load, the penalty charges shall be charged in the regular bills itself as under:
    a. Exceeding the contracted load by a consumer without specific permission of the department.

    And / or

    b. Unauthorized addition, altered and / or extension to the consumer’s electrical installation without the permission of the department.

    If the entire energy consumption has been recorded in the meter, the quantum of energy bearing the same ratio of the total energy recorded in the meter as excess load or the unauthorized additional / extension of load bears to the total connected load as detected at the time of checking shall be charged at penal rate as per the provisions of Electricity Supply Code Regulations, 2010 issued by 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.
13. Unless specifically stated to the contrary, the figures of energy charges related to rupees per unit (kWh) charge for energy consumed during the month.
14. Delay payment charges shall be applicable to all category of consumers.

    Delay payment charges 2% per month (2% of this delay charges shall be charged on all arrears of the bill). In case of permanent disconnection, delay payment charges will be charged only upto the month of permanent disconnection.
15. ED-DD shall take a security deposit from the consumers as per close 6.10 of ‘’JERC (Electricity Supply Code) Regulations 2010 (11/2010)

The approved category wise tariff schedule is given below:

1. Low Tension Supply:

A. (a) Tariff LT-D/Domestic:

Applicable to private houses, bungalows, clubs, hostels and hospitals run on noncommercial lines, charitable educational and religious institutions etc., for lights, fans, radios, domestic heating and other household appliances.

(i) Energy Charges:

First 50 units - 100 ps. per unit.
51 - 200 units - 160 ps. per unit.
201 - 400 units - 200 ps. per unit.
Beyond 401 units - 225 ps. per unit.

(ii) Minimum Charges:

First 500 watts or part thereof - Rs. 20/- per month or part thereof.

For every additional 500 watts or part thereof - Rs.15/- per month or part thereof.

(b) Tariff LT-D/LIG:

Applicable to consumers of Low Income Group with connected load 2 x 40 watts only.
Energy Charges - Rs. 10/- per service connection per Month.

NOTE: For any unauthorized increase in load beyond 2 x 40 watts, penal charges @ Rs. 10/- per month shall be levied and the installation shall be liable for disconnection.

B. Tariff LT-C/Commercial:

Applicable to shops, offices, railway stations, hotels (not registered with Tourism Department), restaurants, photographic studios, X-rays installation, laundry dry cleaners, cinemas, theatres, AIR/ Doordarshan Station, telephone exchanges and other commercial installation for lights, fans, radios, heating and other appliances.

(i) Energy Charges:

First 100 units - 205 ps. per unit.
Beyond- 100 units - 270 ps. per unit.

(ii) Minimum Charges:

(a) Single phase

First 500 watts or part thereof	Rs. 25/- per month or part thereof
For every additional 500 watts or part thereof	Rs. 40/- per month or part thereof

b)	(b) Three Phase –	Rs. 40/- per H.P./KVA/KW per month or part thereof.

C. Tariff LT-P/Motive Power:

Applicable to all low tension industrial and non-industrial motive power connections including PWD Water Works up to 99 HP/Hotels registered with Tourism Department.

(i) Energy Charges:

All connections up to 20 HP of connected load	250 ps. per unit.
For all connections above 20 HP and up to 99 HP connected load	Fixed charges Rs.25/- per HP/ month or part thereof. ***PLUS*** 260 ps. per unit for all units.

(ii) Minimum Charges:

Rs. 25/- (Twenty five) per HP/month of Connected load or part thereof for all LTP up to 99HP.

(iii) Power Factor Charges

Any motive power connection above 3 HP running without proper capacitors installed so as to maintain power factor as 0.9 as per Commission regulation 11/2010 shall be charged extra 2.5% of units consumed as additional power factor charges. Payment of the power factor charge won't exempt the consumer from his responsibility to maintain the power factor. In case of abnormal power factor decrease the department will give the consumer 15 days time to install appropriate capacitors and maintain the standard power factor. If the consumer is not able to rectify the problem within the notice time, the connection will be liable for disconnection. ED – DD reserve the right to install a suitable capacitor at its own cost and recover the cost thereof as arrears of energy charges.

2. HIGH TENSION SUPPLY:

A. H.T.- GENERAL.

Industrial and non Industrial Consumers other than Ferro metallurgical and Steel Rolling. Applicable for all industries / motive power / non-industrial consumers / Hotels registered with Tourism Department having a contract demand of 100KVA and above.

(i) Demand Charges:

For billing demand up to contract demand or part thereof.	Rs. 60/- per KVA/month or part thereof.
For billing demand in excess of contract demand	Rs. 180/- per KVA/month or part thereof.

PLUS

(ii) Energy Charges for all units:

For all KVA contract demand for first 50000 units.	295 ps. per unit.
50,001 – 5 LAKHS	305 ps. per unit.
Beyond 5 Lakhs units	310 ps. per unit.

(iii) Penalty Charges

Penalty charges @ 800 ps/unit

a. Penalty charges will be levied on those units which are drawn beyond the contract demand. These units will be worked out on pro-rata basis correlating the total consumption of the month with billing demand.

b. If industries are over drawing power by more than 20% of the contract demand then their connections will be disconnected immediately.

(iv) Power Factor Charges

If the power factor of the consumer is less than 0.90, then for every 0.01 of the power factor decrease, 0.5% of the total units consumed will be charged extra as surcharge at the rate of 410 ps/unit. Payment of the power factor charge won't exempt the consumer from his responsibility to maintain the power factor. In case of abnormal power factor decrease the department will give the consumer 15 days time to install appropriate capacitors and maintain the standard power factor. If the consumer is not able to rectify the problem within the notice time, the connection will be liable for disconnection.

(v) Minimum Charges

Same as Demand Charges

(vi) Billing Demand

Billing demand will be the highest among the following:

(a) 100 kVA
(b) 75% of the Contract demand
(c) Actual Demand Established

B. H.T- (Ferro Metallurgical/ Steel Melting/ Steel Rolling/ Power Intensive/)

(i) Demand Charges:	Plus (ii) Energy Charges	Ps./Unit (KWH)
Rs. 450 per month per KVA of contract demand	First 300 Units per KVA	205Ps.
	Next 200 Units per KVA	305 Ps.
(b) For billing demand in excess of Contract Demand, Rs. 900 per KVA per month.	Above 500 Units per KVA	355Ps.

(iii) Penalty Charges

Penalty charges @ 800 ps/unit

a. Penalty charges will be levied on those units which are drawn beyond the contract demand. These units will be worked out on pro-rata basis correlating the total consumption of the month with billing demand.

b. If industries are over drawing power by more than 20% of the contract demand then their connections will be disconnected immediately.

. **(iv) Minimum Charges**

(a) Same as Demand Charges.

(b) The consumer shall have to give a notice in writing seven days in advance in case he proposes to close his unit atleast for a period of one month or more and in such case, the minimum charges @Rs.120/kVA shall be chargeable to the consumer

(v) Billing Demand

Billing demand will be the highest among the following:

(a) 100 kVA
(b) 75% of the Contract demand
(c) Actual Demand Established

(vi) Power Factor Charges

If the power factor of the consumer is less than 0.90, then for every 0.01 of the power factor decrease, 0.5% of the total units consumed will be charged extra as surcharge at the rate of 410 ps/unit. Payment of the power factor charge won't exempt the consumer from his responsibility to maintain the power factor. In case of abnormal power factor decrease the department will give the consumer 15 days time to install appropriate capacitors and maintain the standard power factor. If the consumer is not able to rectify the problem within the notice time, the connection will be liable for disconnection.

3. Tariff LT-AG/Agriculture:

Applicable to irrigation pumping and agriculture purposes, poultry, dairy, piggery, pisciculture etc., for lights fans heating and other appliances.

(i) Energy Charges:

Up to 10 HP of connected load - 55 ps. per unit for all units consumed

Beyond 10 HP connected load - 85 ps. per unit for all units consumed

(ii) Minimum Charges:

Rs. 8/-(eight) per month/HP of connected load or part thereof, subject to minimum of 3HP.

NOTE:

(i) Bonafide lighting of the pump house up to 5% of the motive power consumption is permitted under this category and excess consumption chargeable at tariff LTD / Domestic under III.1(a).

(ii) The power factor should not in any case fall below 0.90 lagging. If the power factor is lower than 0.90 lagging, the consumer shall install capacitors to bring the power factor to at least 0.90 lagging. In case the power factor is found to be lower than 0.90 lagging, a penal charge at the rate of 2.5% on the monthly bill corresponding to energy charges only shall be levied. In case the power factor is less than 0.7 lagging, the installation is liable to be disconnected. Further, the Electricity Department reserves the right to install a suitable capacitor at its own cost and recover the cost thereof as arrears of energy charges.

4. Tariff LT-PL/Public Lighting:

Applicable to Public Lighting System including signal system and park lighting belonging to local authorities such as Municipalities / Panchayats etc. This is also applicable to public lighting of Government / Semi-Government establishments.

Energy Charges - 120 ps. per unit

PLUS

Fixed Charges - Rs. 4/- per lamp / month or part thereof.

Minimum Charges - Same as fixed charges.

5. Temporary Supply:

(1) Single phase supply:

Energy Charges	-	600 ps. per unit
Minimum Charges	-	Rs. 25/- per day for supply up to 3 days and Rs. 10/- thereafter.

(ii) Three phase supply:

Energy Charges	-	600 ps. per unit
Minimum Charges	-	Rs. 35/- per day/HP or part thereof.

NOTE:
The above temporary tariff are applicable for temporary supply up to the month, which may be extended to another period of supply with the permission of the department for which, similar tariff will repeat.

6. Other charges

1. Meter Rental Charges:

(**a) For Permanent supply:**

1. Single phase meter - Rs. 2.50/- per month or part thereof
2. Three phase meters - Rs. 10/- per month or part thereof
3. LT meter with M.D. Indicators & CTs - Rs. 100/- per month.
4. HT metering equipment with CT/PT unit - Rs. 300/- for TV meter/month and Rs. 300/- for CT/PT unit/month.

(b) For Temporary supply:

1. Single phase supply - Rs. 7/- per month or part thereof.
2. Three phase meter - Rs. 25/- per month or part thereof.

NOTE:

The type of meters to be installed in the consumers premises will be decided by the department. Generally, the consumers having connected load above 50 HP will be provided with L.T.M.D.I. meter.

2. Reconnection charges after temporary disconnection:

(i) Single phase consumers	- Rs. 10/-
(ii) Three phase consumers	- Rs. 30/- for L.T.D.
	- Rs. 100/- for LTC & LTP
	- Rs. 500/- for HTC

3. (A) Service connection charges for O/H lines:

(i) Single phase consumers	- Rs. 150/- plus Rs. 10/- per meter beyond 30 meters.
(ii) Three phase consumers	- Rs. 550/- plus Rs. 30/- per meter beyond 30 meters.

(B) Service connection charges for U/G lines:

(a) Single phase consumers

(i) Area outside municipal limit	- Full cost plus 15% supervision charges
(ii) Area within municipal limit	- Rs. 150/- plus Rs. 40/- per meter beyond 30 meters.

(b) Three phase consumers:

(i) Area outside municipal limit	- Full cost plus 15% supervision charges
(ii) Area within municipal limit	- Rs. 550/- plus Rs. 60/- per meter beyond 30 meters.

(c) In case of LTP connections (both industrial and non-industrial) U/G service cable and metering system approved by the department will have to be provided by the consumer at his own cost.

(C) Service connection charges for HT supply:

For first 500 KVA CD	- Rs. 5000/-
Beyond 500 KVA CD	- Rs. 800/- per 100 KVA or part thereof.

The cost of high tension connection shall be borne by the consumer and agreement period shall be 2 years (minimum) in the first instant for this category.

4. Meter Board/MCB or cutout installation charges:

The metering board and MCB or cutouts shall be provided by the department as per approved standards and the consumer shall pay the charges as per demand note at the estimated cost.

In case of multi-storey building all meters including that of ground floor houses / shops shall be installed by the building owner / developer at a location in ground floor approved by the department. The metering system shall be on a common board, fully concealed with protective enclosure as per department approved drawing. The building owner / developer shall provide service cable of approved size and quality from metering point up to the nearest source of power supply.

5. MCB replacement / fuse call-off charges:

MCB/fuse call-off charges for single Phase and three phase connections	Rs. 10/- per call plus actual cost of the MCB

Joint Electricity Regulatory Commission for the State of Goa and Union Territories

Aggregate Revenue Requirement (ARR) and Retail Tariff for
the Union Territory of Daman and Diu
for the Financial Year 2010-11

VOLUME 2

ANNEXURES

Annexure-1

List of Associations who filed their written objections on the petition

Sl.No.	Name of the Objector
1	Daman Industries Association
2	Daman Steel Association

Annexure-2(i)

List of consumers / representatives of Associations who raised objections / suggestions during the public hearing at Daman on 18th September 2010.

Sl.No.	Name of the Objector
1.	Daman Industries Association represented by their advocate
2.	Daman Steel Association represented by their advocate
3.	Shri Ketan Patel, President and Chief Counsellor, Daman & Diu Union Territory and Home Minister's Advisory Committee Member, Ministry of Home Affairs, Government of India.
4.	Smt. Tarunaben Patel, Sarpanch, Pattara Daman
5.	Shri V P Gaur
6.	Shri Vishal Tandel, Congress Party President
7.	Shri Haripal Singh, Representing Plastic Industries Association
8.	Shri Vijay Mehta
9.	Shri Nawal Bansal
10.	Shri Dinesh Bhai
11.	Miss. Shashi Agarwal
12.	Shri Ramesh Kudnani, Vice President, Poly Cab Industries
13.	Shri Mukesh Sheth, Indian Packing Industry
14.	Shri Vijay Mishra, DIA President
15.	Shri K C Parikh
16.	Shri Anil Agrawal
17.	Shri Amit Wadhara
18.	Shri Manoj Kumar I. Naik, President, DMC and Member of Home Minister's Advisory Committee (Government of India)
19.	Shri Navin Patel, BJP Yuva Morcha, President
20.	Shri Pamsi Ramesh, Ex-Counselor
21.	Shri H S Trivedi, Vaswajaval Plastics
22.	Shri K K Mukherjee
23.	Daman Hoteliers Association

List of consumers / representatives of Associations who raised objections / suggestions during the public hearing at Diu on 20th September 2010

Sl.No.	Name of the Objector
1	Shri Shankar Bhagvan Bariya, Sarpanch, Saudwadi Village Panchayat
2	Shri Yatin K Fugro, President Diu Hotel Association
3	Shri Rohit N Shah, President, Diu District Chamber of Commerce
4	Dr Haresh R Solanki, Diu

Annexure-2(ii)

List of consumers / representatives of Associations who raised objections / suggestions during the public hearing at Daman on 8th October 2010.

