

Aggregate Revenue Requirement &
Tariff Petition for FY 2012-13

Main Text & Formats (Volume I)
&
Annexure (Volume II)

Submitted to:

Joint Electricity Regulatory Commission
Gurgaon

By

ELECTRICITY DEPARTMENT OF DADRA & NAGAR
HAVELI



November 2011

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In this Petition:

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, Formats and Annexure (Volume II)

1 ARR & Tariff Petition for FY 12-13

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

Filing No.....

Case No.....

IN THE MATTER OF: Filing of Aggregate Revenue Requirement (ARR) for the
FY 12-13 for Union Territory of Dadra and Nagar Haveli
under Section 61, 62 and 64 of the Electricity Act, 2003

AND

IN THE MATTER OF Electricity Department of Dadra & Nagar Haveli
(hereinafter referred to as "ED-DNH" or "The Petitioner"
or "The Department")
..... Petitioner

The Applicant respectfully submits as under: -

1. The Electricity Department of Union Territory of Dadra & Nagar Haveli ("ED-DNH") is a statutory body engaged in the electricity transmission and distribution in the Union Territory of Dadra & Nagar Haveli. 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 61, 62 and 64 of the Act, ED-DNH is filing the current petition, in order to meet its financial requirements.
2. This is a Petition indicating the Aggregate Revenue Requirement (ARR) of ED-DNH and Tariff Revision Proposal of ED-DNH 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 (JERC) for the state of Goa and union territories had issued the first Tariff Order for Electricity Department of Dadra & Nagar Haveli (ED-DNH) on 1st November, 2010 and subsequently the second Tariff Order for FY 11-12 was issued on 13th September, 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. ED-DNH 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. ED-DNH 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;
 - c. Energy Requirement;
 - d. Determination of Aggregate Revenue Requirement (ARR) 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
-
- e. Determination of Gap between Revenue & Costs, Additional Revenue through the proposed Tariff Revision and the arrangements to cover the revenue gap; and
 - f. Tariff revision proposal for FY 12-13 to meet the Revenue Gap.

3 Introduction

The Electricity Department of Dadra & Nagar Haveli (ED-DNH) is engaged in the procurement, transmission and distribution of electricity to the various consumer categories in the UT of Dadra and Nagar Haveli. It does not have its own power generation stations. The bulk power supply is drawn from the Central Generating Stations in Western Region. ED-DNH 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 categories of consumer. The present transmission and distribution system of ED-DNH consists of 48.5 circuit km of 220 kV double circuit (D/C) lines, 154.6 km of 66 kV D/C lines, 637 circuit km of 11 kV lines and 1786 kms of LT lines along with 873 transformers.

The present firm and non-firm power allocation of Dadra & Nagar Haveli is approximately 650 MW from Central Generating Stations including 164 MW from NTPC-SAIL joint venture at Bhilai and 57 MW from Tarapur (TAP) and Kakrapar (KAP) Atomic Power Stations of Nuclear Power Corporation Limited (NPCL). Besides, ED-DNH has entered into a short term agreement with Tata Power Limited to supply 70 MW power from its Haldia Plant in West Bengal (120MW). Power supply from the said plant has been stated from October 2011. Further, ED-DNH is also expected to get power from NTPC Mauda Plant (Maharashtra), which is likely to start from FY 2012-13.

At present, the UT of Dadra & Nagar Haveli gets power from 220/66 kV Khadoli and Kharadpada substations through 220kV D/C line and 220kV Tarapur-Navasari Transmission line.

Earlier in FY 10-11, the average monthly electricity demand of ED-DNH was in the range of 496 to 596 MW against the monthly scheduled availability of 425 to 557 MW resulting in a power deficit of 9 to 125 MW during FY 10-11. ED-DNH has made the necessary arrangement with various power generation companies to meet the energy requirement in the UT of Dadra & Nagar Haveli for FY 11-12 and FY 12-13.

The power demand is primarily dependent on the HT and LT industrial consumers contributing approximately 98% 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 Dadra & Nagar Haveli which has attracted a large number of industries to set up their industry in this region.

