Aggregate Revenue Requirement & Tariff Petition for FY 2012-13

Main Text & Formats (Volume I)
and
Annexures (Volume II)

Submitted to

Joint Electricity Regulatory Commission
Gurgaon

By

Electricity Department of Daman & Diu

(Daman)

November 2011

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All currency figures used in this Petition, unless specifically stated otherwise, are in Rs. Crore and Million Units.

This petition contains the Main Text of the Petition and Format (Volume I) and Annexure (Volume II).

1 ARR & Tariff Petition for FY 12-13

BEFORE THE JOINT ELECTRICITY REGULATORY COMMISSION
FOR THE STATE OF GOA & UNIION TERRITORIES

Filing No…………

Case No…………

IN THE MATTER OF: Filing of Aggregate Revenue Requirement (ARR) for the FY 12-13 under Section 62 and 86 of the Electricity Act, 2003

AND

IN THE MATTER OF Electricity Department of Daman & Diu
(hereinafter referred to as "EDDD" or "The Petitioner")
Daman - Applicant

The Applicant respectfully submits as under: -

1. The Electricity Department of Daman & Diu ("EDDD") is a statutory body engaged in the electricity transmission and distribution in the Union Territory of Daman & Diu. Consequent to the enactment of the Electricity Act, 2003 (hereinafter referred to as the "Act"), the process of approval of proposed tariffs is vested with the State Commission. Based on the provisions of Section 62 of the Act, EDDD is filing the current petition, in order to meet its financial requirements.

2. This is a Petition indicating the Aggregate Revenue Requirement (ARR) of EDDD and Tariff Revision Proposal of EDDD for the FY 12-13 (Financial Year 2012-13).

2 Contents of this Petition

1. This Petition covers in detail the basis, assumptions and projections of individual elements constituting the determination of ARR for FY 12-13. The Joint Electricity Regulatory Commission for the state of Goa and union territories (JERC) had issued the first Tariff Order for Electricity Department of Daman & Diu (EDDD) on 1st November 2010 and subsequently the second Tariff order for FY 11-12 for EDDD was issued on 3rd October, 2011. The Commission in its Tariff Order for FY 11-12 has approved the ARR for FY 11-12 based on the actual cost for FY 09-10 and estimated expenses for FY 10-11. Further, Commission has approved revision in retail tariff to meet the revenue deficit for FY 11-12.

2. EDDD is submitting its ARR and Tariff petition for the determination of tariff for FY 12-13 broadly on the basis of the principles outlined in Tariff Regulations notified by JERC. EDDD has considered the past trends and taken cognizance of other internal and external developments to estimate the likely performance for FY 12-13.

3. The following sections explain in detail the basis and forecasts of the following elements for FY 12-13:

   a. Category wise Energy Sales & Revenues at existing tariffs

   b. T&D Losses and Energy Requirement

   c. Determination of Aggregate Revenue Requirement by forecasting the following costs, other income & returns:
      i. Power Purchase Cost
      ii. Employee Cost
      iii. Repairs & Maintenance Cost
      iv. Admin & General Cost
      v. Capital Investment Plan
      vi. Interest Cost
      vii. Interest on Working Capital
      viii. Depreciation
      ix. Provision for bad & doubtful debts
      x. Return on Equity

xi. Non-Tariff Income

d. Determination of Gap between Revenue & Costs and the arrangements to cover the revenue gap

3 Introduction

The Electricity Department of Daman & Diu (EDDD) is primarily engaged in the procurement, transmission and distribution of electricity to the various consumer categories. It does not have its own power generation station and rely on the bulk power supply is drawn from the Central Sector Generating Stations (CSGS) in Western Region. EDDD also has some allocation from Eastern Region Central Generating Stations.

Since the Department is mainly engaged in the work of construction, operation and maintenance of power distribution system, it caters to power demand of various consumer categories. The present transmission and distribution system of EDDD consists of 25.71 circuit kms of 220 kV Double Circuit (D/C) lines, 80.7 kms of 66kV lines, 342 circuit kms of 11kV and above lines and 890.89 kms of LT lines along with 491 transformers. Presently, there are 78 11 kV feeders in the network of Daman & Diu.

The present power allocation of Daman & Diu is approximately 325 MW from various generating stations including 92 MW from NTPC-SAIL joint venture at Bhilai and 39 MW from Ratnagiri Gas and Power Private Limited (RGPPL). At present, EDDD gets power from 220/66KV Vapi substation through 66kV D/C line and 220KV Vapi-Magarwada Central Sector line, and Diu gets power from 66kV Una substation through 66kV double circuit line emanating from 220 /66 kV Kansari substation of GETCO.

Earlier in FY 10-11, electricity drawal of EDDD was approximately 220 to 250 MW against the daily scheduled availability of 280 to 290 MW resulting in a surplus of 30 to 40 MW during FY 10-11. The current demand is primarily dependent on the HT and LT Industrial consumers contributing approx. 94% of the total sales in FY 10-11. The high demand from industrial consumers is primarily due to tax holiday benefit extended by the Govt of India in UT of Daman & Diu which has attracted a large number of industries to set up base in this area.

Considering the increase in demand from large industries, the demand is likely to reach to 330 MW by FY 2012-13. In view of the huge power demand in future, EDDD had proposed a number of schemes to be implemented during FY 11-12 and FY 12-13 for strengthening and augmentation of the transmission and distribution system in the territory. EDDD is also undertaking efforts to get higher allocation from the Central Generating Stations. The EDDD is undertaking all necessary actions to tie-up for long-term power purchase for meeting the deficit in the UT of Daman and Diu.

4 Energy Sales

1. Electricity Department of Daman & Diu caters to a diverse consumer mix constituting of domestic, commercial, HT Industry, LT Industry and agriculture consumers. The number of consumers as on 1st April 2011 under various categories is summarized in table below:

Table 1: Category wise number of Consumers

Particulars	FY 10-11
	Actual
Domestic	44862
Commercial	9040
Agriculture	1658
LT Industry	3589
HT/EHT Industry	811
Public Lighting	182
Public Water Works	77
Total Sales	**60,219**

2. Table 2 summarizes category wise actual energy sales from FY 06-07 to FY 10-11 for all categories. As can be seen, EDDD's overall energy sales are significantly dependent upon HT/EHT Industries to the extent of around 84%.

Table 2: Consumer category wise energy sales from FY 06-07 to FY 10-11

Particulars (MUs)	FY 06-07	FY 07-08	FY 08-09	FY 09-10	FY 10-11
	Actual	Actual	Actual	Actual	Actual
Domestic	34.92	51.26	56.43	57.92	62.20
LIGH	0.04	0.06	0.06	0.05	0.10
Commercial	20.74	25.42	26.43	27.73	29.30
Agriculture	0.21	0.25	2.47	2.53	2.60
LT Industry	140.08	140.68	134.92	139.12	151.00
HT/EHT Industry	1,023.88	1,053.80	1,099.11	1,236.51	1,381.80
Public Lighting	6.85	4.25	4.33	4.36	4.40

Particulars (MUs)	FY 06-07	FY 07-08	FY 08-09	FY 09-10	FY 10-11
	Actual	Actual	Actual	Actual	Actual
Public Water Works	0.62	0.82	1.05	0.88	0.90
Temp. Supply	4.28	0.36	0.55	0.00	0.65
Total Sales	**1,231.62**	**1,276.90**	**1,325.35**	**1,469.10**	**1,632.95**

3. Energy sold to various consumer categories over the past 5 years have grown at approximately 10% p.a., mainly contributed by increase in domestic, commercial and Industrial HT/EHT growth.

4. The EDDD is of the view that the factors affecting the actual consumption of electricity are numerous and often beyond the control of the utility including factors such as Government Policy, economic climate, weather conditions and force majeure events like natural disasters, etc. EDDD, therefore for projecting the category-wise consumption for the FY 10-11 and FY 11-12 has considered the past growth trends in each of the consumer category including growth trend in number of consumers and connected load.

5. The energy sales for FY 11-12 & FY 12-13 have been determined based on past years CAGR and actual energy sales in various consumer categories for the first five months of FY 2011-12. Since the energy sales in each category depends upon a number of factors like growth in economy, climate, Government policies, etc, normalization in sales has been undertaken in order to remove any wide fluctuations.

6. For FY 11-12, the actual five months energy sales have been analyzed. Actual energy sales for the five months of FY 11-12 was 712.03 MUs. The energy sales for the remaining seven months has been arrived at by considering the five months sale as well as the past years growth trend in each consumer category. EDDD would like to highlight that for estimating the sales to various consumer categories during FY 11-12 & FY 12-13 previous years CAGR trends have been considered as well as the likely new connections to be released by the EDDD.

7. For the domestic consumers, the EDD has projected the energy sales for FY 12-13 by applying three years' Compounded Annual Growth Rate (FY 07-08 to FY 10-11) on the estimated sales for FY 11-12. Whereas, a five-year (FY 06 to FY 11) CAGR has been considered for estimation of sales in commercial, LT industry and public lighting categories.

8. For the HT/EHT category, large variations have been seen in the growth on a year-to-year basis with variations in sale ranging from 2.90% to 17.51%. A CAGR of 7.78% is observed in the growth in energy consumption of HT/EHT category over past four years. Therefore, for FY 12-13, a growth rate of 7.78% has been considered for projecting the sales HT/EHT consumers in view of load enhancement of existing consumers as well as addition of new consumers.

9. Table 3 summarizes category wise revised energy sales for FY 11-12 and projected energy sales for FY 12-13 for EDDD. As can be observed, the overall energy sales in UT of Daman & Diu are significantly dependent upon HT industrial consumption.