Sl.No.	Name of the Objector
1.	Shri M.L. Lahoty, Advocate, Silvassa Steel Industries Association
2.	Shri Paban K.Sharma, Advocate, Silvassa Steel Industries Association
3.	MS Gaugi Bhatta Bharti, Advocate, Silvassa Steel Industries Association
4.	Shri K.C. Parekh, Vice President, Daman Industries Association
5.	Shri Mukesh Seth , Daman Industries Association
6.	Shri Nawal Bansal, Daman Steel Association
7.	Shri Anand Goyal, J.K. Plast & Daman Steel Association
8.	Vijay Mishra, President, Daman Industries Association
9.	Shri Babulal Sharma, Quality Plastic, Daman
10.	Shri V.P. Gaur, St. Secretary, Daman Industries Association

Annexure-3

A) WRITTEN OBJECTIONS RECEIVED IN RESPONSE TO PUBLIC NOTICE ON ARR AND TARIFF PETITION

4.3.1 Objector-1: Daman Industries Association (DIA)

Objections:

1. There is proposal to increase tariff of LT-C/Commercial category by 60 to 95 paise (existing tariff being Rs. 2.05 and Rs. 2.70 proposed to be hiked to Rs. 3.00 and Rs. 3.30 respectively). Similarly in LTP Motive Power, the increase proposed is 50 and 70 paise (from existing Rs. 2.50 and Rs. 2.60 to Rs. 3.00 and Rs. 3.30 respectively). As regards high-tension supply, the proposal is to increase in HTC-General Rs. 1.30 (from Rs. 2.55 and Rs. 2.65 to Rs. 3.85 and Rs. 3.95) and in HTC Ferro, proposed increase is by Rs. 1.50, Rs. 1.20 and Rs. 1.30 (from Rs. 1.27, Rs. 2.27 and Rs. 2.77 to Rs. 2.77, Rs. 3.47 and Rs. 4.07). All the above proposed increases are wholly arbitrary, illegal and unjustified.

2. The ARR is based on certain assumptions and projections, which are either factually incorrect or statutorily impermissible being contrary to the mandate of the EA, 2003, the Tariff Policy and the National Electricity Policy declared by the Government of India and hence, the tariff formulated on assumptions / projections is unsustainable.

3. Section 61 (d) of the EA, 2003 specifically requires that the consumer's interest must be given due consideration before a tariff is formulated. It also mandates that the electricity authorities are required to recover the cost of electricity in the most reasonable manner and to achieve this mandate, the efficient functioning of the electricity authority is the sine-qua-non.

4. Daman is geographically a totally isolated area with innumerable inherent disadvantages. Establishment of any industrial unit is a big challenge considering the fact that there is no infrastructure worth the name whether it pertains to railway, other mode of transportation and government support to provide the basic necessities for industrial growth. Moreover, there is neither any market for the finished products. To attract the industries in 1987 and 1993, the Central Government issued Policy Directions granting relief / exemptions for a period of 5 years and 15 years for the industries which were setup by 2002 and started their

production by March, 2004. The attractive electricity tariff till a few years back was the other reason for the industries to setup their units in Daman.

The industrial units have been adversely affected in recent past and in fact many of the HT units have closed down as neither the government incentives, nor exemptions are available, nor is the electricity tariff any longer in "consumer's interest".

5. Since there was no regulatory regime there was no effective mechanism / institution to address the grievances concerning the irrational tariff formulations, the industrial consumers were not able to vent it out. Now that this Hon'ble Regulatory Commission is in place, the Association reposes full trust and is sure that since its grievances are genuine they would be fully addressed to and the proposed tariff formulated by ED-DD would be suitably rationalized.

6. So far as the proposed tariff for 2010-11 is concerned, the glaring infirmities are (i) the projection of growth by 5%, (ii) disproportionately higher T&D loss at 11%, (iii) external transmission loss computed at 5.19%, (iv) working out power purchase cost by including the strange element of "other cost" of Rs. 18 Crore, (v) showing O&M cost, particularly, employees expenses without linking it to the improvement in efficiency and without giving any supporting inputs, (vi) projecting Rs. 613.65 Crore as total expenditure of which the power purchase cost is only Rs. 535.44 Crore thereby loading Rs. 78.21 Crore, which is almost 15% of the power purchase cost etc. These core issues when individually considered, this Hon'ble Commission would come to an inescapable conclusion that the tariff as it exists is already on the higher side and there is no justification for increasing it whatsoever.

ED-DD Response (For objections 1 to 6):

The ARR petition filed by the ED-DD has been examined in terms of its compliance with the statutory requirements. There have been changes in data of various parameters subsequent to the filing, through validation sessions with the Commission and on account of availability of more authentic figures on power purchase, revenue and cost estimates. ED-DD has also submitted actual details of sales / power purchase for the FY 2009-10 so as to facilitate the commission in approval of more realistic projections for FY 2010-11. It should be appreciated that in spite of first year of regulatory regime in the UT of Damn & Diu, ED-DD has made best efforts to furnish information under various heads of the business.

Further, ED-DD wants to highlight that the major reason for proposed tariff increase for FY 2011 is due to the increase in power purchase cost because of following reasons:

(a) The requirement of power in the UT varies from month to month, whereas the procurement or commitment to purchase is for the entire year. It may be appreciated that this results in surplus and deficits with the demand is less or more than the scheduled energy. Whereas, the petitioner endeavours to sell surplus power in certain months to the outside sale to avoid impact of tariff increase for the consumers of the State. Therefore, there is increase in the quantum of purchase both because of increase in internal sales and external sales (where both of them to an extent are linked).
(b) Cost of available power to meet the growing demand has increased in the region especially in HT category. In order to maintain adequate supply to various categories of consumers, it was necessary for ED-DD to procure such high cost power.

Therefore, the increase in tariff has been proposed in view of the estimated increased costs of the ED-DD in the recent years. The proposed tariff is also in line with the existing tariff in the neighboring states. The objector should acknowledge that in the existing scenario ED-DD is levying 50 paise per unit surcharge over and above the applicable energy charges, which is primarily on account of increase in the power purchase cost. Further, the tariff proposed by the ED-DD does not include the surcharge amount and the ED-DD would like the commission to examine the costs and allow appropriate increase in tariff to ensure full recovery of approved costs.

ED-DD wishes to gradually move towards the recommendations of the National Tariff Policy so that the tariff in the UT of Daman & Diu is in the range of 80% to 120% of the cost of supply. Further, ED-DD would like to highlight that the tariff applicable (without surcharge) to the Industrial consumers in the state is far below the level of 100% of the cost of supply.

Comments of the Commission:

The objections are noted. The petition for ARR & Tariff for 2010-11 has been admitted and taken on record on examination of all aspects.
The objections are addressed while approving the Power Purchase Cost and determination of tariff.

Objection:

7. The growth rate projected in the ARR is highly illogical and not sustainable. Based on this irrational assumption of the growth rate, the current energy sales of 1,238.3 MUs for HT and 137.4MUs for LT has been projected to be 1300.2 MUs for HT/EHT industry and to 137.9 MUs to LT industry (totaling to 1438 MUs). This projection is artificial in the backdrop of what has been stated above. The addition of 61 MUs on this count needs to be deducted and necessary correction could be made in the ARR.

ED-DD Response:

The projections for energy sales in respect of the Industrial consumers has also taken into account the sales/ load growth in the past years and the pending applications for new connections by industrial consumers with the ED-DD as on 1st March, 2010. The actual energy sales figures for nine months of FY 2009-10 also reveal a higher consumption in the industrial sector as compared to the previous years.

Further, the ED-DD has provided the basis for estimation of energy sales for each category in the Tariff Petition. The Commission can take an independent view on the same based on the rationale provided by ED-DD.

Comments of the Commission:

The objection is noted. The projected growth in energy sales has been taken into consideration on examining the past growth, growth during the last two years, pending applications etc.

Objection:

8. So far as the T&D losses are concerned, a bold claim is made by the ED-DD that it has the lowest T&D loss in the country. The geographical area being extremely limited, 93% consumers are bulk buyers (industries); this claim of ED-DD is wholly hollow.
9. In HT industries, most of the feeders are ‘dedicated feeders’ and the line loss, in these types of feeders is extremely low. When a realistic assessment of line loss is done, it would not be more than 2-3%. A rational figure for T&D loss may be considered which is at best could not be more than 5%. When the T&D loss is

calculated at 5%, it would not be at 190 MUs but would be 86 MUs thereby 104MUs need to be reduced on this account.

ED-DD Response: (Para 8 to 9)

The ED-DD would like to submit that the T&D losses have been computed based on the net energy available from the generation plants at the distribution periphery of Daman & Diu (after deduction of inter-state transmission losses) and the total energy billed.

ED-DD acknowledges the fact that the major portion of the total sales is contributed by the industrial consumers resulting in a lower T&D loss level for the UT of Daman & Diu. ED-DD would like to highlight that the states with high industrial consumption like Uttarakhand and Himachal Pradesh, the T&D loss level fixed by the Regulatory Commission is based on the total T&D loss for the State as a whole and not for individual category of consumer.

Additionally, it is quite difficult to reduce losses by more than 0.75% p.a., due to low base loss level in UT of Daman & Diu. It requires significant effort and resources to reduce losses even by 0.75% to 0.5%, due to law of diminishing returns. Moreover, the quantum of energy handled by the system has increased over a period of time and this also marginally affects the T&D Losses in the System. Electricity Department has taken continuous steps to reduce the T&D losses and has initiated following schemes:

- ED-DD has appointed an agency for indexing of consumers & electrical network and system studies of network. ED-DD has issued order in the month of April 2010 for the detailed assessment of the existing network, identification of various measures for improved technical efficiency, voltage regulation and reliability of power distribution system and allied services.
- ED-DD has installed EMS system at every Sub Station. Every consumer has been metered. 100% consumer metering has been done by the Department.
- Static meters have been provided to the industrial units.
- AMR system is being introduced to industrial units.
- Regular testing and checking of the meter on site is carried out by the MRT section of the department.

Comments of the Commission:

The objections are noted. A directive has been issued to ED- Daman & Diu to conduct energy audit by an accredited agency and take appropriate measures for reduction of losses and also furnish loss reduction trajectory for the next 3 years.

Pending further study of the system, the loss level of 11.00% is approved by the Commission for the year 2010-11.

Objection:

10. As per the statutory regulations the external transmission loss is limited to 3% intra-state and 1.36% inter-state, the total of which is 4.36%, but the ARR has taken into consideration the power availability on the basis of 5.19% external transmission loss. Against the external loss, the projected figure at 5.19% is 107MUs, which ought to be 90.85% MUs when worked out on the basis of 4.36%. When excess external transmission loss of 0.83% [5.19% - 4.36%] is deducted, the total requirement of energy would be further reduced by 16.15MUs.

ED-DD Response:

ED-DD has allocation of energy only from the Western and Eastern region central generating stations and the external loss levels shown in the petition are on account of usage of PGCIL transmission lines for transmission of power from the generating stations to the ED-DD periphery. Further, it is submitted that these losses are allocated by the central agency i.e. Western Regional Power Committee (WRPC) and ED-DD has no control on the pooled losses booked during the year. A copy of the month wise western regional pooled losses has been submitted to the Hon'ble Commission.

Comments of the Commission:

The objection is noted. The losses in PGCIL network have been approved on due verification of loss as notified by WRPC..

Objection:

11. The power purchase cost is also faulty for the reason that in the gross power purchase cost, a substantial amount of Rs. 18 crore is taken as "other charges". The Association requests to direct the deletion of this heading altogether thereby reducing the total power purchase cost by Rs. 18 crore.

ED-DD Response:

ED-DD would like to submit that the bills received from the Central Generating Stations have four components fixed, variable, fuel price adjustment and other cost. The other cost includes tax component, incentives, electricity duty, cess, etc which are charged by the generating company as per the norms fixed by the CERC from time to time. A sample copy of the bill received from the generating stations has been provided to the Hon'ble Commission for prudence check.

Comments of the Commission:

The objection is addressed while approving the power purchase costs from Central Generating Stations.

Objection:

12. Regarding Operation and Maintenance (O&M) cost, an amount of Rs. 10.97 Crore has been projected, the employee's cost of which is Rs. 5.09 Crore. According to ED-DD itself, it is not maintaining the required details as to what all comprises in this employees' cost, more pertinently, as to the employees' contribution towards pension and gratuity. The employees' expenses for previous years have also not been submitted. Apart from this reason, there is yet another substantial reason to disallow this projected figure of Rs. 5.09 crore as the employees' contribution is always linked to the improvement in employee's efficiency. No particulars at all have been given on the efficiency account and therefore even otherwise the amount of Rs. 5.09 Crore cannot be approved.

ED-DD Response

The ED-DD would like to submit that the employee cost is an important component of the O&M cost for every utility in India. All distribution utilities have large number of employees for maintenance of distribution infrastructure, billing and distribution, collection, etc. and employee cost forms significant portion of the O&M expenses.

The employee expenses of the ED-DD are justified and proper records relating to the same are submitted to relevant authority. All expenses (including power purchase cost, employee cost, R&M expense, etc.) on a monthly basis is submitted to the Administration of Daman and Diu, which is a part of the Government of India.

With regard to improvement in employee efficiency, it is submitted that the number of employees in the ED-DD are currently less than the required number and cost relating to same is on the lower side. The proposed O&M cost per unit sale of energy for the FY 2010-11 is 7 paise. A comparison of the O&M cost per unit of energy sold with the States/ Utilities having similar consumer mix as of ED-DD is summarized in table below:

Particulars	ED-DD (O&M(	Jammu & Kashmir (Employee Cost)	Himachal Pradesh (Employee cost)	Uttarakhand (O&M)	Jharkhand (Employee cost)	Meghalaya (Employee cost)
O&M/ Employee Cost per unit sale of Energy (paise / unit)	7	60	80	44	51	40

The O&M cost per unit of ED-DD is far less than the O&M cost per unit of energy sold for other utilities. The O&M cost per unit of energy sold by the distribution companies in the western states like Gujarat and Maharashtra is more than 25 Paise per unit.