Considering the increase in demand from large industries, the demand is likely to reach up to 4500 MUs by the end of FY 2012-13. In view of this huge power requirements, ED-DNH had proposed a number of schemes to be implemented during FY 11-12 to FY 12-13 for strengthening and augmentation of the transmission and distribution system in the territory.

ED-DNH has already signed power purchase agreements (PPAs) with NTPC for allocation of power from Kahalgaon Super Thermal Power Station (KhSTPS) –II, Vindychal Super Thermal Power Project (VSTPP) – IV Mauda Super Thermal Power Plant (MSTPP), North Karanpura Super Thermal Power Station (NKSTP), Barh Super Thermal Power Project (BSTPP) and Korba Super Thermal Power Project (KSTPP) – III. Power supply has already started from KhSTPS –II and KSTPP-III plants. Besides, ED-DNH has also shown its willingness for allocation of power for Vindychal Super Thermal Power Project (VSTPP) – V, Lara Super Thermal Power Project (LSTTP) and RGPPL Expansion II of NTPC. ED-DNH has also shown its interest for allocation of 50 MW power from the Ultra Mega Power Projects from Ministry of Power. Already the department has entered into short - term power purchase agreement with Tata Power (for one year) and Ratnagiri Gas and Power Pvt. Ltd. (RGPPL) for supply of 70 MW and 38MW power respectively. Power supply from these two utilities has started from October 2011. Firm and non-firm allocations from NTPC-SAIL Bhilai extension project has been increased to 164 MW.

Further, ED-DNH has taken all the necessary actions to tie-up for long-term power purchase to meet the power deficit in the UT of Dadra and Haveli. Bids had already invited under the competitive bidding process and a single bidder had responded. ED-DNH has requested the Hon'ble Commission to provide guidance on this issue. This matter is currently pending with the Hon'ble Commission.

4 Energy Sales

1. Electricity Department of Dadra & Nagar Haveli has a diverse consumer mix constituting of domestic, commercial, HT Industry, LT Industry and agriculture consumers. The number of consumers in various categories is summarized in table below:

Table 1: Category wise number of Consumers

Consumers	FY 10-11
	Actual
Domestic	32,326
LIGH	14,000
Commercial	6,683
Agriculture	1,023
LT Industry	2,548
HT/EHT Industry	811
Public Lighting	289
Temporary Supply	422
Total	58,102

2. Table 2 summarizes category wise actual energy sales from FY 06-07 to FY 10-11 for all the consumer segments. As can be seen, ED-DNH's overall energy sales are significantly dependent upon HT/EHT Industries to the extent of around 94%. Energy sold to various consumer categories over the past 5 years have grown at approximately 10% p.a., mainly contributed by increase in the industrial LT and HT/EHT sales.

Table 2: Category wise sales from FY 06-07 to FY 10-11

Sales (MUs)	FY 06-07	FY 07-08	FY 08-09	FY 09-10	FY 10-11
Domestic	33.00	41.00	41.00	47.00	54.13
Commercial	11.00	14.00	18.00	19.00	20.69
Agriculture	3.00	3.00	3.00	3.00	2.26
LT Industry	185.00	150.00	115.00	125.00	147.23

Sales (MUs)	FY 06-07	FY 07-08	FY 08-09	FY 09-10	FY 10-11
HT/EHT Industry	2204.00	2732.00	2889.00	3131.00	3668.28
Public Lighting	1.00	2.00	2.00	2.50	2.74
Temp. Supply			1.00	1.50	1.64
Total Sales	2,437.00	2,942.00	3,069.00	3,329.00	3,896.99