10. EDDD submits to the Hon'ble Commission to approve the energy sales forecasted herein.

Table 3: Projected Category wise Energy Sales (MU) for FY 10-11 & FY 11-12

Energy Sales	FY 11-12	Adjusted	FY 12-13
	Estimated	CAGR	Projected
Domestic	66.00	6.66%	70.40
LIGH	0.10	4.56%	0.10
Commercial	31.00	4.71%	32.46
Agriculture	2.74	2.60%	2.82
LT Industry	154.61	1.67%	157.19
HT/EHT Industry	1,480.00	7.78%	1,595.18
Public Lighting	4.75	1.82%	4.84
Public Water Works	0.92	0.00%	0.92
Temp. Supply	0.70	11.93%	0.78
Total Sales	**1,740.82**		**1,864.68**

5 T&D Loss Reduction

1. The EDDD has achieved a significant reduction in transmission & distribution losses. The EDDD would like to submit that the system improvement works executed every year under the planned schemes as well as increase in energy sales quantum at higher voltages have resulted in the reduction of T & D losses in its distribution area.

2. EDDD has considered the T&D loss of 9.95% for FY 11-12 as against the target of 9.75% approved by the Commission. Reduction of T&D below 10% involves significant amount of capital expenditure and it is EDDD's endeavor to bring it below 10% in the subsequent years. Subsequently, EDDD proposes to reduce the T&D losses to 9.70% for FY 12-13 as summarized in Table 4 below:

Table 4: T&D Losses

	FY11-12 Estimated	FY12-13 Projected
T&D Losses	9.95%	9.70%

3. Considering the proposed capital expenditure in transmission and distribution network during FY 12-13, the EDDD expects to reduce the losses by approximately 0.25% in FY 12-13.

4. The EDDD would like to bring in the notice of the Honorable Commission that the T&D losses of the Daman & Diu is one of the lowest in the country and it's quite difficult to reduce losses by more than 0.25% p.a., due to low base loss level of 9.95% estimated for FY 11-12 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.

5. The EDDD submits to the Commission to approve the T&D losses submitted herein.

6 Energy Requirement of the System

1. Overall energy sales to various consumer categories are estimated to grow at approximately 6.61% and 7.12% during FY 11-12 and FY 12-13 respectively. Thus, the overall energy requirement at EDDD's periphery is projected to be 1933 MUs and 2065 MUs in FY 11-12 and FY 12-13 respectively.

2. The increased in energy requirement is on account of higher sales but has been partially offset due to reduction of proposed T&D losses.

Table 5: Energy Requirement of the System

Energy Requirement	FY11-12	FY12-13
	Revised Estimates	Projected
Sales (MUs)	1,741	1,865
Add: Losses (MUs)	192	200
T&D Losses	***9.95%***	***9.70%***
Energy Required at Periphery (MUs)	1,933	2,065
Energy Available (MUs)	2,074	2,165
Surplus Power Available/Sold (MUs)	141	100

7 Energy Availability

1. Daman & Diu being a Union Territory with no generating stations of its own, mainly relies on the firm and infirm allocations of power from Central Generating Stations like Korba, Vindyachal, Kahalgaon, Kawas, Tarapur and Kakrapar atomic power stations of NPCIL etc. to meet its energy requirement.

2. The EDDD for the purpose of estimation of the power availability during FY 11-12 and FY 12-13 has considered the following sources of power:

   - NTPC Western Region Generating Stations;
   - NTPC Eastern Region Generating Stations;
   - NSPCL (NTPC-SAIL Power Company Ltd);
   - Nuclear Power Corporation of India Limited;

- Private sector power generating entities;
- Renewable energy sources (solar and non-solar); and
- Other market sources such Unscheduled Interchange (UI) and Indian Energy Exchange.

3. The Petitioner has allocation from Western as well as Eastern region power generating stations including coal, gas and nuclear power stations. However, for meeting the supply-demand gap during the peak hours, the Petitioner has relied on energy exchange and over-drawal from the grid (UI).

4. For projecting the energy availability for FY 11-12, six (6) months actual power purchase has been considered. For projection of FY 12-13 energy availability, firm and infirm allocation from various generating stations has been considered. Detailed methodology for projecting the power availability to the Petitioner from various sources is summarised below.

7.1 Power Purchase

1. Daman & Diu has firm and infirm allocations in Central Sector Generating Stations of NTPC, Nuclear Power Corporation of India Ltd (NPCIL), NTPC Sail Power Company Ltd (NSPCL) and Ratnagiri Gas and Power Private Limited (RGPPL).

2. Since first six months of FY 11-12 have already elapsed, the actual power purchase data for the same is available. As per the actual power purchased data for the first six months of FY 11-12, power purchase from various sources was 1029.19 MUs and Rs. 359.38 Crore was incurred towards power purchase cost (details for 6 months power purchase of EDDD are enclosed in Format 4). The power availability for remaining six months i.e. October 2011 to March 2012 has been estimated based on weighted average of revised allocation issued by the Western Region Power Committee (WRPC) dated 01 April 2011, 8 June 2011, 30 August, 2011, 26 October 2011 and 28 October 2011. The energy allocation from various generating stations is summarized in table below:

Table 6: Energy Allocation from Central Generating Stations

Source	FY 11-12		FY 12-13 (Projected)	
	DD Allocation (MW)	Avg DD Allocation (%)	DD Allocation (MW)	Avg DD Allocation (%)
Western Region				
KSTPP	52.02	2.48%	52.61	2.51%
VSTPP-I	13.73	1.09%	14.42	1.14%
VSTPP-II	10.04	1.00%	10.60	1.06%
VSTPP- III	12.12	1.21%	12.70	1.27%
KAWAS	30.99	4.72%	30.99	4.72%
JGPP	31.31	4.76%	31.31	4.76%
NSPCL – Bhilai	91.50	18.30%	91.50	18.30%
KSTPP-III	5.89	1.18%	6.24	1.25%
Sipat	14.15	0.85%	15.00	0.90%
Ratnagiri	39.34	2.00%	39.34	2.00%
Subtotal	**301.09**		**304.71**	
Eastern Region				
KHSTPP-II	1.30	0.13%	1.30	0.13%
Subtotal	**2.00**		**2.00**	
NPCIL				
KAPPS	6.49	1.47%	8.30	1.89%
TAPP 3&4	12.70	1.18%	13.40	1.24%
Subtotal	**19.19**		**21.69**	
Grand Total	**322.28**		**328.40**	

3. Actual power purchase in first six months of FY 11-12 and revised power allocation of 92 MW from NTPC-SAIL Bhilai power plant has been considered while estimating the power availability from this plant during FY 11-12.

4. Additional allocation of 39MW of power from Ratnagiri Gas and Power Private Limited has also been considered while estimating the power purchase from October 2011 to March 2012.

5. For projecting the power availability for FY 12-13, EDDD has considered average allocation of firm and infirm power from the western region generation stations (NTPC and NPCIL) as per the allocation specified in the notification no's. WRPC/Comml-I/6/Alloc/2011/ dated 28 October 2011of

Western Regional Power Committee. For projecting the power purchase from eastern region NTPC generating stations, an allocation of 1.30 MW from KhSTPP has been taken into account.

6. Additionally, EDDD has 92 MW allocations from NSPCL Bhilai power stations. Energy availability from NSPCL Bhilai power stations for full year has been considered for projecting power purchase during FY 12-13.

7. Power purchase quantum from the NTPC stations for the second half of the current year and FY 12-13 has been calculated based on the installed capacity of each plant and by applying the average of previous four and half years (FY 08 to FY 11, FY 12 first six months) PLF as mentioned in the REA to calculate the plant-wise gross generation. For NSPCL, an average PLF of 90% has been considered in line with the actual PLF for the first six months of FY 11-12.

8. For gas based generating stations i.e. Kawas (KGPP) and Gandhar (GGPP) weighted average PLF of FY 08-09, FY 09-10, FY 10-11 and FY 11-12 (for the first six months) have been taken into account.

9. Auxiliary consumption of 9% and 3% has been considered for estimating the gross generation from coal and gas based generating stations respectively.

10. For FY 11-12, EDDD has considered power purchase of 3 MUs and 15 MUs from solar and non-solar renewable energy sources respectively as per the JERC's Procurement of Renewable Energy Regulations, 2010 as well as approved by the Commission in the Tariff order for FY 11-12. Further, EDDD has made the provision of power purchase from the renewable sources (solar and non solar) in FY 12-13 as well.

11. Though the availability of power shall increase due to additions in allocation of power from various resources, EDDD will have to still procure power from market and other sources to meet its energy requirement during the deficit period in a year. For the FY 12-13, short-term procurement of power of 12 MUs has been considered to meet the demand of the consumers though out the year.

12. Actual external transmission losses (PGCIL losses) on power purchase for the period March 2011 to September 2011 was 3.61%. Transmission losses for the FY 10-11was recorded as 4.61%. The Petitioner would like to submit to the Commission that the Petitioner has little control over the PGCIL losses. Therefore, for computing the power availability at the periphery, 3.90%

weighted average external transmission losses have been applied on the gross power purchase for FY 11-12 and FY 2012-13.

13.