Major component of the increase in employee costs is on account of uncontrollable aspects like DA increase, Annual increments, 6th pay commission impact, etc. The increase in salary bill is thus beyond the control of ED-DD as the increase in pay & allowances to its existing employees has to be at par with the Central Government employees, as per their service conditions which cannot be changed detrimental to the interest of existing employees.

The ED-DD would like to assure the objector that it is making all endeavors for efficient operation of the system along with increase in productivity of its employees.

Comments of the Commission:

The objection is noted. A directive has been issued to ED-DD to get a study conducted on the optimum number of employees required for the Department to manage the distribution in line with JERC Regulations on Standards of Performance.

Objection:

13. In the proposed ARR for 2010-11, ED-DD has claimed a depreciation of Rs. 15.76 Crore on Gross Fixed Asset, which requires to be rejected by this Hon’ble Commission as it is well settled that no depreciation should be allowed on the assets received / created from surplus. In accordance with the prevailing practice,

the depreciation at weighted average rate of 3.77% on the depreciation gross fixed assets is permissible while the projected deprecation rate taken in the ARR is 5.01%, which, therefore, requires to be aligned @3.77%.

ED-DD Response:

The ED-DD would like to submit that the depreciation rates considered in the Petition are as specified by CERC in the Tariff Regulations for FY 2009-14, which vary from 3.34% to 9.50%. Based on the CERC depreciation rates, the weighted average depreciation claimed by the ED-DD is 5.01% for the opening block of assets and the assets capitalized during the year.

The Hon'ble Commission will approve the depreciation amount after conducting due diligence and necessary vetting of the proposed capital expenditure.

Comments of the Commission:

The objection is noted. Depreciation is allowed as per regulations issued by the Commission.

Objection:

14. As regards the provisions for bad and doubtful debts, the ED-DD projected Rs. 6.08 Crore on this count, which is not sustainable at all considering the fact that 93% of total consumption in Daman is on the account of industrial sectors and there is hardly any scope of bad and doubtful debts. The Association submits that there is no policy for identifying such debts and writing them off, as the ED-DD has not provided any details for the same. Further, ED-DD should utilize this provision for writing off the debts instead of making further provision in the ARR.

ED-DD Response:

ED-DD would like to submit that currently ED-DD classifies its debtors under two categories i.e. existing consumers and permanently disconnected consumers. If an electricity bill for a consumer remains unpaid after the due date the connection of the consumer will be disconnected temporarily along with a notice for payment of minimum amount for resuming of electricity. However, if the consumer fails to pay the bill amount/ minimum bill amount for consecutive five months post the temporary disconnection, the connection of the consumer is permanently disconnected and outstanding dues is classified under Permanently Disconnected Consumers (PDC) debtors.

The total amount outstanding as on 31st March 2010 is Rs. 36.67 crore comprising of Rs. 28.78 crore towards existing consumers and an amount of Rs. 7.89 crore towards permanently disconnected consumers. ED-DD would like to highlight that out of the total dues of Rs. 36.67 crore, 56% comprises of industrial consumers followed by commercial category (25%). It is worthwhile to mention that since most of the sales are in the industrial category, the amount outstanding on such consumers is higher leading to larger bad debts in this category. Further, the ED-DD has proposed the bad debts in the ARR for FY 2010-11 as per the provision of the Tariff Regulations issued by JERC.

Comments of the Commission:

The objection is noted. The provision for bad debts is allowed as per regulations issued by the Commission.
A directive has also been issued to ED-DD to furnish age analysis of the arrears outstanding Category wise and liquidate the arrears before 31st March 2011.

Objection:

15. So far as the return on equity is concerned, the assumption is made @ 16%, which is highly excessive, and, therefore, it needs to be reduced and rationalized.

ED-DD Response:

ED-DD has considered 16% return on equity based on the provision of the Tariff Regulation issued by JERC which states that "Subject to the proviso to Regulation 23(2), Return on Equity shall be computed on the paid up equity capital determined in accordance with Regulation 23 and shall be guided by the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2004 as amended by the CERC from time to time. The same principles will apply for distribution business also as far as possible". The current CERC regulations allow for 15.5% + 0.5% return on equity for generation businesses. Though distribution business being a riskier business as compared with generation and transmission should be allowed a higher return on equity, ED-DD has considered the return on equity similar to the generating business.

Further, ED-DD would also like to submit the department gets Plan and Non-Plan fund for running the electricity business. All types of capital expenditure are met from Plan fund while expenses related to power purchase, salary, office and general expense is met out of Non-Plan funds. While computing its Budget Estimates for any financial year, ED-DD has to provide/ commit to the Govt. of India, the quantum of surplus to be generated from revenue.

The budgetary allocations received by ED-DD are like working capital and the same are required to be remitted back to the Government of India with some margin money. It is clarified that ED-DD has to provide surplus amount to Government of India for the working capital provided to operate the business. The surplus amount is computed as under:

- Projecting power purchase quantum for budget year, based on previous year quantum and future availability scenario
- Average power purchase cost
- Projected total power purchase cost
- Estimation of sales after deduction of actual T&D loss of previous year
- Average realization rate of sale of power
- Projected total revenue
- Difference between revenue and power purchase cost is the surplus amount

The surplus amount generated by ED-DD is remitted back to the Government of India, which may be further made available to ED-DD for funding of future capital expenditure projects envisaged in next 3-4 years.

Therefore, it is clarified that any surplus amount generated out of the business is remitted back to the Government of India and no amount is retained by the ED-DD.

Comments of the Commission:

The objection is noted. Decision is taken as per regulations issued by the Commission.

Objection:

16. The Government of India allocated 190 M.W power to Daman, but for the reasons which remained unexplained, the actual availability of the power to Daman is only 125 MW. As a result of which, the ED-DD has been selling the power over and above 125 MW to the industries at a higher rate by levying power surcharge, which is totally illegal and uncalled for considering the fact that of their own admission, there was a surplus of 215MUs in FY 2009-10. Further, this year also 88 MW power has been de-allocated / diverted from Daman.

ED-DD Response:

ED-DD is selling the surplus power available to ED-DD after meeting the demand within the UT of Daman & Diu **and the revenue earned on this account is deducted from the total annual revenue requirement**. The ED-DD has not applied power cuts in order to sell any power under UI. Further the quantum of surplus energy during any point in time depends on the allocation and revisions in the same made by the Government of India from time to time. It is submitted that during FY 2009-10, ED-DD was having surplus power due to higher allocation of power from the Central Generating Stations. However, this allocation has been revised recently by the WRPC in the month of May. As per the revised allocation of WRPC dated 06.05.2010, the allocation of ED-DD from various CSGS has been reduced from 206 MW to 166 MW.

Comments of the Commission:
The issue raised has been taken note of and the Commission has taken appropriate decision in tariff determination.

Objection:

17. The tariff suffers from yet another infirmity, namely, levying the demand charges on the basis of 365 days of the working of the unit, while a norm of 300 days per year is accepted in all other parts of the country. The reason is very simple, namely, the industrial unit requires appropriate time for wear and tear, annual maintenance etc. Therefore, in all other states including Goa, the demand charges are not levied on 365 days computation. The units in Daman are not distinct from other industries in the country. Considering this fact, computation and levy of demand charges for 365 days is highly illegal.

ED-DD Response:

Given the fact that the Commission has to allow full recovery of the approved ARR, the change in the basis for working out demand charges (on the basis of 300 days) would require an increase in demand charges per kVA to maintain overall revenue neutrality.

Further, ED-DD would like to submit that the SEBs/Utilities have certain fixed cost, which the utility has to incur for the whole year (365 days) even if the utility is not selling power to the consumers. Therefore, under the two-part tariff, the objective is to recover the fixed cost of utility through the fixed charges.

There seems to be a misconception that the fixed charges have been levied to increase the revenue recovery. ED-DD would like to clarify that in a tariff setting exercise, a choice between single part tariff and two-part tariff affects only the mode of recovery. Tariff is designed in such a way that the overall level of revenue recovery through a two part tariff structure is same as it would have been under the single part tariff with the entire increase being taken in the energy charges. This could be seen from the fact that ED-DD has not proposed any increase in the demand Charge for the Industrial Consumers. Moreover, in most of the utilities in India the demand charges have been levied for the whole year as the utility has to incur its fixed cost for the full year.

Comments of the Commission:

The objection is noted. The demand charges are to recover the fixed costs levied by the generator, which are on annual basis (365 days)

Objections:

18. The energy requirement would not be 1541MUs/1731MUs and it would be within the energy requirement presently utilized by these categories. In fact, there would be sufficient surplus of energy and consequently, ED-DD has not to spend Rs. 613.65 Crore and even at the existing rate the annual revenue requirement for 2010-11 would be sufficiently met. There would not be any revenue gap and the projected amount of Rs. 150.05 crore as revenue gap is illusory.

19. The projected ARR needs to be rectified by taking into consideration (a) the projected requirement of 1946 MUs, would only be 1765 MUs, (b) the projected sale of 1540.6 MUs would only 1479 MUs (c) the projected T&D loss of 190 MUs would be at best 86 MUs, (d) the gross power purchase cost would be reduced by Rs. 18 crore and (e) surplus of last FY 2009-10 (215 MUs). When the figures regarding sales projection, T&D loss, external transmission loss and surplus of last year are taken into consideration, the total energy required would be reduced by 396.15 MUs (104MUs + 61MUs + 16.15MUs + 215MUs) and the revenue gap would vanish altogether when the necessary deletion / correction / rectification in capital expenditure, O&M expenses, depreciation, interest, bad and doubtful debts, return on equity etc is carried out.

ED-DD Response: (Para 18 to 19)

The Revenue Gap at existing tariff is computed at Rs. 150.05 crore for FY 2010-11. The surplus estimated for the FY 2009-10 has been utilized for the revenue deficit during FY 2008-09 as the surcharge was not applicable for the whole year during FY 2008-09. It also does not propose to recover the past gaps (i.e. prior to FY 2009-10) as they relate to the period prior to the exercise of regulatory control by the Hon'ble Commission and further these may result in huge burden on the consumers.

Further, ED-DD has not factored the prevailing surcharge in the HT/EHT while projecting the revenue from the category-wise sales during FY 2010-11. The net Revenue Gap of Rs. 150.05 crore for the FY 2010-11 is proposed to be covered through additional revenue from proposed tariff revision of Rs. 157 crore.

Comments of the Commission:

The objections are noted. The issues raised are addressed while approving the ARR and determining the tariff

.

4.3.2 Objector-2: Daman Steel Association

Objections:

1. Hike of the prevailing tariff is not at all justified.
2. The proposed tariff hike is unsustainable since the assumptions of projections are factually incorrect and repugnant to the various statutory provisions. Further more, the proposed tariff has ignored the mandate of Section 61 of the EA, 2003, more particularly, the three significant guidelines, (i) consumers' interest must be given due consideration (ii) cost of electricity is to be recovered in reasonable manner and (iii) the electricity authority has to function efficiently.
3. ED-DD has caused a tariff shock by intending to hike the existing energy charges from Rs. 1.27 to Rs. 2.77 and Rs. 2.27 to Rs. 3.47 and Rs. 2.77 to Rs. 4.07, since these increases are more than 115%, 50% and 47%.

ED-DD Response: (Para 1 to 3)

The major reason for proposed tariff increase for FY 11 is due to the increase in power purchase cost because of following reasons:

i. The requirement of power in the UT varies from month to month, whereas the procurement or **commitment to purchase is for the entire year**. It would be appreciated that this is done to avoid deficit/load shedding in certain months of the year. Whereas, the petitioner endeavours to sell surplus power in certain months to the outside sale to avoid impact of tariff increase for the consumers of the State. Therefore, there is increase in the quantum of purchase both because of increase in internal sales and external sales (where both of them to an extent are linked).

ii. Cost of available power to meet the growing **demand has increased in the region** especially in HT category. In order to maintain adequate supply to various categories of consumers, it was necessary for ED-DD to procure such high cost power.

Therefore, the increase in tariff has been proposed in view of the estimated increased costs of the ED-DD in the recent years. The proposed tariff is also in line with the existing tariff in the neighboring states. The objector should acknowledge that in the existing scenario ED-DD is levying 50 paise per unit surcharge over and above the applicable energy charges, which is primarily on account of increase in the power purchase cost. Further, the tariff proposed by the ED-DD does not include the surcharge amount and the ED-DD would like the commission to examine the costs and allow appropriate increase in tariff to ensure full recovery of approved costs.

ED-DD wishes to gradually move towards the recommendations of the NTP so that the tariff in the UT of Daman & Diu is in the range of 80% to 120% of the cost of supply. Further, ED-DD would like to highlight that the tariff applicable (without surcharge) to the Industrial consumers in the state is far below the level of 100% of the cost of supply. The estimated average cost of supply for FY 10-11 is Rs.3.46/kwh and the average realization from HT industries without surcharge is Rs. 2.60/kwh.

Comments of the Commission:

The objections are addressed while determining the tariff.

Objections:

4. One of the core grievance of HTC-Ferro units is the high demand charges of Rs.700/- per kVA levied on them, which is highly arbitrary and illegal. Till recently, these units were paying demand charges which were equal to other HT industries, i.e Rs.60/- per kVA. Since there is no rationale or reason justifying this Hon'ble Commission to give a serious thought and direct the demand charges to be reduced and brought back to the existing rate of Rs. 60/- as has been charged to other similarly situated HT industries.

5. This unusually heavy burden of demand charges has a crippling effect on steel industries which is reflected by the statistical example given herein under:

   Unit in HTC-General category with 1950 kVA load consuming 10,15,000 Units/Month:

   Energy charges as per tariff:

(i)	For 50,000 kWh @ Rs. 2.55/-	Rs. 1,27,500/-
(ii)	For 4,50,000 kWh @ Rs. 2.65/-	Rs. 11,92,500/-
(iii)	For 5,15,000 kWh @ Rs. 2.65/-	Rs. 13,64,750/-
(iv)	10,15,000kwh	Rs. 26,84,750/-
	Demand charges @ Rs. 60/-	Rs. 1,17,000/-
	Total	**Rs. 28,01,750/-**

   Therefore, the effective rate per unit for the units in HTC-General is Rs. 2.76 per unit.