3. The ED-DNH 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. ED-DNH, therefore for projecting the category-wise consumption for the FY 10-11 and FY 12-13 has considered the past growth trends in each of the consumer category including growth trend in number of consumers and connected load.
4. Actual energy sales in the DNH periphery in the first six months of the FY 11-12 was 2,068.65 MUs and energy billed was Rs 676.98 Crore.
5. The energy sales for FY 11-12 & FY 12-13 have been determined based on CAGR for past four-year (i.e. FY 05-06 to FY 10-11) actual energy sales in various consumer categories. 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. A four-year CAGR has been considered for estimation of sales in domestic, commercial, HT/EHT industry and public lighting categories. For FY 11-12, the actual six month energy sales have also been analyzed and the trend in the growth of half yearly FY 11-12 sales is observed to be similar to the annual growth considered. Therefore, for estimating the sales to various consumer categories during FY 08-09 and FY 12-13, four-year CAGR has been considered.
7. For the LT industry category, large variations have been seen in the growth in the past. While a CAGR growth in the last three years is in LT industry category is 13.15%. However, the CAGR growth in LT industry category had declined in the last three years. Therefore, for FY 12-13, a reasonable growth rate of 7% has been considered for projecting the sales LT consumers. In case of stabilization or minor decline in sales in a few categories such as LIG and

agriculture, no growth has been considered while projecting for FY 12-13 energy sales.

Table 3: Category wise CAGR in Energy Sales in the past four years

Sales	CAGR (Four years)	Adjusted CAGR
Domestic	9.70%	12.00%
Commercial	17.12%	7.22%
Agriculture	-8.98%	0.00%
LT Industry	-0.62%	7.00%
HT/EHT Industry	10.32%	10.32%
Public Lighting	11.12%	11.12%
Temp. Supply		10.00%
Total Sales	9.82%	

8. Table 4 summarizes category wise revised energy sales for FY 11-12 and projected energy sales for FY 12-13 for ED-DNH. As can be observed, the overall energy sales in UT of Dadra & Nagar Haveli are significantly dependent upon LT and HT/EHT industrial consumption.
9. The Electricity Department of Dadra & Nagar Haveli submits to the Hon'ble Commission to approve the energy sales forecasted herein.

Table 4: Projected Category wise Energy Sales for FY 11-12 & FY 10-11

Sales (MUs)	FY 10-11	FY 11-12	FY 11-12	FY 12-13
	Actual	6 months actual	Revised Estimate	Projected
Domestic	54.13	37.14	64.99	71.30
Commercial	20.69	13.11	24.92	26.72
Agriculture	2.26	1.62	2.40	2.40
LT Industry	147.23	76.99	153.98	164.76
HT/EHT Industry	3668.28	1936.57	3,950.61	4,358.38
Public Lighting	2.74	2.41	4.10	4.55
Temp. Supply	1.64	0.80	1.68	1.70
Total Sales	3,896.99	2,068.65	4,202.68	4,629.81

5 T&D Loss Reduction

1. The ED-DNH has achieved a significant reduction in transmission & distribution losses. The ED-DNH would like to submit that the system improvement works executed every year under the plan schemes as well as increase in energy sales quantum at higher voltages has resulted in the reduction of T & D losses.
2. During FY 10-11, the ED-DNH had been able to achieve T&D loss level of 6.85%.
3. ED-DNH has considered the T&D loss of 6.50% for FY 11-12. ED-DNH proposes to reduce the T&D losses to 6.30% for FY 12-13 as summarized in Table 5 below:

Table 5: T&D Losses

T&D Losses	FY 10-11	FY 11-12	FY 12-13
	Actual	Revised Estimate	Projected
T&D Losses (%)	6.85%	6.50%	6.30%

4. Considering the proposed capital expenditure in transmission and distribution network during FY 10-11 and FY 12-13, the ED-DNH expects to reduce the losses by approximately 0.20% in FY 12-13.
5. The ED-DNH would like to bring in the notice of the Honorable Commission that the T&D losses of the Dadra & Nagar Haveli is one of the lowest in the country.
6. It's quite difficult to reduce losses by more than 0.2% p.a., due to low base loss level of 6.85% in Dadra & Nagar Haveli. It requires significant effort and resources to reduce losses even by 0.2%. 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.
7. The ED-DNH submits to the Commission to approve the T&D losses submitted herein.

6 Energy Requirement of the System

- Overall energy sales to various categories are estimated to grow at approximately 10.00% each year during FY 11-12 and FY 12-13. Thus, the overall energy requirement is projected to be 4,202.68 MU and 4,629.81 MU in FY 11-12 and FY 12-13 respectively, an increase of around 9% each year, as shown in Table 6.
- As depicted in Table 6, energy requirement of the Dadra & Nagar Haveli for FY 11-12 and FY 12-13 has increased by approximately 10% each year.