14. Table 7 below depicts the station wise power purchase for FY 11-12 and FY 12-

Table 7: Power Purchase Quantum

Source (MUs)	FY 11-12	FY 12-13
	Revised Estimates	Projected
Western Region		
KSTPP	375.33	393.17
VSTPP-I	99.88	103.36
VSTPP-II	74.07	77.35
VSTPP- III	96.46	94.15
KAWAS	198.22	161.36
JGPP	209.37	181.06
NTPC-SAIL Bhilai	651.32	656.46
KSTPP-III	28.12	20.94
Sipat	97.51	109.81
RGPPL	133.71	267.42
Subtotal	**1963.99**	2065.09
Eastern Region		
KHSTPP-II	7.81	7.07
Subtotal	7.81	**7.07**
NPCIL		
KAPPS	38.56	31.33
TAPP 3&4	76.29	71.38
Subtotal	**114.86**	**102.71**
Power purchase - Other Sources		
Power purchase from Indian E. Exchange	0.00	12.00
UI	53.89	
Solar	3.00	8.78
Non Solar	15.00	57.04
Subtotal	**71.89**	**77.82**
Transmission Losses	83.48	87.85
Total Power Purchase	**2074.36**	**2164.83**

15. The Petitioner submits to the Commission to approve the Power Purchase level estimated in table above.

7.2 Energy Requirement & Availability

1. Based on the data on estimated & projected sales and power purchase, an Energy Balance has been prepared to assess the T&D losses in FY 11-12 and FY 12-13.

Table 8: Energy Balance

Energy Balance	FY11-12	FY12-13
	Revised Estimates	Projected
Sales (MUs)	1,741	1,865
Add: Losses (MUs)	192	200
T&D Losses	***9.95%***	***9.70%***
Energy Required at Periphery (MUs)	1,933	2,065
Energy Available (MUs)	2,074	2,165
Surplus Power Available/Sold (MUs)	141	100

7.3 Power Purchase Cost

1. The cost of purchase from the central generating stations for FY 11-12 and FY 12-13 is estimated based on the following assumptions:

   - The cost of power purchase for FY 11-12 are based on actual power purchase bills, including Fuel Purchase Adjustment (FPA), received by the EDDD during the first six months of FY 11-12. Each element of the power purchase cost i.e. fixed, variable, FPA and other cost have been estimated for each generating station by considering 6 months (Apr 11 to Sep 11) actual cost incurred by the EDDD (copies of the power purchase cost is enclosed at Annexure 2). The projection for remaining six months has been done on pro-rata basis by considering the actual power purchase cost of the first six months of FY 11-12.

- Fixed cost for FY 12-13 has been projected considering a 10% escalation over the estimated fixed cost for various stations for FY 11-12. The escalation has been considered based on the impact of new Tariff Regulations FY 2009-14 issued by CERC for computation of tariff for Central Generating Stations.
- Variable cost (inclusive of FPA Charges) for each NTPC generating stations for FY 12-13 have been projected based on the actual average variable cost and fuel price adjustment per unit for the first six months of FY 11-12. An escalation of 16% has been assumed for projecting the variable cost for FY 12-13 keeping in view of the escalation of approximately 16% on the actual variable cost of power purchase over the first six months of FY 11-12. **The actual average variable cost (NTPC, NPCIL & KHSTPP II) for FY 10-11 was Rs. 1.51 per unit as against Rs. 1.76 per unit for the first six months of FY 11-12.**
- The EDDD has projected other charges (tax, incentives, etc) for FY 12-13 at similar level as estimated for full year of FY 11-12.
- For nuclear plants i.e. KAPPS and TAPP Units 3 & 4, single part tariff with 11% escalation on the actual per unit charges for FY 11-12 have been considered for FY 12-13.
- For NTPC-SAIL Bhilai unit 1 & 2, fixed, variable and other charges have been projected for the entire FY 11-12 based on the actual cost for first six months of FY 11-12. An escalation of 16% for increase in fuel cost has been taken into consideration for projecting the power purchase cost from the said plant.
- For power purchase from renewable energy sources, Commission's approved tariff for solar and non-solar power in the Tariff Order has been taken into account for the remaining six months of FY 11-12 and for the entire period of FY 12-13.
- During FY 11-12, though EDDD had excess power, EDDD had to overdraw power from the grid during the peak hours for meeting the demand of the consumers. EDDD has purchased energy under UI in the first six months at the rate of Rs. 5.80 per unit.
- Based on the short-term purchase rate in the past years, the short term purchase from Indian E. Exchange for FY 12-13 has been assumed at Rs. 4.32.

- EDDD had surplus power during FY 11-12 on account of additional allocation of 39MW of power from RGPPL and revised allocation of 95 MW from NTPC-SAIL generating station.

2. EDDD would like to bring into the notice of Hon'ble Commission that EDDD has recently received communication from NTPC and PGCIL regarding anticipated arrears to be paid in FY 12-13. Thereof, EDDD has separately estimated arrears of Rs. 28 Crs (NTPC Rs. 25 Crs & PGCIL Rs 3 Crs) in the power purchase cost of FY 12-13.

3. The Total Power Purchase cost from various sources for FY 11-12 and FY 12-13 is summarized in Table below:

Table 9: Power Purchase Cost for FY 11-12 (in Rs. Crore)

Source	Units (MUs)	Fixed Charges	Variable Charges	FPA charges	Other Charges	Total	Per Unit Cost
Western Region							
KSTPP	375.33	12.89	26.96	9.95	2.04	51.84	1.38
VSTPP-I	99.88	4.59	8.25	4.26	1.64	18.75	1.88
VSTPP-II	74.07	3.76	5.85	3.55	0.90	14.06	1.90
VSTPP- III	96.46	9.18	10.06	2.84	1.21	23.28	2.41
KAWAS	198.22	14.67	22.09	30.80	1.06	68.62	3.46
JGPP	209.37	22.38	31.99	23.24	1.36	78.98	3.77
NTPC-SAIL Bhilai	651.32	105.66	109.41	0.00	9.97	225.04	3.46
KSTPP-III	28.12	5.81	3.63	0.00	0.09	9.52	3.39
Sipat	97.51	8.98	8.93	0.42	0.85	19.19	1.97
RGPPL	133.71	17.60	25.84	0.00	0.00	43.44	3.25
Subtotal	**1963.99**	**205.50**	**253.01**	**75.07**	**19.14**	**552.72**	**2.81**
Eastern Region							
KHSTPP-II	7.81	0.93	1.14	0.92	0.07	3.07	3.93
Subtotal	**7.81**	**0.93**	**1.14**	**0.92**	**0.07**	**3.07**	**3.93**
NPCIL							
KAPPS	38.56	0.00	7.80	0.49	0.10	8.39	2.18
TAPP 3&4	76.29	0.00	30.70	0.00	-0.04	30.66	4.02
Subtotal	**114.86**	**0.00**	**38.50**	**0.49**	**0.07**	**39.06**	**3.40**
Power purchase from other sources							
Bilateral	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Power purchase from Indian E. Exchange	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Source	Units (MUs)	Fixed Charges	Variable Charges	FPA charges	Other Charges	Total	Per Unit Cost
Banking	0.00	0.00	0.00	0.00	0.00	0.00	0.00
UI	53.89	0.00	31.25	0.00	0.00	31.25	5.80
Solar	3.00	0.00	5.10	0.00	0.00	5.10	16.99
Non Solar	15.00	0.00	5.85	0.00	0.00	5.85	3.90
Subtotal	**71.89**	**0.00**	**42.20**	**0.00**	**0.00**	**42.20**	**5.87**
(-) External Losses	83.48						
Total	**2074.36**	**206.43**	**334.86**	**76.48**	**19.27**	**637.04**	**3.07**

Table 10: Power Purchase Cost for FY 12-13 (in Rs. Crore)

Source	Units (MU)	Fixed Charges	Variable Charges	FPA charges	Other Charges	Total	Per Unit Cost
Western Region							
KSTPP	393.17	14.17	42.82		2.04	59.03	1.50
VSTPP-I	103.36	5.05	14.52		1.64	21.21	2.05
VSTPP-II	77.35	4.13	10.91		0.90	15.94	2.06
VSTPP- III	94.15	10.09	14.96		1.21	26.27	2.79
KAWAS	161.36	16.13	61.35		1.06	78.55	4.87
JGPP	181.06	24.62	64.07		1.36	90.05	4.97
NTPC-SAIL Bhilai	656.46	116.22	126.92		9.97	253.11	3.86
KSTPP-III	20.94	6.39	4.21		0.09	10.68	5.10
Sipat	109.81	9.88	10.85		0.85	21.58	1.97
Ratnagiri	267.42	19.36	29.97		0.00	49.33	1.84
Subtotal	**2065.09**	**226.05**	**380.58**	**0.00**	**19.14**	**625.76**	**3.03**
Eastern Region							
KHSTPP-II	7.07	1.03	2.39		0.07	3.49	4.94
Subtotal	**7.07**	**1.03**	**2.39**	**0.00**	**0.07**	**3.49**	**4.94**
NPCIL							
KAPPS	31.33	0.00	7.48		0.10	7.58	2.42
TAPP 3&4	71.38	0.00	30.70		0.00	30.70	4.30
Subtotal	**102.71**	**0.00**	**38.18**	**0.00**	**0.10**	**38.28**	**3.73**
Power purchase from Other Sources							
Bilateral	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Power purchase from Indian E. Exchange	12.00	0.00	5.18	0.00	0.00	5.18	4.32

Source	Units (MU)	Fixed Charges	Variable Charges	FPA charges	Other Charges	Total	Per Unit Cost
Banking	0.00	0.00	0.00	0.00	0.00	0.00	0.00
UI	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Solar	8.78	0.00	14.91	0.00	0.00	14.91	16.99
Non Solar	57.04	0.00	22.24	0.00	0.00	22.24	3.90
Subtotal	**77.82**	**0.00**	**42.34**	**0.00**	**0.00**	**42.34**	**5.44**
Arrears from NTPC and PGCIL			28.00			28.00	
(-) External Losses	87.85						
Total	**2164.83**	**227.08**	**491.48**	**0.00**	**19.31**	**737.87**	**3.41**

7.4 Transmission and Other Charges

1. Transmission charges payable to PGCIL are based on the total capacity allocation in the transmission network. EDDD has a mix of firm and infirm capacity allocations from various Central Generating Stations which is revised by the Ministry of Power at regular intervals. Therefore, considering the changing capacity allocation, EDDD has estimated the transmission charges for FY 11-12 based on the actual transmission charges for six months of FY 11-12 and pro-rata allocation of the same for remaining six months.