   In the case of unit in HTC-Ferro with 1950 kVA load consuming 10,15,000 units/month:

(i)	For 5, 85,000 kWh @ Rs. 1.27/-	Rs. 7,42,950/-
(ii)	For 3,90,000 kWh @ Rs. 2.27/-	Rs. 8,85,300/-
(iii)	For 40,000 kWh @ Rs. 2.77/-	Rs. 1,10,800/-
(iv)	10,15,000kwh	Rs. 17,39,050/-
	Demand charges @ Rs. 60/-	Rs. 13,65,000/-
	Total	**Rs. 31,04,050/-**

Therefore, the effective rate per unit for the units in HTC-Ferro is Rs. 3.05 per unit.

6. While on one hand we have been the target of all exorbitant levies, like demand charges, energy charges, we have not been given the necessary rebates / concessions such as load factor rebate, power factor rebate and voltage rebate. It is well know that our load factors are in the range of 0.95 to 0.98, which economizes to a great extent the cost of supply to ED-DD. We would, therefore, like this Hon'ble Commission to direct that specific provision may be made in the Tariff FY 2010-11 incorporating these rebates to HTC - Ferro units.

7. The tariff suffers from yet another infirmity, levying the demand charges on the basis of 365 days of the working of the unit, while a norm of 300 days per year is accepted in all other parts of the country. The reason is very simple, namely, the industrial unit requires appropriate time for wear and tear, annual maintenance etc. Therefore, in all other states including Goa, the demand charges are not levied on 365 days computation. The units in Daman are not distinct from other

industries in the country. Considering this fact, computation and levy of demand charges for 365 days is highly illegal.

ED-DD Response: (Paras 4 to 7)

There seems to be a misconception that the fixed charges have been levied to increase the revenue recovery. ED-DD would like to clarify that in a tariff setting exercise, a choice between single part tariff and two-part tariff affects only the mode of recovery. Tariff is designed in such a way that the overall level of revenue recovery through a two part tariff structure is same as it would have been under the singe part tariff with the entire increase being taken in the energy charges. This could be seen from the fact that ED-DD has not proposed any increase in the demand charges for the Industrial Consumers. Moreover, in most of the utilities in India the demand charges have been levied for the whole year as the utility has to incur its fixed cost for the full year. Further, the higher demand charges levied to the HTC Ferro industries is to maintain adequate supply to steel units (as these are power intensive units), it is necessary for ED-DD to procure such high cost power.

Given the fact that the Commission has to allow full recovery of the approved ARR, the change in the basis for working out demand charges (on the basis of 300 days) would require an increase in demand charges per kVA to maintain overall revenue neutrality.

Further, ED-DD would like to submit that the SEBs/Utilities have certain fixed cost, which the utility has to incur for the whole year (365 days) even if the utility is not selling power to the consumers. Therefore, under the two-part tariff the objective is to recover the fixed cost of utility is through the fixed charges.

With regard to power factor/ voltage rebate, the ED-DD would like the Commission to take a final view on this matter**.**

Comments of the Commission:

The issues raised are addressed while determining the tariff.

Objection:

8. The steel units are seriously affected and are suffering huge losses due to the default of ED-DD to supply quality power. Unlike the other industrial units, interruption in supply/inferior supply of power has a vicious effect on us due to the fact that the induction furnaces takes a lot of time and consumes substantial

energy in the process of heating. As and when there is an interruption or break in supply of power, the furnaces are to be re-heated and the earlier energy consumed in heating the furnaces goes waste. Moreover, the metal which is in the furnaces at the time of interruption looses its value and quality causing unbearable damage loss to the steel units.

ED-DD Response:

While it is desirable that a consumer should get continuous power supply, it is a fact that there are power cuts for reasons beyond the ED-DD's control such as grid disturbances, breakdowns etc. All possible efforts are made by the ED-DD to ensure uninterrupted power supply to its consumers and power cuts are imposed for reasons beyond its control.

Comments of the Commission:

The objection is noted. ED-DD has been directed to augment the transmission and distribution systems and improve the quality of supply.

Objection:

9. The establishment of the steel units is altogether prohibited since 2004 in entire Daman and therefore, the growth rates projected in the tariff has no bearing to our category of consumers.

ED-DD Response:

The projections for energy sales in respect of the Industrial consumers has also taken into account the sales/ load growth in the past years and the actual energy sales figures for nine months of FY 2009-10 also reveal a higher consumption in the industrial sector (HT Ferro) as compared to the previous years. Further, the ED-DD has provided the basis for estimation of energy sales for each category in the Tariff Petition.

Comments of the Commission:

The objection is noted. Though the steel units are prohibited there are other industries, which are coming up. The growth in energy sales is approved after due verification of past growth, growth during last two years and application pending.

B. OBJECTIONS / SUGGESTIONS RAISED DURING PUBLIC HEARING ON 18-08-2010 AT DAMAN

Objector-1: Shri Ketan Patel

Objection:

He objected for the proposed tariff increase only to commercial and industrial categories and why not for domestic consumers. Living conditions of people in Daman improved due to development of industries and increase in employment and ancillary business. If tariff is increased, development of this area will suffer.

Objector-2: Smt. Tarunaben Patel

Objection:

Industries are established due to the concessional packages announced among which low electricity tariff is one. If tariff is increased, industries will go away and the Government will loose the income which they are getting as excise duty etc.

Objector-3: Shri V P Gaur

Objection:

He objected for purchasing of costly power through UI and other short-term purchases and thus burdening the consumers. He suggested to get more allocation of power from Government. He complained that new connections are not being given on the pretext of power shortage.

Objector-4: Shri Vishal Tandel

Objection:

He requested not to increase the tariff which will greatly affect not only industries but also all public of Daman in general.

Objector-5: Shri Haripal Singh

Objection:

He objected levying of the power surcharge and requested for its withdrawal. The basic raw material for industries in Daman is electricity and if tariff is hiked, the industries will suffer. Due to diversion of power to other states, Daman is suffering with power shortage and high tariff.

Objector-6: Shri Vijay Mehta

Objection:

He requested not to increase but reduce power tariff.

Objector-7: Shri Dineshbhai

Objection:

The objections already given by the industries association were explained and suggested not to increase the tariff and requested to treat Ferro and other steel industries also under HT General category.

Objector-8: Miss Shashi Agarwal

Objection:

She suggested that due to establishment of industries, employment potential is created for women due to which their living conditions improved and so not to increase tariff. She objected for selling of power under UI to other and for not supplying the same power to industries of Daman.

Objector-9: Shri Ramesh Kudnani

Objection:

He suggested to give benefits for those who are maintaining higher power factor and saving power.

Objector-10: Shri Mukesh Seth

Objection:

He objected for the power interruptions which are causing great loss to continuous processing industries and requested to maintain uninterrupted and quality power supply to industries.

Objector-11: Shri Vijay Mishra

Objection

He explained that due to concessional packages of Government of India, many industries are established due to which not only lot of employment is created but also good amount of revenue by taxes is generated to Government. He suggested to keep all HT industries under a single category only and also requested not to increase tariff so that the industries will stay and not migrate to other areas.

Objector-12: Shri K C Parikh

Objection:

He objected for proposing bad debts as expenses in ARR and suggested that all bad debts should be realized. He requested for withdrawal of surcharge.

Objector-13: Shri Anil Agarwal

Objection:

Requested not to increase tariff.

Objector-14: Shri Amit Widdhara

Objection:

He objected for charging even for the period when plant is closed and when there is no power due to break down etc., in the department lines.

Objector-15: Shri Manojkumar I. Nair

Objection:

He suggested not to increase tariff because industries will get migrated and revenue to Government will get reduce, and employment potential gets reduced.

Objector-16: Shri Naveen Patel

Objection:

Due to development of industries, people are able to send their children to convent school and lot of employment also generated. He suggested not to increase tariff and to withdraw power surcharge.

Objector-17: Shri Pamsi Ramesh

Objection;

Requested not to increase tariff. Due to development of industries, income for people improved and they are able to pay income tax to Government.

Objector-18: Shri H S Trivedi

Objection:

When the consumer has invested for transformer, meters etc., claiming return on equity on such assets does not arise. Bad debts should be realized. He suggested that, if the efficiency in the department is improved, all the losses would come down and power supply conditions will improve.

Objector-19: Shri A K Mukherjee

Objection:

Due to Governments fore-thought and concessional package given, industries are developed in Daman. Government is getting profit from electricity charges. Power is diverted to other states as the department has not properly acted. Industries will leave Daman if tariff is increased.

Objector-20: Daman Hoteliers Association

Objection:

Requested not approve any proposal to increase the tariff for Hotel Industries as the tariffs is already high for commercial users. Hospitality industry does not get any incentives form the Government like income tax or sales tax benefits which manufacturing industry has been granted.

(C) <u>OBJECTION/SUGGESTIONS RAISED DURING PUBLIC HEARING ON 20-08-2010 AT DIU</u>

Objector-1: Shri Shankar Bhagavan Baria

Objection:

Requested not to increase the tariff because if the tariff is increased, the tourism and fisheries business on which Diu is mainly depending and which are already suffering due to inflation etc., will further suffer.

Objector-2: Shri Yatin K. Furgo

Objection:

Requested not to increase tariff and to withdraw the power surcharge of 50 Ps./unit being levied on HT consumers.

Objector-3: Diu District Chamber of Commerce

Objection:

Diu is depending on tourism and fisheries business which are seasonal. Traders and industries depend on neighbouring state for raw material as Diu is a small island. Requested not to increase tariff which will make the business of the island to vanish.

Objector-4: Dr Haresh R. Solanki

Objection:

He requested to withdraw power surcharge for HT categories also. He expressed that small industries like Ice factories, expellers existing in Diu cannot survive if tariff increased.

Comments of the Commission:

All the objections / suggestions raised during the public hearings at Daman and Diu are noted and they are addressed while approving the ARR and determining the tariff.

Annexure-4

WESTERN REGIONAL POWER COMMITTEE
CALCULATIONS FOR ALLOCATION OF SHARES w.e.f 6.05.2010
FOR OFF-PEAK HOURS (FROM 0000 TO 1800 HOURS & FROM 2200 TO 2400 HOURS)

	KSTPS	VSTPS-I	VSTPS-II	VSTPS-III	KGPP	GGPP	SIPAT	KAPP	TAPP 3&4	TOTAL
Installed Capacity (MW)	2100.00	1260.00	1000.00	1000.00	656.20	657.39	1000.00	440.00	1080.00	9193.59
Firm allocation	**1790.00**	**1070.00**	**850.00**	**850.00**	**558.00**	**558.00**	**850.00**	**374.00**	**918.00**	**7818.00**
Un-allocated share	310.00	190.00	150.00	150.00	98.20	99.39	150.00	66.00	162.00	1375.59
Specific allocation out of Unallocated share										
Allocation to DD	40.00				28.99	29.31				98.30
Allocation to DNH	10.00				55.99	56.46				122.45
Allocation to Powergrid (HVDC-BHD)		2.52								2.52
Allocation to Powergrid (HVDC-VIN)		0.76								0.76
Allocation to MPAKVNL, Indore	2.73	1.89	1.50		0.85	0.99				7.96
Allocation to Goa					12.37	12.63				25.00
Madhya Pradesh	52.63	32.26	25.47	25.47			25.47	11.21	27.50	200.00
Heavy Water Plant of DAE								18.00		18.00
Balance un-allocated share	**204.64**	**152.57**	**123.03**	**124.53**	**0.00**	**0.00**	**124.53**	**36.79**	**134.50**	**900.60**
FIRM ALLOCATION IN MW										
Gujarat	360.00	230.00	239.00	266.00	187.00	237.00	273.00	125.00	274.00	2191.00
Madhya Pradesh	400.00	385.00	273.00	200.00	140.00	117.00	143.00	93.00	180.00	1931.00
Chhattisgarh	210.00	0.00	0.00	105.00	0.00	0.00	158.00	0.00	48.00	521.00
Maharashtra	610.00	410.00	319.00	258.00	204.00	200.00	258.00	137.00	393.00	2789.00
GOA	210.00	35.00	12.00	10.00	0.00	0.00	10.00	15.00	11.00	303.00
DD	0.00	5.00	3.00	5.00	2.00	2.00	4.00	2.00	5.00	28.00
DNH	0.00	5.00	4.00	6.00	25.00	2.00	4.00	2.00	7.00	55.00
TOTAL	**1790.00**	**1070.00**	**850.00**	**850.00**	**558.00**	**558.00**	**850.00**	**374.00**	**918.00**	**7818.00**

ALLOCATION OF 15% UNALLOCATED SHARE in MW

	%	KSTPS	VSTPS-I	VSTPS-II	VSTPS-III	KGPP	GGPP	SIPAT	KAPP	TAPP 3&4	TOTAL
Gujarat	3.43 %	7.02	5.23	4.22	4.27	0.00	0.00	4.27	1.26	4.61	30.89
Madhya Pradesh	19.54 %	37.76	28.27	22.82	24.33	0.00	0.00	24.33	7.19	26.28	170.98
Chhattisgarh	0.00 %	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maharashtra	43.97 %	89.98	67.09	54.10	54.76	0.00	0.00	54.76	16.18	59.14	395.99
GOA	1.47 %	3.01	2.24	1.81	1.83	0.00	0.00	1.83	0.54	1.98	13.24
DD	4.99 %	10.21	7.61	6.14	6.21	0.00	0.00	6.21	1.84	6.71	44.94
DD - Specific Allocation		40.00	0.00	0.00	0.00	28.99	29.31	0.00	0.00	0.00	98.30
DNH	26.60 %	54.43	40.58	32.73	33.13	0.00	0.00	33.13	9.79	35.78	239.56
DNH - Specific allocation		10.00	0.00	0.00	0.00	55.99	56.46	0.00	0.00	0.00	122.45
Goa - Specific allocation		0.00	0.00	0.00	0.00	12.37	12.63	0.00	0.00	0.00	25.00
Madhya Pradesh		52.63	32.26	25.47	25.47	0.00	0.00	25.47	11.21	27.50	200.00
Allocation to Powergrid (HVDC-BHD)			2.52								2.52
Allocation to Powergrid (HVDC-VIN)			0.76								0.76
Allocation to MPAKVNL, Indore (Sp. Allo.)		2.73	1.89	1.50		0.85	0.99				7.96
Allocation to MPAKVNL, Indore		2.23	1.54	1.23		0.00	0.00				5.00
Heavy Water Plant of DAE									18.00		18.00
Total		**310.00**	**190.00**	**150.00**	**150.00**	**98.20**	**99.39**	**150.00**	**66.00**	**162.00**	**1375.59**