Table 6: Energy Requirement of the System

Energy Balance	FY10-11	FY11-12	FY12-13
	Actual	Revised Estimate	Projected
Sales (MU)	3,896.99	4,202.68	4,629.81
Add: T&D Losses (MU)	286.63	292.17	311.29
T&D Losses (%)	6.85%	6.50%	6.30%
Energy Required at Periphery (MU)	4,183.61	4,494.85	4,941.10
Energy Available (MU)	4,183.61	4,736.89	5,004.32
Surplus/ (Deficit) Power (MU)	0.00	242.05	63.22

7 Energy Availability

- Dadra & Nagar Haveli has no generating stations of its own and relies on the firm and infirm allocation of power from Central Generating Stations like Korba, Vinashyachal, Kahalgaon, Kawas, Sipat, Tarapur, Kakrapar etc. to meet its energy requirement.
- The ED-DNH 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 Companies

- Renewable energy sources – Solar and Non-Solar
 - Other market sources
3. The Petitioner has allocation from Western as well as Eastern region from 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). In FY 10-11, energy drawn from UI source formed a 10% of the total availability.
 4. The Petitioner would like to submit that due to coal shortages in the NTPC power plants and NSPCL Bhopal, the department has faced shortage in power supply in the first six months of FY 11-12. To meet the demand of the consumers especially industrial consumers, ED-DNH had to purchase power on the short term basis from UI and Indian Power Exchange at a high cost. As a result of that the average power purchase cost of ED-DNH has increased significantly in FY 11-12. In comparison to the average power purchase cost of Rs. 2.81 in FY 10-11, the average power cost during first six months of FY 11-12 has increased to Rs. 3.67 per unit (including transmission charges). As the power supply position from the NTPC and NCPCL Bhopal plants has improved in the second half of FY 11-12 and power supply from Tata Power Haldia Plant and RGPPL have started from the month of October 2011, the average power purchase cost of ED-DNH is expected to come down in the latter half of FY 11-12.
 5. For projecting of the energy availability for FY 11-12, six 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 summarized below.

7.1 Power Purchase

1. Dadra & Nagar Haveli has firm and infirm allocated share in Central Sector Generating Stations (CSGS) of NTPC, Nuclear Power Corporation of India Ltd (NPCIL), and NTPC Sail Power Company Ltd (NSPCL).

2. Since first half of FY 11-12 has already elapsed, the power purchase data for the first six months is available. As per the actual power purchased data for the first six months of FY 11-12, power purchase from various sources was 2147.36 MUs and Rs. 787.85 Crore was incurred towards power purchase cost (details for 6 months power purchase of ED-DNH are enclosed in Format 4). Therefore, the power availability for remaining six months i.e. October 2011 to March 2012 has been estimated based on average of firm and infirm allocation of ED-DNH notified by the Western Region Power Committee (WRPC) dated 1 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 7: Energy Allocation from Central Generating Stations

Name of the plant	Weighted average infirm allocation	Weighted Average firm allocation	Weighted average total allocation
KSTPP	67.78	0.00	67.78
VSTPP-I	43.10	5.00	48.10
VSTPP-II	34.76	4.00	38.76
VSTPP- III	35.18	6.00	41.18
KAWAS	55.99	25.00	80.99
JGPP	56.46	2.00	58.46
Sipat – II	33.50	4.00	37.50
Sipat – I	28.81	3.00	31.81
KHSTPP – II	0.00	3.00	3.00
NPCIL – KAPS	10.41	2.00	12.41
NPCIL - TAPP 3&4	38.06	7.00	45.06
Total	404.05	61.00	465.05

3. Additional power allocation of 70 MW from Tata Power – Haldia Plant (for six months) has been considered for the purpose of FY 11-12 power availability projection.
4. Additional power allocation of 38 MW from RGPPL has also been considered from October 2011 to March 2012.
5. Additional power allocation of 37.5 MW from Sipat – II has been considered for FY 12-13.