2. For projecting the PGCIL transmission charges for FY 12-13, an escalation of 15% over the estimated FY 11-12 transmission charges has been considered in view of the increase in transmission charges. Further, EDDD has taken into account the additional capacity share in the new stations while estimating the Inter-State transmission charges for ensuing year.

Table 11: Total Power Purchase Cost for FY 11-12 & FY 12-13

Particulars	FY 11-12 (Revised Estimate)			FY 12-13 (Projected)		
	Energy available at DD Periphery (MUs)	Total Cost (Rs. Cr)	Per Unit Cost (Rs/kWh)	Energy available at DD Periphery (MUs)	Total Cost (Rs. Cr)	Per Unit Cost (Rs/kWh)
Gross Power Purchase Cost	2074.36	637.04	3.07	2164.83	737.87	3.41
PGCIL charges		38.08			43.79	

Particulars	FY 11-12 (Revised Estimate)			FY 12-13 (Projected)		
	Energy available at DD Periphery (MUs)	Total Cost (Rs. Cr)	Per Unit Cost (Rs/kWh)	Energy available at DD Periphery (MUs)	Total Cost (Rs. Cr)	Per Unit Cost (Rs/kWh)
Open access charges		0.08			0.15	
Other charges		3.95			3.95	
Total Power Purchase Cost (including Transmission Cost)	**2074.36**	**679.15**	**3.27**	**2164.83**	**785.76**	**3.63**

8 Operation & Maintenance Costs

1. Operation and Maintenance expenses comprise of the following heads:
   - **Employees Expenses** which includes the basic pay, dearness pay, dearness allowances, house rent allowances, and other allowances paid to the staff;
   - **Repair and Maintenance (R&M) Expenses**, which include all expenditure incurred on the maintenance and upkeep of transmission and distribution assets; and
   - **Administrative and General Expenses**, which include all expenditure incurred in operating a business such as telephone charges, consultancy and regulatory fee etc.

2. In the past, the Petitioner has not maintain segregation between the three cost elements for the purpose of accounting and had booked all cost including salaries, medical expenses, office expenses, domestic traveling expenses, and other charges towards repairs and supply of materials under the operation and maintenance expense head. However, efforts have been made by EDDD to segregate the O&M expenses under commercially accepted principles. In this regard a specialized accounting firm has been appointed by EDDD. The specialized firm has already identified and segregated all the elements of cost to be covered under the three broad categories of O&M expenses from FY 08-09 to FY 10-11. The said work will be finalized soon and output of the same will be submitted to the Hon'ble Commission.

3. Summary of the past five year operation and maintenance expense is summarized in table below:

Table 12: Operation & Maintenance Expense (Rs. Crore)

Year	O&M Expense (Rs. Crore)
	Actual
FY 06-07	7.02
FY 07-08	6.47
FY 08-09	8.47
FY 09-10	9.35
FY 10-11	11.17

4. The total O&M expense for FY 10-11 is Rs. 11.17 Crore as compared to Rs. 9.35 Crore in FY 2009-10, an increase of over Rs. 1.82 Crore. The increase in operation and maintenance cost in FY 10-11 was primarily due to increase in R&M expenses during FY 10-11.

5. The methodology adopted by EDDD for projecting the values of each component of the O&M expense for FY 11-12 & FY 12-13 has been explained in the following section.

8.1 Employee Expense

1. The Employee expense estimated by the Petitioner comprise of all costs related to employees like basic salary, dearness allowances, medical cost, leave travel allowances, honorarium, etc. But the Petitioner does not maintain cost related to leave salary contribution, pension and terminal benefits of the employee in the employee cost. Therefore, the Petitioner will claim these expenses relating to the employee cost at an appropriate time when the respective cost items become payable.

2. Actual employee expense of EDDD for the first six months of FY11-12 was Rs. 2.47 Crore. Based on the various expense head related to employee booked during six months of FY 11-12, EDDD has estimated the total employee cost for full year of FY 11-12 as Rs. 5.16 Crore. Salary expenses for FY 12-13 is estimated based on the five year moving average of the WPI Index published by the

Office of Economic Adviser, Government of India. The year on year growth rate from FY 04-05 as per the WPI index is presented in the table below:

Table 13: WPI Index

Financial Year	FY 12-13	FY 11-12	FY 10-11	FY 09-10	FY 08-09	FY 07-08	FY 06-07	FY 05-06	FY 04-05
Index	163.28	152.65	143.32	130.81	126.02	116.63	111.35	104.47	100.00
Growth in 5 year moving average	6.69%	6.96%	6.51%	5.78%	5.95%				

3. For projecting the employee cost for FY 12-13, the Petitioner has considered a 6.69% escalation over the estimated employee cost for FY 11-12. Total employee cost of EDDD for FY 12-13 is estimated at Rs. 5.50.

4. EDDD submits to the Hon'ble Commission to approve the employee costs as projected by the Petitioner.

8.2 Repairs & Maintenance Expense

1. Repairs and maintenance expense comprise of expenses incurred by the Petitioner with regard to maintenance and upkeep of the transmission and distribution system. Adequate R&M activities help in reduction of transmission and distribution losses and breakdowns in the system.

2. The actual R&M expense for FY 10-11 for EDDD was Rs. 6.20 Crore. Whereas, the Commission has approved R&M expense of Rs. 6.26 Crore for FY 11-12.

3. For FY 11-12, EDDD has considered the R&M expense of Rs. 6.51 Crore for FY 11-12 and has projected a 5% increase in the R&M expense for FY 12-13. The R&M cost for FY 10-11, FY 11-12 and FY 12-13 is summarized in table below:

Table 14: Repairs & Maintenance Expense (Rs. Crore)

R&M Expenditure (Rs. Crs)	FY 10-11	FY11-12	FY12-13
	Actual	Revised Estimate	Projected
R&M Cost	6.20	6.51	6.84

4. EDDD requests the Commission to approve the R&M expense without any disallowances as the same is necessary for proper maintenance and strengthening of the system and quality of supply in the region in order to ensure consumer satisfaction. Further, Commission should considered the fcat that price of most of the basic commodities like iron, copper, zinc and cement used in the repairs and maintenance has increased tremendously over the last 5 years.

8.3 Administration & General Expense

1. Administrative and General (A&G) expense comprise of various sub-heads including the following:

   - Rent
   - Rates and taxes
   - Travel and conveyance expenses
   - Consultancy and regulatory fees
   - Energy auditing fee and consumer indexing
   - Insurance and other administration expenses

2. The actual A&G expense for FY 10-11 is Rs. 2.00 Crore. The Commission has approved A&G expense of Rs. 2.17 Crore for FY 11-12, which includes consultancy and regulatory expense.

3. EDDD has considered the A&G expense of Rs. 2.17 Crore for FY 11-12 as approved by the Commission and has projected a 10% increase in the A&G expense for FY 12-13. For FY 12-13, the A&G expense would include on account of regulatory, consultancy, energy auditing and consumer indexing fees.

4. The Regulatory & Consultancy expenses for the FY 12-13 has been projected as per the existing agreements, contracts with the consultants and the best estimates for the future regulatory and consultancy works. For FY 12-13 total A&G expenses have been projected at Rs. 2.39 Crore on account of A&G expenses.

5. In line with the above, the Hon'ble Commission is requested to approve the A&G costs without any disallowance.

8.4 Total Operation and Maintenance Expense

Based on the employee cost, R&M and A&G expense projected above, the total O&M expenditure for FY 11-12 and FY 12-13 is summarized in table below. The Hon'ble Commission is requested to approve the total O&M expense as projected by EDDD.

Table 15: Total O&M Expense (Rs. Crore)

O&M Expenditure	FY 10-11	FY11-12	FY12-13
	Estimated	Revised Estimate	Projected
Employee Cost	4.69	5.16	5.50
R&M Cost	6.20	6.51	6.84
A&G Expenditure	0.28	2.17	2.39
Total O&M Expenditure	**11.17**	**13.84**	**14.73**

9 Capital Expenditure Plan

1. Considering the increase in demand from HT & LT consumers, EDDD would be required to undertake significant capital expenditure for system augmentation and strengthening. System augmentation would not only help EDDD in handling increased load but would also ensure better quality of supply and network reliability to the consumers. Though, EDDD T&D loss levels are very low, the capital expenditure would help in maintaining the low T&D loss levels and further reduction in the same.

2. EDDD's each year prepares an Annual Plan for the capital investment for new schemes and continuing schemes which it plans to incur in the ensuing year. Due to lower allocation of funds from the Government of India as against the requested funds by EDDD, the actual capital expenditure has been lower than the planned capital expenditure in the previous years. Therefore, the capital expenditure for the subsequent years is higher as it includes the schemes for which the funds were not allocated in the previous capital expenditure proposal. A summary of the proposed and approved capital expenditure for the past three years is summarized below:

Table 16: Proposed and Approved Capital Expenditure

Annual Capital Expenditure Plan (Rs. Cr)	FY 09-10	FY 10-11	FY 11-12
Proposed funds for Capex	61.38	90.65	40.55
Approved funds Capex – GOI	21.41	21.53	31.00
Disallowance in Capex	**39.97**	**69.12**	**9.55**

3. For FY 12-13, the EDDD has proposed a capital expenditure of Rs. 40 Crore under various existing and new schemes. The draft Annual Plan is being prepared and will be submitted to the Hon'ble Commission shortly.