Total Allocation (Firm + Specific allocation + allocation from balance unallocated share) in MW

	KSTPS	VSTPS-I	VSTPS-II	VSTPS-III	KGPP	GGPP	SIPAT	KAPP	TAPP 3&4	TOTAL
Gujarat	**367.02**	**235.23**	**243.22**	**270.27**	**187.00**	**237.00**	**277.27**	**126.26**	**278.61**	**2221.89**
Madhya Pradesh	**490.39**	**445.53**	**321.28**	**249.80**	**140.00**	**117.00**	**192.80**	**111.40**	**233.78**	**2301.98**
Chhattisgarh	**210.00**	**0.00**	**0.00**	**105.00**	**0.00**	**0.00**	**158.00**	**0.00**	**48.00**	**521.00**
Maharashtra	**699.98**	**477.09**	**373.10**	**312.76**	**204.00**	**200.00**	**312.76**	**153.18**	**452.14**	**3184.99**
GOA	**213.01**	**37.24**	**13.81**	**11.83**	**12.37**	**12.63**	**11.83**	**15.54**	**12.98**	**341.24**
DD	**50.21**	**12.61**	**9.14**	**11.21**	**30.99**	**31.31**	**10.21**	**3.84**	**11.71**	**171.24**
DNH	**64.43**	**45.58**	**36.73**	**39.13**	**80.99**	**58.46**	**37.13**	**11.79**	**42.78**	**417.01**
Allocation to Powergrid (HVDC-BHD)		**2.52**								**2.52**
Allocation to Powergrid (HVDC-VIN)		**0.76**								**0.76**
Allocation to MPAKVNL, Indore	**4.96**	**3.43**	**2.73**		**0.85**	**0.99**				**12.96**
Heavy Water Plant of DAE								**18.00**		**18.00**
TOTAL	**2100.00**	**1260.00**	**1000.00**	**1000.00**	**656.20**	**657.39**	**1000.00**	**440.00**	**1080.00**	**9193.59**

Shares in %

Constituents	**KSTPS**	**VSTPS-I**	**VSTPS-II**	**VSTPS-III**	**KGPP**	**GGPP**	**SIPAT**	**KAPP**	**TAPP 3&4**
Gujarat	**17.4771**	**18.6693**	**24.3219**	**27.0271**	**28.4974**	**36.0517**	**27.7271**	**28.6959**	**25.7975**
Madhya Pradesh	**23.3518**	**35.3592**	**32.1280**	**24.9801**	**21.3350**	**17.7977**	**19.2801**	**25.3171**	**21.6467**
Chhattisgarh	**10.0000**	**0.0000**	**0.0000**	**10.5000**	**0.0000**	**0.0000**	**15.8000**	**0.0000**	**4.4445**
Maharashtra	**33.3324**	**37.8640**	**37.3096**	**31.2757**	**31.0881**	**30.4233**	**31.2757**	**34.8133**	**41.8646**
GOA	**10.1432**	**2.9558**	**1.3809**	**1.1831**	**1.8851**	**1.9212**	**1.1831**	**3.5320**	**1.2016**
DD	**2.3910**	**1.0011**	**0.9139**	**1.1214**	**4.7226**	**4.7628**	**1.0214**	**0.8718**	**1.0844**
DNH	**3.0683**	**3.6178**	**3.6727**	**3.9126**	**12.3423**	**8.8927**	**3.7126**	**2.6790**	**3.9607**
Allocation to Powergrid (HVDC-BHD)		**0.2000**							
Allocation to Powergrid (HVDC-VIN)		**0.0603**							
Allocation to MPAKVNL, Indore	**0.2362**	**0.2725**	**0.2730**		**0.1295**	**0.1506**			
Heavy Water Plant of DAE								**4.0909**	
TOTAL	**100.0000**	**100.0000**	**100.0000**	**100.0000**	**100.0000**	**100.0000**	**100.0000**	**100.0000**	**100.0000**

Note :(i) Specific allocation of 200 MW of unallocated power from WR ISGS stations have been made to drought prone district of Bundelkhand
(ii) Also, allocation to Maharashtra has been increased from unallocated power of WR CGSs by reduction in unallocated share of other states of WR

Share Allocation_6.05.10 REA_Share_Allocation

WESTERN REGIONAL POWER COMMITTEE
CALCULATIONS FOR ALLOCATION OF SHARES w.e.f 6.05.2010
FOR PEAK HOURS (FROM 1800 TO 2200 HOURS)

	KSTPS	VSTPS-I	VSTPS-II	VSTPS-III	KGPP	GGPP	SIPAT	KAPP	TAPP 3&4	TOTAL
Installed Capacity (MW)	2100.00	1260.00	1000.00	1000.00	656.20	657.39	1000.00	440.00	1080.00	9193.59
Firm allocation	**1790.00**	**1070.00**	**850.00**	**850.00**	**558.00**	**558.00**	**850.00**	**374.00**	**918.00**	**7818.00**
Un-allocated share	310.00	190.00	150.00	150.00	98.20	99.39	150.00	66.00	162.00	1375.59
Specific allocation out of Unallocated share										
Allocation to DD	40.00				28.99	29.31				98.30
Allocation to DNH	10.00				55.99	56.46				122.45
Allocation to Powergrid (HVDC-BHD)		2.52								2.52
Allocation to Powergrid (HVDC-VIN)		0.76								0.76
Allocation to MPAKVNL, Indore	2.73	1.89	1.50		0.85	0.99				7.96
Allocation to Goa					12.37	12.63				25.00
Madhya Pradesh	52.63	32.26	25.47	25.47			25.47	11.21	27.50	200.00
Heavy Water Plant of DAE								18.00		18.00
Balance un-allocated share	**204.64**	**152.57**	**123.03**	**124.53**	**0.00**	**0.00**	**124.53**	**36.79**	**134.50**	**900.60**
FIRM ALLOCATION IN MW										
Gujarat	360.00	230.00	239.00	266.00	187.00	237.00	273.00	125.00	274.00	2191.00
Madhya Pradesh	400.00	385.00	273.00	200.00	140.00	117.00	143.00	93.00	180.00	1931.00
Chhattisgarh	210.00	0.00	0.00	105.00	0.00	0.00	158.00	0.00	48.00	521.00
Maharashtra	610.00	410.00	319.00	258.00	204.00	200.00	258.00	137.00	393.00	2789.00
GOA	210.00	35.00	12.00	10.00	0.00	0.00	10.00	15.00	11.00	303.00
DD	0.00	5.00	3.00	5.00	2.00	2.00	4.00	2.00	5.00	28.00
DNH	0.00	5.00	4.00	6.00	25.00	2.00	4.00	2.00	7.00	55.00
TOTAL	**1790.00**	**1070.00**	**850.00**	**850.00**	**558.00**	**558.00**	**850.00**	**374.00**	**918.00**	**7818.00**

ALLOCATION OF 15% UNALLOCATED SHARE in MW

		KSTPS	VSTPS-I	VSTPS-II	VSTPS-III	KGPP	GGPP	SIPAT	KAPP	TAPP 3&4	TOTAL
Gujarat	3.43 %	7.02	5.23	4.22	4.27	0.00	0.00	4.27	1.26	4.61	30.89
Madhya Pradesh	17.22 %	33.01	24.73	19.96	21.44	0.00	0.00	21.44	6.34	23.16	150.08
Chhattisgarh	0.00 %	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maharashtra	44.07 %	90.18	67.24	54.22	54.88	0.00	0.00	54.88	16.22	59.27	396.89
GOA	0.37 %	0.76	0.56	0.46	0.46	0.00	0.00	0.46	0.14	0.50	3.33
DD	2.54 %	5.20	3.88	3.13	3.16	0.00	0.00	3.16	0.93	3.42	22.88
DD - Specific Allocation		40.00	0.00	0.00	0.00	28.99	29.31	0.00	0.00	0.00	98.30
DNH	32.37 %	66.24	49.39	39.83	40.31	0.00	0.00	40.31	11.91	43.54	291.52
DNH - Specific allocation		10.00	0.00	0.00	0.00	55.99	56.46	0.00	0.00	0.00	122.45
Goa - Specific allocation		0.00	0.00	0.00	0.00	12.37	12.63	0.00	0.00	0.00	25.00
Madhya Pradesh		52.63	32.26	25.47	25.47	0.00	0.00	25.47	11.21	27.50	200.00
Allocation to Powergrid (HVDC-BHD)			2.52								2.52
Allocation to Powergrid (HVDC-VIN)			0.76								0.76
Allocation to MPAKVNL, Indore (Sp. Allo.)		2.73	1.89	1.50		0.85	0.99				7.96
Allocation to MPAKVNL, Indore		2.23	1.54	1.23							5.00
Heavy Water Plant of DAE									18.00		18.00
Total		**310.00**	**190.00**	**150.00**	**150.00**	**98.20**	**99.39**	**150.00**	**66.00**	**162.00**	**1375.59**

Total Allocation (Firm + Specific allocation + allocation from balance unallocated share) in MW

	KSTPS	VSTPS-I	VSTPS-II	VSTPS-III	KGPP	GGPP	SIPAT	KAPP	TAPP 3&4	TOTAL
Gujarat	**367.02**	**235.23**	**243.22**	**270.27**	**187.00**	**237.00**	**277.27**	**126.26**	**278.61**	**2221.89**
Madhya Pradesh	**485.64**	**441.99**	**318.43**	**246.91**	**140.00**	**117.00**	**189.91**	**110.54**	**230.66**	**2281.08**
Chhattisgarh	**210.00**	**0.00**	**0.00**	**105.00**	**0.00**	**0.00**	**158.00**	**0.00**	**48.00**	**521.00**
Maharashtra	**700.18**	**477.24**	**373.22**	**312.88**	**204.00**	**200.00**	**312.88**	**153.22**	**452.27**	**3185.89**
GOA	**210.76**	**35.56**	**12.46**	**10.46**	**12.37**	**12.63**	**10.46**	**15.14**	**11.50**	**331.33**
DD	**45.20**	**8.88**	**6.13**	**8.16**	**30.99**	**31.31**	**7.16**	**2.93**	**8.42**	**149.18**
DNH	**76.24**	**54.39**	**43.83**	**46.31**	**80.99**	**58.46**	**44.31**	**13.91**	**50.54**	**468.97**
Allocation to Powergrid (HVDC-BHD)		**2.52**								**2.52**
Allocation to Powergrid (HVDC-VIN)		**0.76**								**0.76**
Allocation to MPAKVNL, Indore	**4.96**	**3.43**	**2.73**		**0.85**	**0.99**				**12.96**
Heavy Water Plant of DAE								**18.00**		**18.00**
TOTAL	**2100.00**	**1260.00**	**1000.00**	**1000.00**	**656.20**	**657.39**	**1000.00**	**440.00**	**1080.00**	**9193.59**

Shares in %

Constituents	KSTPS	VSTPS-I	VSTPS-II	VSTPS-III	KGPP	GGPP	SIPAT	KAPP	TAPP 3&4
Gujarat	**17.4771**	**18.6693**	**24.3219**	**27.0272**	**28.4974**	**36.0517**	**27.7272**	**28.6959**	**25.7975**
Madhya Pradesh	**23.1257**	**35.0783**	**31.8426**	**24.6911**	**21.3350**	**17.7977**	**18.9911**	**25.1230**	**21.3578**
Chhattisgarh	**10.0000**	**0.0000**	**0.0000**	**10.5000**	**0.0000**	**0.0000**	**15.8000**	**0.0000**	**4.4444**
Maharashtra	**33.3421**	**37.8761**	**37.3219**	**31.2882**	**31.0881**	**30.4233**	**31.2882**	**34.8217**	**41.8771**
GOA	**10.0361**	**2.8226**	**1.2455**	**1.0461**	**1.8851**	**1.9212**	**1.0461**	**3.4400**	**1.0646**
DD	**2.1523**	**0.7044**	**0.6125**	**0.8163**	**4.7226**	**4.7628**	**0.7163**	**0.6670**	**0.7793**
DNH	**3.6305**	**4.3165**	**4.3826**	**4.6311**	**12.3423**	**8.8927**	**4.4311**	**3.1615**	**4.6793**
Allocation to Powergrid (HVDC-BHD)		**0.2000**							
Allocation to Powergrid (HVDC-VIN)		**0.0603**							
Allocation to MPAKVNL, Indore	**0.2362**	**0.2725**	**0.2730**		**0.1295**	**0.1506**			
Heavy Water Plant of DAE								**4.0909**	
TOTAL	**100.0000**	**100.0000**	**100.0000**	**100.0000**	**100.0000**	**100.0000**	**100.0000**	**100.0000**	**100.0000**

Note :(i) Specific allocation of 200 MW of unallocated power from WR ISGS stations have been made to drought prone district of Bundelkhand
(ii) Also, allocation to Maharashtra has been increased from unallocated power of WR CGSs by reduction in unallocated share of other states of WR

Share Allocation_6.05.10 REA_Share_Alloctaion

WESTERN REGIONAL POWER COMMITTEE
CALCULATIONS FOR ALLOCATION OF SHARES w.e.f 23.04.2010
FOR OFF-PEAK HOURS (FROM 0000 TO 1800 HOURS & FROM 2200 TO 2400 HOURS)