6. Actual units purchased in the first six months of FY 11-12 and 164 MW from NTPC-SAIL Bhilai has been considered for the remaining six months of FY 11-12.
7. For projecting the power availability for FY 12-13, Dadra & Nagar Haveli has considered allocation of firm and infirm power from the western region generation stations (NTPC and NPCIL) as per the allocation specified in the notification no. WRPC/Comml/I/6/Alloc/2011 dated 28 October 2011 of Western Regional Power Committee. For projecting the power purchase from eastern region NTPC generating stations, allocation from KhSTPP has been considered.
8. ED-DNH has 164 MW of firm and infirm allocations from 2X250 MW NSPCL Bhilai power plant. Entire allocation of 164 MW has been considered for projecting power availability during FY 12-13.
9. Additionally, power purchase from NTPC Mauda Power Plant in Maharashtra has been taken into account by ED-DNH, wherein ED-DNH has 25 MW of allocation out of the total installed capacity of 1000 (2X500) MW. The first unit of plant will be commissioned during early FY 12-13.
10. Power purchase quantum from the NTPC stations and NPCIL 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 PLF as mentioned in the REA to calculate the plant-wise gross generation. For NSPCL, an average PLF of 82% has been considered in line with the actual PLF for first six months of the plant during FY 11-12
11. For gas based generating stations i.e. Kawas (KGPP) and Gandhar (GGPP) average gross generation of FY 07-08, FY 08-09, FY 09-10, FY 10-12 and FY 11-12 (six months) has been considered.
12. Auxiliary consumption of 9% and 3% has been considered for coal and gas based generating stations, respectively.
13. ED-DNH has also made the provision of power purchase from the renewable sources (solar and non solar) for FY 11-12 and FY 12-13 as specified in the procurement of renewable energy regulations of JERC 2010 as well as approved by the Commission in the Tariff order for FY 11-12.

14. Actual external transmission losses (PGCIL losses) on power purchase for FY 10-11 was 4.61% and six months of FY 11-12 was 3.65% of gross power purchase. The Petitioner would like to submit to the Commission that the Petitioner has no control over the PGCIL losses. Therefore, for computing the power availability at the periphery, 3.90% external transmission losses have been applied on the gross power purchase for FY 11-12 and FY 12-13 respectively. Table 8 below lists down station wise actual power purchase for FY 10-11 and estimated power purchase for FY 11-12 and FY 12-13.

Table 8: Power Purchase for FY 11-12 and FY 12-13

Source (MUs)	FY 11-12 Revised Estimate	FY 12 -13 Projected
KSTPP 1&2	495.36	526.57
KSTPS 3	146.45	180.01
VSTPP-I	345.77	352.95
VSTPP-II	299.77	292.58
VSTPP- III	314.29	315.71
KAWAS	431.10	423.41
JGPP	368.44	337.67
Sipat- I	262.71	232.81
Sipat – II	0.00	141.43
NTPC-SAIL Bhilai	1046.03	1135.74
RGPPL	137.05	274.11
Tata Power – Haldia	282.53	282.00
Mauda		125.71
Subtotal	4129.52	4621.24
Eastern Region		
KHSTPP-2	18.10	18.97
Subtotal	18.10	18.97
NPCIL		
KAPS	98.24	88.71
TAPS	311.69	327.65
Subtotal	409.94	416.35
Power purchase from Other Sources		
Bilateral	0.00	0.00
Power purchase from Indian E. Exchange	139.91	0.00

Source (MUs)	FY 11-12 Revised Estimate	FY 12 -13 Projected
Banking	0.00	0.00
UI	137.66	0.00
Solar	14.00	20.11
Non-Solar	80.00	130.73
Subtotal	371.57	150.84
External Losses	192.24	203.09
Total Power Purchase	4736.89	5004.32

15. The Petitioner requests the Commission to approve the Power Purchase quantum estimated in table above.

7.2 Energy Requirement & Availability

1. Based on the data on estimated & projected sales and purchase obtained, an Energy Balance has been prepared to assess the T&D losses in FY 10-11 and FY 11-12.