4. The capitalization of new schemes has been considered at 40% of the planned capital expenditure in the same year while the balance 60% has been capitalized in subsequent year. A summary of the capital expenditure and capitalization for FY 11-12 and FY 12-13 is summarized in Table below:

Table 17: Capital Expenditure & Capitalization for FY 10-11 and FY 11-12

Capital Expenditure & Capitalization	FY 11-12	FY 12-13
(Rs. Crore)	Revised Estimate	Projected
Capital Expenditure	31.00	40.00
Asset Capitalization	28.15	33.46
Capital Work in Progress	29.10	35.64

10 Gross Fixed Assets

1. EDDD had Rs. 288.52 Crore of Opening Gross Fixed Assets (GFA) in FY 11-12. EDDD has further proposed capital expenditure of Rs. 31 Crore during FY 11-12.

2. Based on the actual capitalization of the first six months and estimated addition in GFA during the remaining six months of FY 11-12, assets amounting to Rs. 28.15 Crore have been estimated to be added in the GFA during FY 11-12.

3. For FY 12-13, EDDD has proposed a capital expenditure of Rs. 40 Crore of which Rs. 33.46 Crore assets (including CWIP) have been estimated be capitalized.

4. A summary of the Opening and Closing GFA and capitalization has been summarized in table below:

Table 18: Opening and Closing GFA (in Rs. Crore)

Particulars	Opening GFA	Additions during the Year	Closing GFA
FY 2010-11 (Actual)	277.37	11.15	288.52
FY 2011-12 (Revised Estimate)	288.52	28.15	316.66
FY 2012-13 (Projected)	316.66	33.46	350.12

11 Depreciation

1. Depreciation is charged on the basis of straight-line method, on the GFA in use at the beginning of the year and addition in assets during the financial year. The depreciation is based on the original cost of the Gross Fixed Assets.

2. Based on the CERC norms, EDDD has applied the following depreciation rates as specified by CERC in the Tariff Regulations for FY 2009-14.

Asset Category	Depreciation Rate %
Plant & Machinery	5.28%
Buildings	3.34%
Vehicles	9.50%
Furniture & Fixtures	6.33%
Computers & Others	6.33%
Land	0.00%

3. Depreciation for the current year and FY 12-13 is determined by applying aforesaid category-wise assets depreciation rates on the opening balance of Gross Fixed assets and average of the addition during the year projected for FY

11-12 and FY 12-13. The table below summarizes the asset-wise depreciation considered claimed by EDDD:

Table 19: Depreciation (in Rs. Crore)

Particulars	FY 10-11	FY 11-12	FY 12-13
	Actual	Revised Estimate	Projected
Opening GFA	277.37	288.52	316.66
Additions	11.15	28.15	33.46
Closing GFA	**288.52**	**316.66**	**350.12**
Average GFA	282.54	302.59	333.39
Depreciation Amount	14.09	15.13	16.76
Average Depreciation Rate	*4.9%*	*4.8%*	*4.8%*

12 Interest & Finance Costs

12.1 Interest on Long-term / Capital Loans

1. The entire capital expenditure of EDDD since its inception has been funded by the Central Government through budgetary support each year. Therefore, the department does not have any loan liabilities.

2. However, EDDD is now migrating from a Government owned utility to a commercial utility under the Electricity Act, 2003, it has come under the direction of the Joint Electricity Regulatory Commission. It has been assumed that EDDD would work as a separate commercial utility and therefore would be utilizing the debt facilities from FY 2011-12 onwards.

3. Assets capitalized during FY 12-13 have been considered based on normative debt-equity ratio of 70:30 as per the JERC (Terms and Conditions for Determination of Tariff) Regulations, 2009.

4. Further, EDDD would like to submit that EDDD has engaged a specialized CA firm for preparing the Accounts and Asset Depreciation Register and will also maintain proper audited accounts for any long term loans availed during the ensuing years.

5. Interest rate of 14.75% has been considered for computation of interest cost for long-term loans which is similar to the prevailing SBI Prime Lending Rate. Details of the loan amounts and interest cost computed for FY 12-13 is summarized in Table below:

Table 20: Total Interest on Long-term Loans

Interest on Long-term Loans	FY 12-13
Rs Crore	Projected
Opening Loan	0.00
Addition in Loan (70% of Asset Capitalization)	23.42
Repayment of Loan (10% of Opening Balance)	1.17
Closing Loan Amount	**22.55**
Average Loan	11.12
Interest Rate on Loan	*14.75%*
Total Interest Cost on Long-term Loans	**1.64**

12.2 Interest on Working Capital Borrowings

1. EDDD has computed the Interest on Working Capital for FY 11-12 and FY 12-11-13 based on normative basis as per the JERC (Terms and Conditions for Determination of Tariff) Regulations, 2009.

2. Since EDDD is an integrated utility, the working capital requirement for FY 11-12 and FY 12-13 has been computed considering the following parameters:

   a. One month Power purchase cost
   b. One month Employees cost
   c. One month Administration & general expenses
   d. One month Repair & Maintenance expenses.
   e. Sum of two month requirement for meeting Fuel cost.

3. A rate of interest of 14.75% has been considered on the working capital requirement, being the SBI Prime Lending Rate as on 1st April of the year. This is in line with the JERC (Terms and Conditions for Determination of Tariff) Regulations, 2009 which states that *"The rate of interest on working capital shall be*

equal to the short term Prime Lending Rate of State Bank of India on the 1st April of the relevant financial year."

4. The normative interest on working capital for FY 11-12 and FY 12-13 considering the above methodology is summarized in Table 21 below:

Table 21: Interest on Working Capital

Interest on Working Capital	FY 11-12	FY 12-13
Rs Crore	Revised Estimate	Projected
One Month Power Purchase Cost	56.60	65.48
One Month Employee Cost	0.43	0.45
One Month R&M Cost	0.54	0.57
One Month A&G Cost	0.18	0.20
Two Month Fuel Cost	-	-
Total Working Capital requirement	**57.75**	**66.71**
Rate of Interest on Working Capital	14.75%	14.75%
Total Interest on Working Capital	**8.52**	**9.84**

13 Return on Equity

1. As per the JERC (Terms and Conditions for Determination of Tariff) Regulations, 2009, EDDD is entitled for a Return on Equity (RoE). However, the Rate of return has not been specified in the Regulations issued by JERC.

2. As per the CERC revised Tariff Regulations FY 2009-14, Generation and Transmission utilities are entitled for a pre-tax Return on Equity of 15.50% with an additional return of 0.50% for projects completing before a specified timeline. EDDD would like to submit that Distribution Business is perceived to be a higher risk business as compared with Generation and Transmission Business. Therefore, a higher RoE should be provided for the Distribution Business given that EDDD is primarily a transmission and distribution utility with no generating assets.

3. However, considering that the other State Electricity Regulatory Commissions in India are allowing a RoE of 16% for distribution business, EDDD has claimed RoE of 16% for FY 12-13 in its ARR Petition.

4. Return on equity has been computed based on 30% normative equity for capitalization during FY 12-13 in line with the JERC (Terms and Conditions for Determination of Tariff) Regulations, 2009.

5. Return on equity for EDDD computed for FY 12-13 has been detailed in Table 22 below:

Table 22: Proposed Return on Equity

Return	FY 12-13
Rs Crore	Projected
Opening Equity	0.00
Addition in Equity (30% of Asset Capitalization)	10.04
Closing Equity Amount	**10.04**
Average Equity Amount	5.02
Rate of Return on Equity	*16.00%*
Return on Equity	**0.80**

14 Provision for Bad & Doubtful Debts

1. EDDD has considered provision for Bad and Doubtful Debts as 1% of the revenue for FY 11-12 and FY 12-13.

2. EDDD requests the Hon'ble Commission to approve the provision for bad & doubtful debts as summarized in the Table below:

Table 23: Provision for Bad & Doubtful debts

Provision for Bad & Doubtful Debts	FY 10-11	FY 11-12
Rs Crore	Revised Estimate	Projected
Provision for Bad &Doubtful Debts as % of Receivables	1.00%	1.00%
Provision for Bad & Doubtful Debts	**6.84**	**5.81***

* Revenue from proposed tariff has not been included in this.

15 Non-Tariff & Other Income

1. Non-tariff income includes meter rent/service line rentals, recovery for theft of power/malpractices, miscellaneous charges from consumers. Other income includes Interest on Staff loans & advances, Delayed payment charges from consumers, Interest on advances to suppliers/contractors, and Miscellaneous receipts.

2. For estimating the non-tariff income for FY 11-12 an increase of 5% p.a. has been considered over the estimated FY 10-11 non-tariff income.

3. For projecting the non-tariff income for FY 12-13 an increase of 5% p.a. has been considered over the estimated FY 11-12 non-tariff income. Details of the year wise non-tariff income is provided in table below:

Table 24: Non-tariff Income

Particulars (Rs Crore)	FY 10-11	FY 11-12	FY 12-13
	Actual	Revised Estimate	Projected
Non-tariff Income	8.96	9.41	9.88

16 Aggregate Revenue Requirement

1. Table 25 summarizes EDDD's Aggregate Revenue Requirement for FY 12-13.

2. Aggregate Revenue Requirement for FY 12-13 is estimated to be Rs 794.30 Crore.

Table 25: Aggregate Revenue Requirement

Annual Revenue Requirement	FY11-12	FY12-13
Rs. Crs	Revised Estimates	Projected
Power Purchase Cost	679.15	785.76
O&M Expense	13.84	14.73
Depreciation	15.13	16.76

Annual Revenue Requirement	FY11-12	FY12-13
Rs. Crs	Revised Estimates	Projected
Interest Cost on Long-term Capital Loans	-	1.64
Interest on Working Capital Loans	8.52	9.84
Return on Equity	-	0.80
Provision for Bad Debt	6.84	5.81
Less: Non-Tariff Income	9.41	9.88
Annual Revenue Requirement	**714.07**	**825.46**

17 Revenue at Existing Tariff

1. Revenue from sale of power for FY 11-12 & FY 12-13 is determined based on the energy sales estimated in Table 2 and category wise tariff prevalent in the UT of Daman & Diu.