	KSTPS	VSTPS-I	VSTPS-II	VSTPS-III	KGPP	GGPP	SIPAT	KAPP	TAPP 3&4	TOTAL
Installed Capacity (MW)	2100.00	1260.00	1000.00	1000.00	656.20	657.39	1000.00	440.00	1080.00	9193.59
Firm allocation	**1790.00**	**1070.00**	**850.00**	**850.00**	**558.00**	**558.00**	**850.00**	**374.00**	**918.00**	**7818.00**
Un-allocated share	310.00	190.00	150.00	150.00	98.20	99.39	150.00	66.00	162.00	1375.59
Specific allocation out of Unallocated share										
Allocation to DD	40.00				28.99	29.31				98.30
Allocation to DNH	10.00				55.99	56.46				122.45
Allocation to Powergrid (HVDC-BHD)		2.52								2.52
Allocation to Powergrid (HVDC-VIN)		0.76								0.76
Allocation to MPAKVNL, Indore	2.73	1.89	1.50		0.85	0.99				7.96
Allocation to Goa					12.37	12.63				25.00
Heavy Water Plant of DAE								18.00		18.00
Balance un-allocated share	**257.27**	**184.83**	**148.50**	**150.00**	**0.00**	**0.00**	**150.00**	**48.00**	**162.00**	**1100.60**
FIRM ALLOCATION IN MW										
Gujarat	360.00	230.00	239.00	266.00	187.00	237.00	273.00	125.00	274.00	2191.00
Madhya Pradesh	400.00	385.00	273.00	200.00	140.00	117.00	143.00	93.00	180.00	1931.00
Chhattisgarh	210.00	0.00	0.00	105.00	0.00	0.00	158.00	0.00	48.00	521.00
Maharashtra	610.00	410.00	319.00	258.00	204.00	200.00	258.00	137.00	393.00	2789.00
GOA	210.00	35.00	12.00	10.00	0.00	0.00	10.00	15.00	11.00	303.00
DD	0.00	5.00	3.00	5.00	2.00	2.00	4.00	2.00	5.00	28.00
DNH	0.00	5.00	4.00	6.00	25.00	2.00	4.00	2.00	7.00	55.00
TOTAL	**1790.00**	**1070.00**	**850.00**	**850.00**	**558.00**	**558.00**	**850.00**	**374.00**	**918.00**	**7818.00**

ALLOCATION OF 15% UNALLOCATED SHARE in MW

		KSTPS	VSTPS-I	VSTPS-II	VSTPS-III	KGPP	GGPP	SIPAT	KAPP	TAPP 3&4	TOTAL
Gujarat	4.31 %	11.09	7.97	6.40	6.47	0.00	0.00	6.47	2.07	6.98	47.44
Madhya Pradesh	34.16 %	85.65	61.59	49.50	51.24	0.00	0.00	51.24	16.40	55.34	370.96
Chhattisgarh	0.00 %	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maharashtra	30.48 %	78.42	56.34	45.26	45.72	0.00	0.00	45.72	14.63	49.38	335.46
GOA	1.20 %	3.09	2.22	1.78	1.80	0.00	0.00	1.80	0.58	1.94	13.21
DD	6.58 %	16.93	12.16	9.77	9.87	0.00	0.00	9.87	3.16	10.66	72.42
DD - Specific Allocation		40.00	0.00	0.00	0.00	28.99	29.31	0.00	0.00	0.00	98.30
DNH	23.27 %	59.87	43.01	34.56	34.91	0.00	0.00	34.91	11.17	37.70	256.11
DNH - Specific allocation		10.00	0.00	0.00	0.00	55.99	56.46	0.00	0.00	0.00	122.45
Goa - Specific allocation		0.00	0.00	0.00	0.00	12.37	12.63	0.00	0.00	0.00	25.00
Allocation to Powergrid (HVDC-BHD)			2.52								2.52
Allocation to Powergrid (HVDC-VIN)			0.76								0.76
Allocation to MPAKVNL, Indore (Sp. Allo.)		2.73	1.89	1.50		0.85	0.99				7.96
Allocation to MPAKVNL, Indore		2.23	1.54	1.23		0.00	0.00				5.00
Heavy Water Plant of DAE									18.00		18.00
Total		**310.00**	**190.00**	**150.00**	**150.00**	**98.20**	**99.39**	**150.00**	**66.00**	**162.00**	**1357.59**

Total Allocation (Firm + Specific allocation + allocation from balance unallocated share) in MW

	KSTPS	VSTPS-I	VSTPS-II	VSTPS-III	KGPP	GGPP	SIPAT	KAPP	TAPP 3&4	TOTAL
Gujarat	**371.09**	**237.97**	**245.40**	**272.47**	**187.00**	**237.00**	**279.47**	**127.07**	**280.98**	**2238.44**
Madhya Pradesh	**485.65**	**446.59**	**322.50**	**251.24**	**140.00**	**117.00**	**194.24**	**109.40**	**235.34**	**2301.96**
Chhattisgarh	**210.00**	**0.00**	**0.00**	**105.00**	**0.00**	**0.00**	**158.00**	**0.00**	**48.00**	**521.00**
Maharashtra	**688.42**	**466.34**	**364.26**	**303.72**	**204.00**	**200.00**	**303.72**	**151.63**	**442.38**	**3124.46**
GOA	**213.09**	**37.22**	**13.78**	**11.80**	**12.37**	**12.63**	**11.80**	**15.58**	**12.94**	**341.21**
DD	**56.93**	**17.16**	**12.77**	**14.87**	**30.99**	**31.31**	**13.87**	**5.16**	**15.66**	**198.72**
DNH	**69.87**	**48.01**	**38.56**	**40.91**	**80.99**	**58.46**	**38.91**	**13.17**	**44.70**	**433.56**
Allocation to Powergrid (HVDC-BHD)		**2.52**								**2.52**
Allocation to Powergrid (HVDC-VIN)		**0.76**								**0.76**
Allocation to MPAKVNL, Indore	**4.96**	**3.43**	**2.73**		**0.85**	**0.99**				**12.96**
Heavy Water Plant of DAE								**18.00**		**18.00**
TOTAL	**2100.00**	**1260.00**	**1000.00**	**1000.00**	**656.20**	**657.39**	**1000.00**	**440.00**	**1080.00**	**9193.59**

Shares in %

Constituents	**KSTPS**	**VSTPS-I**	**VSTPS-II**	**VSTPS-III**	**KGPP**	**GGPP**	**SIPAT**	**KAPP**	**TAPP 3&4**
Gujarat	**17.6709**	**18.8862**	**24.5399**	**27.2465**	**28.4974**	**36.0517**	**27.9465**	**28.8793**	**26.0169**
Madhya Pradesh	**23.1263**	**35.4440**	**32.2501**	**25.1240**	**21.3350**	**17.7977**	**19.4240**	**24.8629**	**21.7907**
Chhattisgarh	**10.0000**	**0.0000**	**0.0000**	**10.5000**	**0.0000**	**0.0000**	**15.8000**	**0.0000**	**4.4444**
Maharashtra	**32.7817**	**37.0108**	**36.4261**	**30.3720**	**31.0881**	**30.4233**	**30.3720**	**34.4614**	**40.9609**
GOA	**10.1470**	**2.9538**	**1.3782**	**1.1800**	**1.8851**	**1.9212**	**1.1800**	**3.5400**	**1.1985**
DD	**2.7109**	**1.3620**	**1.2771**	**1.4870**	**4.7226**	**4.7628**	**1.3870**	**1.1724**	**1.4500**
DNH	**3.3270**	**3.8103**	**3.8556**	**4.0905**	**12.3423**	**8.8927**	**3.8905**	**2.9931**	**4.1386**
Allocation to Powergrid (HVDC-BHD)		**0.2000**							
Allocation to Powergrid (HVDC-VIN)		**0.0603**							
Allocation to MPAKVNL, Indore	**0.2362**	**0.2726**	**0.2730**		**0.1295**	**0.1506**			
Heavy Water Plant of DAE								**4.0909**	
TOTAL	**100.0000**	**100.0000**	**100.0000**	**100.0000**	**100.0000**	**100.0000**	**100.0000**	**100.0000**	**100.0000**

Note :(i) Additional allocation 100 MW of unallocated power of WR ISGS stations have been made to drought prone district of Bundelkhand Region in MP by reduction in allocation of unallocated power of other states of WR

Share Allocation_23.04.10 REA_Share_Alloctaion

WESTERN REGIONAL POWER COMMITTEE
CALCULATIONS FOR ALLOCATION OF SHARES w.e.f 23.04.2010
FOR PEAK HOURS (FROM 1800 TO 2200 HOURS)

	KSTPS	VSTPS-I	VSTPS-II	VSTPS-III	KGPP	GGPP	SIPAT	KAPP	TAPP 3&4	TOTAL
Installed Capacity (MW)	2100.00	1260.00	1000.00	1000.00	656.20	657.39	1000.00	440.00	1080.00	9193.59
Firm allocation	**1790.00**	**1070.00**	**850.00**	**850.00**	**558.00**	**558.00**	**850.00**	**374.00**	**918.00**	**7818.00**
Un-allocated share	310.00	190.00	150.00	150.00	98.20	99.39	150.00	66.00	162.00	1375.59
Specific allocation out of Unallocated share										
Allocation to DD	40.00				28.99	29.31				98.30
Allocation to DNH	10.00				55.99	56.46				122.45
Allocation to Powergrid (HVDC-BHD)		2.52								2.52
Allocation to Powergrid (HVDC-VIN)		0.76								0.76
Allocation to MPAKVNL, Indore	2.73	1.89	1.50		0.85	0.99				7.96
Allocation to Goa					12.37	12.63				25.00
Heavy Water Plant of DAE								18.00		18.00
Balance un-allocated share	**257.27**	**184.83**	**148.50**	**150.00**	**0.00**	**0.00**	**150.00**	**48.00**	**162.00**	**1100.60**
FIRM ALLOCATION IN MW										
Gujarat	360.00	230.00	239.00	266.00	187.00	237.00	273.00	125.00	274.00	2191.00
Madhya Pradesh	400.00	385.00	273.00	200.00	140.00	117.00	143.00	93.00	180.00	1931.00
Chhattisgarh	210.00	0.00	0.00	105.00	0.00	0.00	158.00	0.00	48.00	521.00
Maharashtra	610.00	410.00	319.00	258.00	204.00	200.00	258.00	137.00	393.00	2789.00
GOA	210.00	35.00	12.00	10.00	0.00	0.00	10.00	15.00	11.00	303.00
DD	0.00	5.00	3.00	5.00	2.00	2.00	4.00	2.00	5.00	28.00
DNH	0.00	5.00	4.00	6.00	25.00	2.00	4.00	2.00	7.00	55.00
TOTAL	**1790.00**	**1070.00**	**850.00**	**850.00**	**558.00**	**558.00**	**850.00**	**374.00**	**918.00**	**7818.00**

ALLOCATION OF 15% UNALLOCATED SHARE in MW

		KSTPS	VSTPS-I	VSTPS-II	VSTPS-III	KGPP	GGPP	SIPAT	KAPP	TAPP 3&4	TOTAL
Gujarat	4.31 %	11.09	7.97	6.40	6.47	0.00	0.00	6.47	2.07	6.98	47.44
Madhya Pradesh	32.26 %	80.76	58.08	46.68	48.39	0.00	0.00	48.39	15.48	52.26	350.05
Chhattisgarh	0.00 %	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maharashtra	30.56 %	78.62	56.48	45.38	45.84	0.00	0.00	45.84	14.67	49.51	336.34
GOA	0.30 %	0.77	0.55	0.45	0.45	0.00	0.00	0.45	0.14	0.49	3.30
DD	4.58 %	11.78	8.47	6.80	6.87	0.00	0.00	6.87	2.20	7.42	50.41
DD - Specific Allocation		40.00	0.00	0.00	0.00	28.99	29.31	0.00	0.00	0.00	98.30
DNH	27.99 %	72.01	51.73	41.57	41.99	0.00	0.00	41.99	13.44	45.34	308.06
DNH - Specific allocation		10.00	0.00	0.00	0.00	55.99	56.46	0.00	0.00	0.00	122.45
Goa - Specific allocation		0.00	0.00	0.00	0.00	12.37	12.63	0.00	0.00	0.00	25.00
Allocation to Powergrid (HVDC-BHD)			2.52								2.52
Allocation to Powergrid (HVDC-VIN)			0.76								0.76
Allocation to MPAKVNL, Indore (Sp. Allo.)		2.73	1.89	1.50		0.85	0.99				7.96
Allocation to MPAKVNL, Indore		2.23	1.54	1.23							5.00
Heavy Water Plant of DAE									18.00		18.00
Total		**310.00**	**190.00**	**150.00**	**150.00**	**98.20**	**99.39**	**150.00**	**66.00**	**162.00**	**1357.59**

Total Allocation (Firm + Specific allocation + allocation from balance unallocated share) in MW

	KSTPS	VSTPS-I	VSTPS-II	VSTPS-III	KGPP	GGPP	SIPAT	KAPP	TAPP 3&4	TOTAL
Gujarat	**371.09**	**237.97**	**245.40**	**272.47**	**187.00**	**237.00**	**279.47**	**127.07**	**280.98**	**2238.44**
Madhya Pradesh	**480.76**	**443.08**	**319.68**	**248.39**	**140.00**	**117.00**	**191.39**	**108.48**	**232.26**	**2281.05**
Chhattisgarh	**210.00**	**0.00**	**0.00**	**105.00**	**0.00**	**0.00**	**158.00**	**0.00**	**48.00**	**521.00**
Maharashtra	**688.62**	**466.48**	**364.38**	**303.84**	**204.00**	**200.00**	**303.84**	**151.67**	**442.51**	**3125.34**
GOA	**210.77**	**35.55**	**12.45**	**10.45**	**12.37**	**12.63**	**10.45**	**15.14**	**11.49**	**331.30**
DD	**51.78**	**13.47**	**9.80**	**11.87**	**30.99**	**31.31**	**10.87**	**4.20**	**12.42**	**176.71**
DNH	**82.01**	**56.73**	**45.57**	**47.99**	**80.99**	**58.46**	**45.99**	**15.44**	**52.34**	**485.51**
Allocation to Powergrid (HVDC-BHD)		**2.52**								**2.52**
Allocation to Powergrid (HVDC-VIN)		**0.76**								**0.76**
Allocation to MPAKVNL, Indore	**4.96**	**3.43**	**2.73**		**0.85**	**0.99**				**12.96**
Heavy Water Plant of DAE								**18.00**		**18.00**
TOTAL	**2100.00**	**1260.00**	**1000.00**	**1000.00**	**656.20**	**657.39**	**1000.00**	**440.00**	**1080.00**	**9193.59**

Shares in %

Constituents	**KSTPS**	**VSTPS-I**	**VSTPS-II**	**VSTPS-III**	**KGPP**	**GGPP**	**SIPAT**	**KAPP**	**TAPP 3&4**
Gujarat	**17.6709**	**18.8862**	**24.5399**	**27.2465**	**28.4974**	**36.0517**	**27.9465**	**28.8793**	**26.0169**
Madhya Pradesh	**22.8936**	**35.1652**	**31.9679**	**24.8390**	**21.3350**	**17.7977**	**19.1390**	**24.6556**	**21.5057**
Chhattisgarh	**10.0000**	**0.0000**	**0.0000**	**10.5000**	**0.0000**	**0.0000**	**15.8000**	**0.0000**	**4.4444**
Maharashtra	**32.7915**	**37.0225**	**36.4380**	**30.3840**	**31.0881**	**30.4233**	**30.3840**	**34.4702**	**40.9729**
GOA	**10.0367**	**2.8218**	**1.2446**	**1.0450**	**1.8851**	**1.9212**	**1.0450**	**3.4418**	**1.0635**
DD	**2.4659**	**1.0687**	**0.9801**	**1.1870**	**4.7226**	**4.7628**	**1.0870**	**0.9542**	**1.1500**
DNH	**3.9052**	**4.5027**	**4.5565**	**4.7985**	**12.3423**	**8.8927**	**4.5985**	**3.5080**	**4.8466**
Allocation to Powergrid (HVDC-BHD)		**0.2000**							
Allocation to Powergrid (HVDC-VIN)		**0.0603**							
Allocation to MPAKVNL, Indore	**0.2362**	**0.2726**	**0.2730**		**0.1295**	**0.1506**			
Heavy Water Plant of DAE								**4.0909**	
TOTAL	**100.0000**	**100.0000**	**100.0000**	**100.0000**	**100.0000**	**100.0000**	**100.0000**	**100.0000**	**100.0000**

Note :(i) Additional allocation 100 MW of unallocated power of WR ISGS stations have been made to drought prone district of Bundelkhand Region in MP by reduction in allocation of unallocated power of other states of WR

Share Allocation_23.04.10 REA_Share_Alloctaion

WESTERN REGIONAL POWER COMMITTEE
CALCULATIONS FOR ALLOCATION OF SHARES w.e.f 1.03.2010
FOR OFF-PEAK HOURS (FROM 0000 TO 1800 HOURS & FROM 2200 TO 2400 HOURS)

	KSTPS	VSTPS-I	VSTPS-II	VSTPS-III	KGPP	GGPP	SIPAT	KAPP	TAPP 3&4	TOTAL
Installed Capacity (MW)	2100.00	1260.00	1000.00	1000.00	656.20	657.39	1000.00	440.00	1080.00	9193.59
Firm allocation	**1790.00**	**1070.00**	**850.00**	**850.00**	**558.00**	**558.00**	**850.00**	**374.00**	**918.00**	**7818.00**
Un-allocated share	310.00	190.00	150.00	150.00	98.20	99.39	150.00	66.00	162.00	1375.59
Specific allocation out of Unallocated share										
Allocation to DD	40.00				28.99	29.31				98.30
Allocation to DNH	10.00				55.99	56.46				122.45
Allocation to Powergrid (HVDC-BHD)		2.52								2.52
Allocation to Powergrid (HVDC-VIN)		0.76								0.76
Allocation to MPAKVNL, Indore	2.73	1.89	1.50		0.85	0.99				7.96
Allocation to Goa					12.37	12.63				25.00
Heavy Water Plant of DAE								18.00		18.00
Balance un-allocated share	**257.27**	**184.83**	**148.50**	**150.00**	**0.00**	**0.00**	**150.00**	**48.00**	**162.00**	**1100.60**
FIRM ALLOCATION IN MW										
Gujarat	360.00	230.00	239.00	266.00	187.00	237.00	273.00	125.00	274.00	2191.00
Madhya Pradesh	400.00	385.00	273.00	200.00	140.00	117.00	143.00	93.00	180.00	1931.00
Chhattisgarh	210.00	0.00	0.00	105.00	0.00	0.00	158.00	0.00	48.00	521.00
Maharashtra	610.00	410.00	319.00	258.00	204.00	200.00	258.00	137.00	393.00	2789.00
GOA	210.00	35.00	12.00	10.00	0.00	0.00	10.00	15.00	11.00	303.00
DD	0.00	5.00	3.00	5.00	2.00	2.00	4.00	2.00	5.00	28.00
DNH	0.00	5.00	4.00	6.00	25.00	2.00	4.00	2.00	7.00	55.00
TOTAL	**1790.00**	**1070.00**	**850.00**	**850.00**	**558.00**	**558.00**	**850.00**	**374.00**	**918.00**	**7818.00**

ALLOCATION OF 15% UNALLOCATED SHARE in MW

		KSTPS	VSTPS-I	VSTPS-II	VSTPS-III	KGPP	GGPP	SIPAT	KAPP	TAPP 3&4	TOTAL
Gujarat	6.31 %	16.23	11.66	9.37	9.47	0.00	0.00	9.47	3.03	10.22	69.45
Madhya Pradesh	25.06 %	62.24	44.77	35.99	37.59	0.00	0.00	37.59	12.03	40.60	270.81
Chhattisgarh	0.00 %	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maharashtra	30.48 %	78.42	56.34	45.26	45.72	0.00	0.00	45.72	14.63	49.38	335.46
GOA	2.30 %	5.92	4.25	3.42	3.45	0.00	0.00	3.45	1.10	3.73	25.31
DD	10.08 %	25.93	18.63	14.97	15.12	0.00	0.00	15.12	4.84	16.33	110.94
DD - Specific Allocation		40.00	0.00	0.00	0.00	28.99	29.31	0.00	0.00	0.00	98.30
DNH	25.77 %	66.30	47.63	38.27	38.66	0.00	0.00	38.66	12.37	41.75	283.62
DNH - Specific allocation		10.00	0.00	0.00	0.00	55.99	56.46	0.00	0.00	0.00	122.45
Goa - Specific allocation		0.00	0.00	0.00	0.00	12.37	12.63	0.00	0.00	0.00	25.00
Allocation to Powergrid (HVDC-BHD)			2.52								2.52
Allocation to Powergrid (HVDC-VIN)			0.76								0.76
Allocation to MPAKVNL, Indore (Sp. Allo.)		2.73	1.89	1.50		0.85	0.99				7.96
Allocation to MPAKVNL, Indore		2.23	1.54	1.23		0.00	0.00				5.00
Heavy Water Plant of DAE									18.00		18.00
Total		**310.00**	**190.00**	**150.00**	**150.00**	**98.20**	**99.39**	**150.00**	**66.00**	**162.00**	**1357.59**

Total Allocation (Firm + Specific allocation + allocation from balance unallocated share) in MW

	KSTPS	VSTPS-I	VSTPS-II	VSTPS-III	KGPP	GGPP	SIPAT	KAPP	TAPP 3&4	TOTAL
Gujarat	**376.23**	**241.66**	**248.37**	**275.47**	**187.00**	**237.00**	**282.47**	**128.03**	**284.22**	**2260.45**
Madhya Pradesh	**462.24**	**429.77**	**308.99**	**237.59**	**140.00**	**117.00**	**180.59**	**105.03**	**220.60**	**2201.81**
Chhattisgarh	**210.00**	**0.00**	**0.00**	**105.00**	**0.00**	**0.00**	**158.00**	**0.00**	**48.00**	**521.00**
Maharashtra	**688.42**	**466.34**	**364.26**	**303.72**	**204.00**	**200.00**	**303.72**	**151.63**	**442.38**	**3124.46**
GOA	**215.92**	**39.25**	**15.42**	**13.45**	**12.37**	**12.63**	**13.45**	**16.10**	**14.73**	**353.31**
DD	**65.93**	**23.63**	**17.97**	**20.12**	**30.99**	**31.31**	**19.12**	**6.84**	**21.33**	**237.24**
DNH	**76.30**	**52.63**	**42.27**	**44.66**	**80.99**	**58.46**	**42.66**	**14.37**	**48.75**	**461.07**
Allocation to Powergrid (HVDC-BHD)		**2.52**								**2.52**
Allocation to Powergrid (HVDC-VIN)		**0.76**								**0.76**
Allocation to MPAKVNL, Indore	**4.96**	**3.43**	**2.73**		**0.85**	**0.99**				**12.96**
Heavy Water Plant of DAE								**18.00**		**18.00**
TOTAL	**2100.00**	**1260.00**	**1000.00**	**1000.00**	**656.20**	**657.39**	**1000.00**	**440.00**	**1080.00**	**9193.59**

Shares in %

Constituents	**KSTPS**	**VSTPS-I**	**VSTPS-II**	**VSTPS-III**	**KGPP**	**GGPP**	**SIPAT**	**KAPP**	**TAPP 3&4**
Gujarat	**17.9159**	**19.1796**	**24.8369**	**27.5465**	**28.4974**	**36.0517**	**28.2465**	**29.0975**	**26.3169**
Madhya Pradesh	**22.0115**	**34.1091**	**30.8987**	**23.7590**	**21.3350**	**17.7977**	**18.0590**	**23.8702**	**20.4257**
Chhattisgarh	**10.0000**	**0.0000**	**0.0000**	**10.5000**	**0.0000**	**0.0000**	**15.8000**	**0.0000**	**4.4444**
Maharashtra	**32.7817**	**37.0108**	**36.4261**	**30.3720**	**31.0881**	**30.4233**	**30.3720**	**34.4614**	**40.9609**
GOA	**10.2818**	**3.1152**	**1.5416**	**1.3450**	**1.8851**	**1.9212**	**1.3450**	**3.6600**	**1.3635**
DD	**3.1396**	**1.8755**	**1.7969**	**2.0120**	**4.7226**	**4.7628**	**1.9120**	**1.5542**	**1.9750**
DNH	**3.6333**	**4.1770**	**4.2268**	**4.4655**	**12.3423**	**8.8927**	**4.2655**	**3.2658**	**4.5136**
Allocation to Powergrid (HVDC-BHD)		**0.2000**							
Allocation to Powergrid (HVDC-VIN)		**0.0603**							
Allocation to MPAKVNL, Indore	**0.2362**	**0.2725**	**0.2730**		**0.1295**	**0.1506**			
Heavy Water Plant of DAE								**4.0909**	
TOTAL	**100.0000**	**100.0000**	**100.0000**	**100.0000**	**100.0000**	**100.0000**	**100.0000**	**100.0000**	**100.0000**

Notes: (i) 5 MW has been allocated to MPAKVNL round the clock by equivalent reduction in the allocation from unallocated power to MP.
(ii) Additiona allocation of unallocated power have been made to MP by reduction in allocation of unallocated power of Chhattissgarh & Gujarat for supply of power to drought prone district of Bundelkhand Region in MP.

Share Allocation_1.03.10 REA_Share_Alloctaion

WESTERN REGIONAL POWER COMMITTEE
CALCULATIONS FOR ALLOCATION OF SHARES w.e.f 1.03.2010
FOR PEAK HOURS (FROM 1800 TO 2200 HOURS)

	KSTPS	VSTPS-I	VSTPS-II	VSTPS-III	KGPP	GGPP	SIPAT	KAPP	TAPP 3&4	TOTAL
Installed Capacity (MW)	2100.00	1260.00	1000.00	1000.00	656.20	657.39	1000.00	440.00	1080.00	9193.59
Firm allocation	**1790.00**	**1070.00**	**850.00**	**850.00**	**558.00**	**558.00**	**850.00**	**374.00**	**918.00**	**7818.00**
Un-allocated share	310.00	190.00	150.00	150.00	98.20	99.39	150.00	66.00	162.00	1375.59
Specific allocation out of Unallocated share										
Allocation to DD	40.00				28.99	29.31				98.30
Allocation to DNH	10.00				55.99	56.46				122.45
Allocation to Powergrid (HVDC-BHD)		2.52								2.52
Allocation to Powergrid (HVDC-VIN)		0.76								0.76
Allocation to MPAKVNL, Indore	2.73	1.89	1.50		0.85	0.99				7.96
Allocation to Goa					12.37	12.63				25.00
Heavy Water Plant of DAE								18.00		18.00
Balance un-allocated share	**257.27**	**184.83**	**148.50**	**150.00**	**0.00**	**0.00**	**150.00**	**48.00**	**162.00**	**1100.60**
FIRM ALLOCATION IN MW										
Gujarat	360.00	230.00	239.00	266.00	187.00	237.00	273.00	125.00	274.00	2191.00
Madhya Pradesh	400.00	385.00	273.00	200.00	140.00	117.00	143.00	93.00	180.00	1931.00
Chhattisgarh	210.00	0.00	0.00	105.00	0.00	0.00	158.00	0.00	48.00	521.00
Maharashtra	610.00	410.00	319.00	258.00	204.00	200.00	258.00	137.00	393.00	2789.00
GOA	210.00	35.00	12.00	10.00	0.00	0.00	10.00	15.00	11.00	303.00
DD	0.00	5.00	3.00	5.00	2.00	2.00	4.00	2.00	5.00	28.00
DNH	0.00	5.00	4.00	6.00	25.00	2.00	4.00	2.00	7.00	55.00
TOTAL	**1790.00**	**1070.00**	**850.00**	**850.00**	**558.00**	**558.00**	**850.00**	**374.00**	**918.00**	**7818.00**

ALLOCATION OF 15% UNALLOCATED SHARE in MW

	%	KSTPS	VSTPS-I	VSTPS-II	VSTPS-III	KGPP	GGPP	SIPAT	KAPP	TAPP 3&4	TOTAL
Gujarat	4.31 %	11.09	7.97	6.40	6.47	0.00	0.00	6.47	2.07	6.98	47.44
Madhya Pradesh	23.16 %	57.35	41.26	33.17	34.74	0.00	0.00	34.74	11.12	37.52	249.90
Chhattisgarh	0.00 %	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maharashtra	30.56 %	78.62	56.48	45.38	45.84	0.00	0.00	45.84	14.67	49.51	336.34
GOA	2.30 %	5.92	4.25	3.42	3.45	0.00	0.00	3.45	1.10	3.73	25.31
DD	10.08 %	25.93	18.63	14.97	15.12	0.00	0.00	15.12	4.84	16.33	110.94
DD - Specific Allocation		40.00	0.00	0.00	0.00	28.99	29.31	0.00	0.00	0.00	98.30
DNH	29.59 %	76.13	54.69	43.94	44.39	0.00	0.00	44.39	14.20	47.94	325.67
DNH - Specific allocation		10.00	0.00	0.00	0.00	55.99	56.46	0.00	0.00	0.00	122.45
Goa - Specific allocation		0.00	0.00	0.00	0.00	12.37	12.63	0.00	0.00	0.00	25.00
Allocation to Powergrid (HVDC-BHD)			2.52								2.52
Allocation to Powergrid (HVDC-VIN)			0.76								0.76
Allocation to MPAKVNL, Indore (Sp. Allo.)		2.73	1.89	1.50		0.85	0.99				7.96
Allocation to MPAKVNL, Indore		2.23	1.54	1.23							5.00
Heavy Water Plant of DAE									18.00		18.00
Total		**310.00**	**190.00**	**150.00**	**150.00**	**98.20**	**99.39**	**150.00**	**66.00**	**162.00**	**1357.59**