2. Revenue from sale of power at existing tariff is estimated to be Rs. 683.99 Crore (inclusive Fuel price surcharge) and Rs. 580.79 Crore in FY 11-12 and FY 12-13 respectively, as shown in Table 26. The estimated revenue for FY 11-12 is based on the first five months actual revenue from sale of power at the earlier tariff structure, four month additional revenue from June 2011 to September 2011 raised through the supplementary bills issued to consumers on account of the new tariff as per the retail tariff notified by the Commission vide the Tariff Order for FY 11-12 dated 3rd October, 2011.

3. The fuel purchase adjustment surcharge approved by the Hon'ble Commission is also being levied to Commercial, LT and HT consumers during the period June 2011 to September 2011 @ 0.99 paise per unit and has also been estimated for the remaining six months of revenue estimation for FY 11-12.

4. Further, EDDD has computed the revenue for the full year of FY 12-13 based on the tariff notified by the Hon'ble Commission in the Tariff Order for FY 11-12 dated 3rd October, 2011.

5. During FY 11-12, EDDD has estimated a surplus of 141 MUs based on the energy available and sale to various consumer categories. EDDD has sold surplus power during the first 6 months of FY 11-12 at an average rate of Rs. 2.75 per unit. Revenue from surplus power available for sale during the remaining six months of FY 11-12 and FY 12-13 has been computed at the same rate.

6. The table below summarizes the revenue from sale of power at existing tariff for FY 11-12 & FY 12-13:

Table 26: Revenue from Sale of Power at Existing Tariff (Rs. Crore)

Revenue @ Existing Tariff	FY 11-12	FY 12-13*
(Rs Crore)	Revised Estimated	Proposed
Domestic	8.39	8.95
LIG	0.01	0.01
Commercial	10.49	8.35
Agriculture	0.33	0.34
LT Industry	55.12	43.01
HT/EHT Industry	608.33	518.75
Public Lighting	0.60	0.62
Public Water Works	0.32	0.32
Temp. Supply	0.39	0.43
Total Sales	**683.99**	**580.79**
Revenue from surplus power	38.83	27.46
Total Revenue	**722.82**	**608.24**

*This is calculated at the existing tariff without surcharge based PPCA formula.

18 Coverage of Revenue Gap

1. Revenue from sale of power with-in the UT (category-wise) is determined in Tble 26.

2. Table 27 summarizes the revenue gap at existing tariff at Rs. 217.22 Crs for FY 12-13. Moreover, EDDD would like to submit that the EDDD has estimated a surplus of Rs. 8.75 Crs for the FY 11-12.

Table 27: Revenue Gap & Proposed Revenue

Particulars (Rs. Crore)	FY 11-12	FY12-13
	Revised Estimates	Projected
Total ARR	**714.07**	**825.46**
Revenue @ Existing Tariff	683.99*	580.79**
Revenue from Surplus Power Sale	38.83	27.46
Total Revenue	**722.82**	**608.24**
Revenue (Gap) /Surplus	**8.75**	**(217.22)**
Covered by		
Additional Revenue @ Proposed Tariff	0.00	217.50
Total	**0.00**	**217.50**
Net Surplus	**8.75**	**0.28**

* Estimated Revenue from existing tariff for FY 11-12 includes sale of power as per existing tariff rate approved by JERC by Tariff Order 3 October 2011 and PPCA charges of Rs. 0.99 per unit of consumption for the industrial consumers but exclusive of domestic, agriculture and BPL category of consumers.

** Projected Revenue for sale of power for FY 12-13 includes the tariff rates as approved by JERC by Tariff Order 3 October 2011 exclusive of PPCA charge for all the consumer categories.

19 Average Cost of Supply

1. Table 28 summarizes Average Cost of supply and total average realization at the existing tariff approved by the Hon'ble Commission.

Table 28: Average Cost of Supply & Revenue Realization

Average Realization & Cost of Supply	FY 11-12	FY 12-13
(Rs/Unit)	Existing Tariff	Existing Tariff
Average Cost of Supply of EDDD	3.79	4.20
Average Realization *	3.84**	3.10***
Revenue Gap at Existing Tariff	0.05	(1.11)
Additional revenue at Proposed Tariff depicted in Table 29		1.11

* Includes Revenue Realization from Surplus Power Sale available to EDDD

** For Average Realization for FY11-12, revenue realizations calculated as per the existing tariff rate approved by JERC vide tariff order dated 3 October 2011and PPCA charges of Re. 0.99/unit levied on all consumers, except domestic, agriculture and BPL category of consumers.

*** For Average Realization for FY12-13, revenue realizations calculated only as per the existing tariff rates approved by JERC vide tariff order dated 3 October 2011, excluding PPCA charges.

20 New Initiatives

A) Introduction of Time of Day (ToD) tariff

For certain hours in a day, the electricity demand is at the peak due to the simultaneous requirement of electricity from industrial, commercial and domestic consumers. The peak hours usually vary from around 9 a.m. to 11 a.m. in the morning and 6 p.m. to 9 p.m. in the evening. To meet this peak demand, the Electricity Department of Daman and Diu has to procure power from the market at a high price which creates an additional burden on the Utility and ultimately leads to overall tariff hike for consumers. To reduce the demand during the peak hours, Utilities often offer incentives to customers who are willing to shift or move a portion of their consumption to off-peak hours. Also the proposed off peak hours shall be from 0.00 AM to 6:00 AM.

In this context, EDDD will like to add that Time of Day (TOD) tariff, is recognized globally across electricity industries, as an important Demand Side Management (DSM) measure which is used as a means of incentivizing consumers to shift a portion of their loads from peak times to off-peak times, thereby improving the system load factor by reducing the demand on the system during peak period. The TOD tariffs send price signals to consumers that reflect the underlying cost of generating, transmitting and supplying electricity, and enables resources to be allocated more judiciously and efficiently. Further price based demand response can reduce or shape consumer demand particularly to reduce load at peak hours on the electricity system. Hence, TOD tariff assumes importance in the context of propagating and implementing DSM and achieving energy efficiency in the country

In most of the states TOD tariff has been introduced as a means of DSM measures and load factor improvement. The SERCs in India have followed diverse mechanisms in designing the TOD tariff, with different tiers, different number of periods within a day, and different rates applicable to these periods.

As a first step towards better demand side management, EDDD has proposed the time of day tariff in this petition for HT consumers having sanctioned demand of 900 KVA and above. The EDDD has proposed energy charges of Rs 7.50 per unit for the all consumers having sanctioned demand of 900 KVA and above. Also, during the off peak hours, the EDDD has proposed a rebate of Rs. 0.80 per unit in the energy charges approved by the Commission in the respective category of the consumers having sanctioned demand of 900 KVA and above

Further, EDDD would like to submit that due to TOD tariff, consumers who reduce their consumption during peak hours will shift 50% (average) of this consumption to other time of the day. It will also help the EDDD in reduction in energy supplied during peak hours through short term sources (costly power).

B) Power Factor Rebate

The petitioner would like to submit before the Hon'ble Commission that currently levies a surcharge if the power factor of the consumer is less than 0.90 for every 0.01 of the power factor decrease, 0.5% of the total units consumed will be charged as extra at the rate of 600 paise/unit in the HT category. Moving a step further, EDDD would like to propose a power factor rebate in the HT category. If the power factor of the consumer is more than 0.95, for every 0.01 of the power factor increase, 0.5% of the total units consumed will be charged at a rebate rate of 300 paise/unit will be given on every 0.5% of the total units consumed.

Further, EDDD would like to submit that in the adjoining states of Maharashtra and Gujarat the consumers having power factor more than 0.95 is getting the rebate in the electricity bills and no incentive is given to the consumers having power factor in the range of 0.90 to 0.95.

C) New Domestic Slab

EDDD requests the Hon'ble Commission to accept its proposal to create a new slab in the domestic category, namely "601 units and above" slab.

All the domestic consumers who are consuming more than 600 units per month will be shifted to this slab. The proposed energy charges applicable for this slab will be Rs. 3.00/unit as against the existing tariff rate of Rs. 3.25/unit. The proposed energy charges applicable for this slab are being detailed in the proposed tariff structure for 2012-13.

Upon approval of the above domestic slab, the existing "401 units and above" slab of the will be termed as "401 units to 600 units" slab. Domestic consumers consuming 400 to 600 units per month will be under this slab.

21 Tariff Proposal for FY 12-13

1. EDDD submits to the Commission that the sales to LT industrial and HT/EHT category form approximately 94% of the total sales within the UT of Daman & Diu. However, the per unit revenue realization from this category is below the average cost of supply leading to revenue losses for EDDD. Further, the average cost of supply has also increased over the past years due to increase in power purchase cost. Therefore, the current two-part Tariff structure is inadequate to compensate for the loss of revenue.