Total Allocation (Firm + Specific allocation + allocation from balance unallocated share) in MW

	KSTPS	VSTPS-I	VSTPS-II	VSTPS-III	KGPP	GGPP	SIPAT	KAPP	TAPP 3&4	TOTAL
Gujarat	**371.09**	**237.97**	**245.40**	**272.47**	**187.00**	**237.00**	**279.47**	**127.07**	**280.98**	**2238.44**
Madhya Pradesh	**457.35**	**426.26**	**306.17**	**234.74**	**140.00**	**117.00**	**177.74**	**104.12**	**217.52**	**2180.90**
Chhattisgarh	**210.00**	**0.00**	**0.00**	**105.00**	**0.00**	**0.00**	**158.00**	**0.00**	**48.00**	**521.00**
Maharashtra	**688.62**	**466.48**	**364.38**	**303.84**	**204.00**	**200.00**	**303.84**	**151.67**	**442.51**	**3125.34**
GOA	**215.92**	**39.25**	**15.42**	**13.45**	**12.37**	**12.63**	**13.45**	**16.10**	**14.73**	**353.31**
DD	**65.93**	**23.63**	**17.97**	**20.12**	**30.99**	**31.31**	**19.12**	**6.84**	**21.33**	**237.24**
DNH	**86.13**	**59.69**	**47.94**	**50.39**	**80.99**	**58.46**	**48.39**	**16.20**	**54.94**	**503.12**
Allocation to Powergrid (HVDC-BHD)		**2.52**								**2.52**
Allocation to Powergrid (HVDC-VIN)		**0.76**								**0.76**
Allocation to MPAKVNL, Indore	**4.96**	**3.43**	**2.73**		**0.85**	**0.99**				**12.96**
Heavy Water Plant of DAE								**18.00**		**18.00**
TOTAL	**2100.00**	**1260.00**	**1000.00**	**1000.00**	**656.20**	**657.39**	**1000.00**	**440.00**	**1080.00**	**9193.59**

Shares in %

Constituents	**KSTPS**	**VSTPS-I**	**VSTPS-II**	**VSTPS-III**	**KGPP**	**GGPP**	**SIPAT**	**KAPP**	**TAPP 3&4**
Gujarat	**17.6709**	**18.8862**	**24.5399**	**27.2465**	**28.4974**	**36.0517**	**27.9465**	**28.8793**	**26.0169**
Madhya Pradesh	**21.7787**	**33.8304**	**30.6166**	**23.4740**	**21.3350**	**17.7977**	**17.7740**	**23.6629**	**20.1407**
Chhattisgarh	**10.0000**	**0.0000**	**0.0000**	**10.5000**	**0.0000**	**0.0000**	**15.8000**	**0.0000**	**4.4444**
Maharashtra	**32.7915**	**37.0225**	**36.4380**	**30.3840**	**31.0881**	**30.4233**	**30.3840**	**34.4702**	**40.9729**
GOA	**10.2818**	**3.1152**	**1.5415**	**1.3450**	**1.8851**	**1.9212**	**1.3450**	**3.6600**	**1.3635**
DD	**3.1397**	**1.8755**	**1.7969**	**2.0120**	**4.7226**	**4.7628**	**1.9120**	**1.5542**	**1.9750**
DNH	**4.1012**	**4.7374**	**4.7941**	**5.0385**	**12.3423**	**8.8927**	**4.8385**	**3.6825**	**5.0866**
Allocation to Powergrid (HVDC-BHD)		**0.2000**							
Allocation to Powergrid (HVDC-VIN)		**0.0603**							
Allocation to MPAKVNL, Indore	**0.2362**	**0.2725**	**0.2730**		**0.1295**	**0.1506**			
Heavy Water Plant of DAE								**4.0909**	
TOTAL	**100.0000**	**100.0000**	**100.0000**	**100.0000**	**100.0000**	**100.0000**	**100.0000**	**100.0000**	**100.0000**

Notes: (i) 5 MW has been allocated to MPAKVNL round the clock by equivalent reduction in the allocation from unallocated power to MP.

(ii) Additiona allocation of unallocated power have been made to MP by reduction in allocation of unallocated power of Chhattissgarh & Gujarat for supply of power to drought prone district of Bundelkhand Region in MP.

Share Allocation_1.03.10 REA_Share_Alloctaion

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EASTERN REGIONAL POWER COMMITTEE :: KOLKATA

REGIONAL ENERGY ACCOUNTING FOR THE MONTH OF APRIL, 2010

STATION : FSTPS STAGE - I

CAPACITY CHARGES (INCLUSIVE OF INCENTIVE, IF ANY) & ENERGY CHARGES BILLING

BENEFICIARIES	SHARE ALLOCATION OF CURRENT MONTH	CAPACITY CHARGE INCLUSIVE OF INCENTIVE PAYABLE BY THE BENEFICIARIES	DRAWAL SCHUDULE
	(%)	(Rs.)	(MWH)
ER:			
BIHAR	26.066250	65796868	140732.50
JHARKHAND	9.826667	24804639	53042.34
DVC	0.000000	0	0.00
ORISSA	13.630000	34405076	73584.79
WEST BENGAL	30.540000	77089584	164877.44
SIKKIM	1.630000	4114474	8799.94
SUB-TOTAL	81.692917	206210640	441037.01
SR:			
ANDHRA PRADESH	2.480000	6260058	
KARNATAKA	0.000000	0	
TAMILNADU	1.460000	3685357	
KERALA	0.190667	481285	
PONDICHERRY	0.302805	764345	
SUB-TOTAL	4.433472	11191045	23882.90
WR:			
CHHATTISGARH	0.000000	0	
GUJARAT	0.000000	0	
MADHYA PRADESH	0.000000	0	
MAHARASTRA	0.000000	0	
DADRA & NAGAR HAVELI	0.000000	0	
DAMAN & DIU	0.000000	0	
GOA	0.000000	0	
SUB-TOTAL	0.000000	0	0.00
NR:			
UTTAR PRADESH	2.080000	5250371	
HARYANA	0.690000	1741710	
RAJASTHAN	0.690000	1741710	
J & K	1.340278	3383152	
HIMACHAL PRADESH	0.000000	0	
DELHI	1.390000	3508661	
PUNJAB	1.390000	3508661	
UTTARAKHAND	0.000000	0	
CHANDIGARH	0.000000	0	
SUB-TOTAL	7.580278	19134266	40979.48
NER :			
ASSAM	4.955000	12507495	
MEGHALAYA	0.580000	1464046	
NAGALAND	0.608333	1535564	
ARUNACHAL PRADESH	0.150000	378633	
SUB-TOTAL	6.293333	15885737	33974.35
GRAND TOTAL	100.000000	252421688	539873.75

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EASTERN REGIONAL POWER COMMITTEE :: KOLKATA

REGIONAL ENERGY ACCOUNTING FOR THE MONTH OF APRIL, 2010

STATION : KhSTPS STAGE - I
CAPACITY CHARGES (INCLUSIVE OF INCENTIVE, IF ANY) & ENERGY CHARGES BILLING

BENEFICIARIES	SHARE ALLOCATION OF CURRENT MONTH	CAPACITY CHARGE INCLUSIVE OF INCENTIVE PAYABLE BY THE BENEFICIARIES	DRAWAL SCHUDULE
	(%)	(Rs.)	(MWH)
ER:			
BIHAR	37.967918	72693711	131305.18
JHARKHAND	4.615000	8835920	15956.60
DVC	0.000000	0	0.00
ORISSA	15.240000	29178638	52700.68
WEST BENGAL	0.000000	0	0.00
SIKKIM	1.550000	2967644	5359.98
SUB-TOTAL	59.372918	113675912	205322.44
SR:			
ANDHRA PRADESH	2.450000	4690792	
KARNATAKA	0.000000	0	
TAMILNADU	1.440000	2757037	
KERALA	0.186333	356755	
PONDICHERRY	0.298944	572361	
SUB-TOTAL	4.375277	8376944	15205.56
WR:			
CHHATTISGARH	0.000000	0	
GUJARAT	0.000000	0	
MADHYA PRADESH	0.000000	0	
MAHARASTRA	0.000000	0	
DADRA & NAGAR HAVELI	0.000000	0	
DAMAN & DIU	0.000000	0	
GOA	0.000000	0	
SUB-TOTAL	0.000000	0	0.00
NR:			
UTTAR PRADESH	9.120000	17461232	
HARYANA	3.040000	5820411	
RAJASTHAN	3.040000	5820411	
J & K	4.168472	7980993	
HIMACHAL PRADESH	0.000000	0	
DELHI	6.070000	11621676	
PUNJAB	6.070000	11621676	
UTTARAKHAND	0.000000	0	
CHANDIGARH	0.000000	0	
SUB-TOTAL	31.508472	60326398	108874.74
NER :			
ASSAM	3.273333	6267152	
MEGHALAYA	0.580000	1110473	
NAGALAND	0.600000	1148765	
ARUNACHAL PRADESH	0.140000	268045	
SUB-TOTAL	4.593333	8794436	15883.55
POWERGRID(PUSAULI)	0.150000	287191	518.71
GRAND TOTAL	100.000000	191460882	345805.00

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EASTERN REGIONAL POWER COMMITTEE :: KOLKATA

REGIONAL ENERGY ACCOUNTING FOR THE MONTH OF APRIL, 2010

STATION : KhSTPS STAGE - II
CAPACITY CHARGES (INCLUSIVE OF INCENTIVE, IF ANY) & ENERGY CHARGES BILLING

BENEFICIARIES	SHARE ALLOCATION OF CURRENT MONTH	CAPACITY CHARGE INCLUSIVE OF INCENTIVE PAYABLE BY THE BENEFICIARIES	DRAWAL SCHUDULE
	(%)	(Rs.)	(MWH)
ER:			
BIHAR	6.670000	35550331	38794.80
JHARKHAND	1.670000	8900907	9713.24
DVC	0.000000	0	0.00
ORISSA	2.050000	10926264	11923.44
WEST BENGAL	0.000000	0	0.00
SIKKIM	0.330000	1758862	1919.38
SUB-TOTAL	10.720000	57136364	62350.87
SR:			
ANDHRA PRADESH	0.000000	0	
KARNATAKA	0.000000	0	
TAMILNADU	0.000000	0	
KERALA	0.000000	0	
PONDICHERRY	0.000000	0	
SUB-TOTAL	0.000000	0	0.00
WR:			
CHHATTISGARH	2.000000	10659769	
GUJARAT	9.400000	50100916	
MADHYA PRADESH	4.930000	26276332	
MAHARASTRA	9.870000	52605962	
DADRA & NAGAR HAVELI	0.200000	1065977	
DAMAN & DIU	0.130000	692885	
GOA	0.000000	0	
SUB-TOTAL	26.530000	141401841	154306.77
NR:			
UTTAR PRADESH	16.730000	89168971	
HARYANA	4.580000	24410872	
RAJASTHAN	7.110000	37895480	
J & K	5.560000	29634159	
HIMACHAL PRADESH	1.530000	8154724	
DELHI	10.490000	55910491	
PUNJAB	8.020000	42745675	
UTTARAKHAND	1.870000	9966884	
CHANDIGARH	0.200000	1065977	
SUB-TOTAL	56.090000	298953233	326236.97
NER :			
ASSAM	5.060000	26969217	
MEGHALAYA	1.600000	8527816	
NAGALAND	0.000000	0	
ARUNACHAL PRADESH	0.000000	0	
SUB-TOTAL	6.660000	35497032	38736.64
GRAND TOTAL	100.000000	532988471	581631.25

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EASTERN REGIONAL POWER COMMITTEE :: KOLKATA

REGIONAL ENERGY ACCOUNTING FOR THE MONTH OF APRIL, 2010

STATION : TSTPS STAGE - I

CAPACITY CHARGES (INCLUSIVE OF INCENTIVE, IF ANY) & ENERGY CHARGES BILLING

BENEFICIARIES	SHARE ALLOCATION OF CURRENT MONTH	CAPACITY CHARGE INCLUSIVE OF INCENTIVE PAYABLE BY THE BENEFICIARIES	DRAWAL SCHUDULE
	(%)	(Rs.)	(MWH)
ER:			
BIHAR	37.264583	142001256	248827.90
JHARKHAND	9.146667	34854494	61076.59
DVC	0.310000	1181293	2069.96
ORISSA	31.800000	121177793	212337.35
WEST BENGAL	9.100000	34676664	60763.20
SIKKIM	2.400000	9145494	16025.46
SUB-TOTAL	90.021250	343036995	601100.45
SR:			
ANDHRA PRADESH	2.480000	9450344	
KARNATAKA	0.000000	0	
TAMILNADU	1.460000	5563509	
KERALA	0.190667	726560	
PONDICHERRY	0.301541	1149059	
SUB-TOTAL	4.432208	16889471	29624.16
WR:			
CHHATTISGARH	0.000000	0	
GUJARAT	0.000000	0	
MADHYA PRADESH	0.000000	0	
MAHARASTRA	0.000000	0	
DADRA & NAGAR HAVELI	0.000000	0	
DAMAN & DIU	0.000000	0	
GOA	0.000000	0	
SUB-TOTAL	0.000000	0	0.00
NR:			
UTTAR PRADESH	0.000000	0	
HARYANA	0.000000	0	
RAJASTHAN	0.000000	0	
J & K	0.491542	1873081	
HIMACHAL PRADESH	0.000000	0	
DELHI	0.000000	0	
PUNJAB	0.000000	0	
UTTARAKHAND	0.000000	0	
CHANDIGARH	0.000000	0	
SUB-TOTAL	0.491542	1873081	3248.91
NER :			
ASSAM	3.716667	14162815	
MEGHALAYA	0.580000	2210161	
NAGALAND	0.608333	2318127	
ARUNACHAL PRADESH	0.150000	571593	
SUB-TOTAL	5.055000	19262696	33753.98
GRAND TOTAL	100.000000	381062243	667727.50

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