2. Table below summarizes the existing and proposed tariff structure for various consumer categories.

Table 29: Proposed Tariff Structure for FY 12-13

Tariff Structure	Existing		Proposed		
	Energy Charges (Rs/kWh)	Fixed Charges	Energy Charges ((Rs/kWh)	Fixed Charges	
Low Income Group		Rs. 24/connection /month		Rs. 10/connection /month	
LT-D/Domestic					
Ist 50 Units	1.60		1.00		*
51 to 200 Units	2.25		1.60		
201 to 400 Units	3.00		2.00		
401 to 600 Units	3.25		2.25		
601 units and above	3.25		3.00		
LT-C/Commercial					
1st 100 Units	2.25		2.25		
Beyond 100 Units	3.25		3.25		
LT- Ag/ Agriculture					
Upto 10 HP per unit	2.50		0.55		*
Beyond 10 HP per unit	2.65		0.85		
LTP Motive Power(Including Public Water Work)					
Upto 20 HP of Connected Load	2.50		3.55		
Above 20 HP Connected Load	2.60	Rs. 25/HP	3.65	Rs. 25/HP	
LT-PL/Public Lighting					
Public Lighting	3.32		3.32		
HT					
HTC General Industrial / Motive Power 11KV or 66KV having CMD above 100KVA					

Tariff Structure	Existing		Proposed		
	Energy Charges (Rs/kWh)	Fixed Charges	Energy Charges ((Rs/kWh)	Fixed Charges	
50000 units	2.95	Rs. 60 /KVA	4.21	Rs.120 / KVA	For connected load >500KVA, Rs.500/KVA
50000 to 5 lakh units	3.10	Rs. 60 /KVA	4.36	Rs.120 /KVA	
Beyond 5 lakh units	3.15	Rs. 60 /KVA	4.41	Rs. 120 /KVA	
Penal Charges for exceeding contracted demand	8.00	Rs. 180/KVA	8.00	Rs. 360/KVA	Beyond 500 KVA Rs. 1500/KVA
HT Industrial(Ferro Metallurgical / Steel Melting/ Steel Rerolling Power Intensive)					
First 300 Units per KVA	2.05	Rs. 450/KVA	3.31	Rs. 600/KVA	
Next 200 units per KVA	3.05	Rs. 450/KVA	4.31	Rs. 600/KVA	
Above 500 units per KVA	3.55	Rs. 450/KVA	4.81	Rs. 600/KVA	
Penal Charges for exceeding contracted demand	8.00	Rs. 900/KVA	8.00	Rs. 900/KVA	
Temporary Supply					
	Fixed / Demand charges (if any) plus energy charges (for relevant slab if any) under corresponding permanent supply category plus 50% of both				

* It is proposed to have the existing tariff of the year 2010-11 during 2012-13. As the total consumption of domestic and agriculture category of consumer is less than 4% in the overall consumption.

1. New domestic consumer slab "600 units and above" has been proposed with tariff rate of Rs. 3.00/unit as against the existing tariff rate of Rs. 3.25/unit.

2. EDDD would like to submit that due to rapid industrialization the power demand in its territory has increased considerably in the industrial consumer categories. Almost 96% of the total electricity in the EDDD territory is consumed by the industrial categories and remaining 4% by the other consumer categories such as domestic, agriculture, commercial and street lighting. Due to heavy demand of power from the industrial consumers, the that power purchase cost of the utility has increased exorbitantly as the utility had to source more power from the costlier sources such as UI and Power Exchange.

3. The revised tariff issued by the Hon'ble Commission vide its Tariff Order dated 03 October 2011 mainly affects the domestic and BPL categories which

contributes only 4% and 0.15% respectively of the total power consumption in the EDDD territory.

The Petitioner submits that such abnormal increase in the tariff for the above two categories of the territory is a tariff shock and is against the principle of the National Electricity Policy and Electricity Act 2003. The abstract from the National Electricity Policy provides that cross subsidy needs to be reduced **gradually**.

Clause 5.5.3 of National Electricity Policy

5.5.3 Over the last few decades cross-subsidies have increased to unsustainable levels. Cross-subsidies hide inefficiencies and losses in operations. *There is urgent need to correct this imbalance without giving tariff shock to consumers.* The existing cross-subsidies for other categories of consumers would need to be reduced progressively and gradually**.**

This clearly suggests that the increment in the tariff should be gradual so that the same should not be act as a tariff shock to the domestic consumers.

Further the National Tariff Policy provides for setting tariff based on the geographical location. DNH is pre-dominantly a Tribal and poor people dominated area. Most of domestic consumers will find it difficult to pay even the basic cost of electricity. It is submitted that Government of India has declared Tax Holiday and various such incentives to attract industries to set up their business in Dadra and Nagar Haveli, so that these tribal & poor people get jobs/work and can earn their livelihoods. The dominant users of the total power consumption are industries of the territory and are responsible for the increase in power purchase cost over the years due to huge industrialization taking place in the territory.

In view of the above the Commission is requested to review the tariff fixed for these two consumer category (Domestic and BPL) in the previous Tariff Order and restore it to the previous level.

4. The agriculture consumption in the EDDD territory is only 0.15% of the total power consumption, which is negligible. Due to industrial development in the area, it is very difficult to sustain the agriculture activities in this region. In such a situation huge increase in tariff from 55 paisa/unit to 250/unit and 85 paisa/unit to 265 paisa/unit will definitely vanish the agriculture activities from the EDDD territory, when the Government of India is keen to encourage the agricultural development in the country in order to become self-reliant on food production and improve the economic conditions of the poor farmers.

5. The Hon'ble has granted the Power Purchase Cost Adjustment (PPCA) charges in the previous tariff order. However, ED-ENH is concerned about the levy of the PPCA charges to the domestic consumer at the same rate as applicable for the industrial categories. The implication of PPCA charges to the domestic categories will again overburden the domestic consumers in addition the raise in the tariff rates. Besides in order to meet the requirement of power demand for the industries, the department is purchasing power from Power Exchange, UI as well as in the process of short term/long term procurement. The rates of electricity from these sources are higher than the rates of NTPC, NPCIL etc. This is being done keeping in view the requirement of existing demand of power from the industries. Hence this additional burden should not pass to the domestic categories. Industries are ready to bear the burden of the same. Besides they have clearly stated that this additional burden shall not be passed on the domestic category and hence they shall be excluded from PPCA formula. In nut shell the power purchase cost is increasing on account of industries and not because of domestic consumers. Hence it is humbly submitted to exclude the domestic consumers from PPCA formula.

   In some of the states in India, domestic category of consumers is excluded from PPCA formula. The applicability of formula for recovery of PPCA in Jharkhand is as under:

   "The FPPCA will be recovered in the form on an incremental energy charge (Rs./kWh) and shall be recovered from all consumers other than agriculture and rural domestic category of consumers".

   Therefore, it is humbly requested to exclude the domestic, LIG and agriculture consumers from the PPCA formula.

3. Based on the revenue from proposed tariff, EDDD would have a surplus of Rs. 0.28 Crore during FY 12-13 which can be utilized towards any variation in projected expenses as against actual expenses during the period.

4. EDDD, requests the Hon'ble Commission to approve the fuel purchase adjustment formula for FY 12-13 as well on monthly basis, which can take care of any variation in the ARR over and above the approved level by the Commission for FY 12-13. The same has been pronounced in OP No. 1 of 2011 by APTEL on 11 November 2011.

22 Prayer

1. EDDD requests the Hon'ble Commission to:

    - Admit the Aggregate Revenue Requirement of FY 12-13 and the Tariff Revision Proposal for FY 12-13 as submitted herewith.

    - Approve the Aggregate Revenue Requirement of FY 12-13 as well as the revised estimates for FY 11-12.

    - Make the proposed Retail Supply Tariffs applicable from April 1, 2012.

    - Condone any inadvertent omissions/ errors/ shortcomings and permit the Petitioner to add/ change/ modify/ alter this filing and make further submissions as may be required at a future date.

    - Submit necessary additional information required by the Commission during the processing of this petition.

    - And pass such other and further orders as are deemed fit and proper in the facts and circumstances of the case

23 FORMATS

Electricity Department of Daman & Diu

ANNUAL REVENUE REQUIREMENT FOR THE YEAR 2011-12

Revenue from Existing Tariff

Format -28

2012-13

S.No.	Category of Consumers	No. of Consumers	Energy Sales (MU)	Contracted Max Demand KVA	Demand Charges (Rs/KVA)	Tariff Rates (P/unit)	Demand Charges/other charges (Rs. In Crore)	Energy Charges (Rs. In Crore)	Surcharge Amount (Rs. In Crore)	Total Revenues (Rs. In Crore)
1	Domestic									
	Up to 50 units		17.63		0	160		2.24		2.24
	51-200 units		17.63		0	225		2.24		2.24
	201-400 units		21.86		0	300		2.78		2.78
	Beyond 401 units		13.40		0	325		1.70		1.70
	Total Domestic	**47,215**	**70.50**		**0**			**8.96**		**8.96**
2	NRS/Commercial									
	0-100 units		14.93		0	225		4.12		4.12
	above 100 units		17.53		0	325		4.84		4.84
	Total Commercial	**9,514**	**32.46**		**0**			**8.35**		**8.96**
3	**Public Lighting**	**854**	**4.84**		**4**	**332**	**0.00**	**0.62**		**0.62**
4	**Public Water Work**	**77**	**0.92**		**60**	**260**	**0.00**	**0.32**		**0.32**
5	**Industrial**									
a)	HT									
i)	**HT (A) General**	**836**	**1484.25**		**60**		**20.01**	**455.74**		**475.75**
	0-50000		385.90		60	295		113.84		
	50000-5 lakh		816.34		60	310		253.06		
	Above 5 lakh		282.01		60	315		88.83		
ii)	**HT (B) Furnace**	**18**	**111.72**		**450**		**2.88**	**40.04**		**42.92**
	0-300		0.04			205		0.01		
	301-500		0.03			305		0.01		
	Above 500		111.65			355		40.02		
	Total HT Industrial	**854**	**1595.97**				**22.89**	**495.78**		**518.67**
b)	**LT**	**3,777**	**157.19**				**2.10**	**40.82**		**42.92**
	upto 20HP		4.72			250	0.00	1.18		1.18
	above 20HP		152.47		25	260	2.10	39.64		41.74
	Total HT+LT Industrial	**4631**	**1753.15**				**24.99**	**536.60**		**561.59**
6	**Agriculture Consumption**	**1,745**	**2.82**		**0**			**0.34**		**0.34**
7	**Total Revenue Billed**	**64036**	**1864.68**				**24.99**	**555.19**		**580.79**
8	Meter rent									
9	Arrear									
10	Delayed Payment Charges									
11	Diff. of Arrears & Credit									
12	**Grand Total**	**64,036**	**1864.68**				**24.99**	**555.19**		**580.79**

1. Figures of HT Industrial for Connected load are in KVA

Proposed Tariff Schedule

TARIFF SCHEDULE

General Terms and Condition:

1. These tariffs shall be applicable with effect from the date 1st April 2012.
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 the power supply are applicable for supply at one point only.
4. Supply to consumers having contracted load between 100kVA to 2500kVA will be generally at 11kV and for more than 2500kVA at 66kV. For separate feeders, the consumer will get contracted load upto 4000 KVA. Further, the consumer who required load more than above, the voltage of supply shall be at 66kV 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 3 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 installations presently running on without capacitors.
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 services shall be revised by applying the appropriate higher tariffs from the date of connection unless convincing reason are adduced thereof for adopting a different period. The imposition of this higher tariff shall not relive 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 rights to disconnect the supply as per provision of the Supply code.
9. Fixed charges and demand charges, wherever applicable, will be charged on prorata basis from the date of release of connection.

10. Demand charges and fixed charges, wherever applicable, will be double as and when bi-monthly billing is carried out, Similarly slabs of energy consumption will also be considered accordingly in case of bi-monthly billing.

11. In case of exceeding the contract demand for 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.

12. 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 the 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 paise per unit (kWh) charge for energy consumed during the month.

14. Delayed payment charges shall be applicable to all categories of consumers. Delayed payment charges of 2% per month (2% of the delayed Payment charges shall be charged on all arrears of the bill). In case of permanent disconnection, delayed payment charges will be charged only up to the month of permanent disconnection.

15. Power Purchase Cost Adjustment (PPCA) shall be applicable to all categories of consumers except domestic, LIG/BPL and Agriculture & Poultry categories. PPCA shall be applicable on monthly basis in line with the judgment made by Appellate Tribunal for Electricity vide order dated 11 November 2011.

The proposed category wise tariff schedule is given below:

1. Low Tension Supply:

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

Application to private houses, bungalows, clubs, hostels and hospitals run on noncommercial lines, charitable educational and religious institutions etc. for lights, fans, radios, domestic hating and other household appliances including water pumps up to 2 HP.

(i) Energy Charges:

First 50 units	-100 ps. per unit.
51 – 200 units	- 160 ps. per unit.
201 – 400 units	- 200 ps. per unit.
401 – 600 units	- 225 ps. per unit.
601 units and above	- 300 ps. per unit.

(b) Tariff LT –D/LIG:

Applicable to consumers of low income group with connected load 2X40 Watts only.

Energy Charges – Rs 10/- per services connection per Month.

NOTE: For any Unauthorized increase on 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:

This includes all categories which are not covered by other tariff categories.

Domestic Category, Power Supply to low Income Group, Industrial LT, HT/EHT Category (A&B), Agriculture and Poultry, Public Lighting.

Applicable for Shops, Offices, Restaurants, Bus Stations, Photo Studios, Laundries, Cinema Theatres, Industrial Lighting, clubs and other Commercial installations.

(i) Energy Charges:

First 100 units	-	225 ps. per unit.
Beyond -100 units	-	325 ps. per unit.

C. Tariff LT – INDUSTRIAL CATEGORY INCLUDING PUBLIC WATER WORKS:

Applicable to all low tension industrial and non-industrial motive power connections including PWD Water Works up to 99 HP.

(i) Energy Charges:

All connections up to 20HP of connected load	355 ps. Per unit
For all connections above 20HP and up to 99HP connected load	Fixed charges Rs. 25/- per HP/month or part thereof. PLUS 365 ps. Per unit of all units.

(ii) 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 charge. 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 with in the notice time, the connection to be liable for disconnection. ED – DD reserves 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

Applicable to all Industrial/Motive power consumers drawing through 11 kV and 66 kV systems having contract demand of 100 kVA and above.

(i) Demand Charges

For all KVA contract demand for first 50000 units	Rs. 120/- per KVA/ month or part thereof
50001 -5 LAKHS	Rs. 120/- per KVA/month or part thereof
Beyond 5 Lakhs units	Rs. 120/- per KVA/month or part Thereof

For connected load >500KVA,	Rs.500/KVA
Penalty charges for exceeding contract demand	Less than 500 KVA Rs. 360 per KVA of billing demand or part thereof Beyond 500 KVA Rs. 1500/KVA

PLUS

(ii) Energy charges for all units:

For all KVA contract demand for first 50000 units	421 Ps. Per unit.
50001 -5 LAKHS	436 ps. Per unit.
Beyond 5 Lakhs units	441 ps. Per unit.

(iii) Penalty Charges

Penalty charges @ 800 ps/unit/month

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 bases correlating the total consumption of the month with billing demand.

b. If industries are over drawing power by more than 20% of the power demand then there 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 surcharged at the rate of 600 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 with in the notice time, the connection will be liable for disconnection.

(v) Power Factor Rebate

If the power factor of the consumer is more than 0.95, for every 0.01 of the power factor increase, a rebate of 300 ps./unit will be given on every 0.5% of the total units consumed.

(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

First 300 Units per KVA	Rs. 600/- per KVA/ month or part thereof
Next 200 units per KVA	Rs. 600/- per KVA/month or part thereof
Above 500 units per KVA	Rs. 600/- per KVA/month or part thereof
For billing demand in excess of contact demand	Rs. 900 per KVA of billing demand or part there of

PLUS

(ii) Energy charges for all units:

First 300 Units per KVA	331 Ps. Per unit.
Next 200 units per KVA	431 ps. Per unit.
Above 500 units per KVA	481 ps. Per unit.

(iii) Penalty Charges

Penalty charges @ 800 ps/unit/month

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

(ii) If industries are over drawing power by more than 20% of the power demand then there 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 surcharged at the rate of 600 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 with in the notice time, the connection be liable for disconnections.

(v) Power Factor Rebate

If the power factor of the consumer is more than 0.95, for every 0.01 of the power factor increase, a rebate of 300 ps/unit will be given on every 0.5% of the total units consumed.

(vi) Billing demand

Billing demand will be the highest among the following

a. 100 kVA

b. 75% of the contract demand

c. Actual demand establishment.

3. Tariff LT-AG/Agriculture:

Agriculture or poultry loads up to 99 HP connected load will be considered in this category.

(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) 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 charge. 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 with in the notice time, the connection be liable for disconnection. ED DD 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:
Energy Charges - 332 ps. per unit

5. Temporary Supply:

Tariff for Temporary Connection shall be Fixed / Demand charges (if any) plus energy charges (for relevant slab if any) under corresponding permanent supply category plus 50% of both.

For multi-activity pursuit, applicable tariff for temporary connection shall be with reference to that of non-domestic category for permanent supply.

The Temporary Tariffs are applicable for temporary period of supply up to 1 (one) month, which can be extended for another period of supply up to maximum period of 2 years.

6. Other charges
1. Meter Rental Charges:

(**a) For Permanent supply:**
1. Single phase meter - Rs. 10/- per month or part thereof

2. Three phase meters - Rs. 25/- per month or part thereof

3. LT meter with M.D. Indicators - Rs. 200/- per month or part thereof

4. Tri- vector Meter - Rs. 500/- 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 LT - Rs. 50/-
(ii) Three phase LT - Rs. 100/-
(i) HT Consumer -Rs. 1000/-

3. (A) Service connection charges :

(i) Single phase LT - Rs. 250/-
(ii) Three phase LT - Rs. 1000/-

(iii) HT(First 500KVA) -Rs. 10000/-

(iv) HT (Beyond 500KVA) -Rs. 1000/-per 100KVA or part thereof

4. Extra Length Charge

(i) Single phase - Rs. 25/- per meter
(ii) Three phase - Rs. 50/-per meter

Extra length Chargeable will be beyond permissible 30 Meters free length from existing network for new connection for all categories except Agriculture. Free length in respect of New Agriculture consumer is 300 Meters.

5. Cost of HT Connection

Entire Cost of setting up HT connection would be borne by the consumer and the agreement period would be two years for the category. 15% supervision charges shall be recovered by EDDD.

6. Service connection charges for- Under Ground 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 all the 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.

7. Testing Fee for various Metering Equipments

S.No.	**Types of Metering Equipment**	**Fee Per Unit (in Rs.)**
1	1 – Ø Single Phase	100
2	3 – Ø Single Phase	300
3	3 – Ø Single Phase Tri-vector Meter (0.5 Class) Industrial LT Consumer	500
4	3 – Ø Three Phase Tri-vector Meter (0.5 Class) 11 KV HT Consumer	500
5	Three Phase Tri-Vector Meter (0.2 Class) 66 KV EHT Consumers	1000
6	Combined CTPT Unit for 11 kV Consumer	500
7	66 KV CT / PT Unit	500
8	Three Phase CT Block	300
9	CT Coil	100

8. Fees (Non- refundable) for submission of Test Report of wiring Completion

S.No.	**Types of Metering Equipment**	**Fee Per Unit (in Rs.)**
1	1 – Ø Single Phase Lighting / Domestic	10
2	3 – Ø Lighting / Domestic	25
3	1 – Ø Single Phase Lighting / Non Domestic	50
4	3 – Ø Three Phase Lighting /Non Domestic	100
5	Three Phase LT Industries	250
6	Single phase / Three phase Agriculture / Street light / Public Lighting & others.	50
7	HT Industries up to 500 KVA	1000
8	HT Industries up to 2500 KVA	5000
9	HT Industries above 2500 KVA	10000