Table 9: Energy Balance

Energy Balance	FY10-11	FY11-12	FY12-13
	Actual	Revised Estimate	Projected
Sales (MU)	3,896.99	4,202.68	4,629.81
Add: T&D Losses (MU)	286.63	292.17	311.29
T&D Losses (%)	6.85%	6.50%	6.30%
Energy Required at Periphery (MU)	4,183.61	4,494.85	4,941.10
Energy Available (MU)	4,183.61	4,736.89	5,004.32
Surplus/ (Deficit) Power (MU)	0.00	242.05	63.22

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 Agreement (FPA), received by the ED-DNH during the first six months of FY 11-12. Each element of the power purchase cost i.e. fixed, variable, fuel price adjustment (FPA) and other cost has been estimated for each generating station by considering 6 month (Apr 11 to Sept. 11) cost incurred by the ED-DNH (copies of the power purchase cost is enclosed at Annexure II) and 6 month estimated power purchase. The projection for remaining six months has been done on pro-rata basis by considering the actual cost for 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 impact of new Tariff Regulations FY 2009-14 issued by CERC for computation of tariff for Central Generating Stations and recent increase in fix charges of the NTPC power plants by CERC.
- Variable cost from each NTPC generating stations for FY 12-13 have been projected based on the actual escalation of average variable cost and fuel price adjustment per unit from FY 10-11 to FY 11-12 (6 months). An escalation of 15% has been assumed for projecting the variable cost for FY 12-13 keeping in view of the escalation of 15% witnessed in the variable cost in the last two years by approximately 15 per cent p.a. on the coal and gas prices over the past one and half years. Per-unit variable cost escalation over from FY 10-11 to FY 11-12 (for the first six months) is presented in the table below.

Table 10: Variable cost escalation from FY 10-11 to FY 11-12 (6 months)

Source	Per-unit cost Rs./unit FY 10-11 (Actual)	Per-unit cost Rs./unit FY 11-12 (Actual 6 months)	Rate of increase in variable cost
Western region power plants	1.57	1.79	15%
Eastern region power plants	2.00	2.58	29%
Average increase from FY 10-11 to FY 11-12			15%

- The ED-DNH has projected other charges for FY 12-13 at similar level as estimated for full year of FY 11-12.

- For nuclear plants i.e. KAPS and TAPP Units 3 & 4, single part tariff with 10% escalation on the actual per unit charges for FY 11-12 has been considered for FY 12-13.
 - For NTPC-SAIL Bhilai unit 1 & 2, fixed, variable and other charges have been projected based on the actual cost for first six months of FY 11-12. An escalation of 15% for increase in fuel cost, fixed charges, other charges, etc. has been used for projecting the power purchase cost from NTPC-SAIL.
 - For Tata Power Haldia Plant, power purchase cost for FY 12-13 has been projected at the same rate as FY 11-12 (Rs. 3.95/per unit) i.e. per unit cost as per the power purchase agreement with Tata Power.
 - For RGPPL fixed, variable and other charges have been projected based on the actual cost for October 2011. An escalation of 10% in fixed cost and 15% for increase in fuel cost and other charges have been used from projecting the power purchase cost for RGPPL.
2. ED-DNH would like to bring into the notice of Hon'ble Commission that ED-DNH has recently received communication from NTPC and PGCIL regarding anticipated arrears to be paid in FY 12-13. Thereof, ED-DNH has separately estimated arrears of Rs. 64 Crore (NTPC Rs. 59 Crore & PGCIL Rs 5 Crore) 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 11: Power Purchase Cost for FY 11-12 (in Rs. Crore)

Source	Units (MU)	Fixed charges	Variable charges	FPA charges	Other charges	Total	Per Unit Cost
KSTPP 1&2	495.36	15.31	30.59	13.00	6.96	65.85	1.33
KSTPS 3	146.45	19.30	10.38	0.00	2.08	31.75	2.17
VSTPP-I	345.77	14.83	39.10	15.23	4.75	73.91	2.14
VSTPP-II	299.77	17.08	28.27	13.33	11.66	70.35	2.35
VSTPP- III	314.29	28.99	36.79	10.05	5.98	81.80	2.60
KAWAS	431.10	34.65	67.15	50.60	7.57	159.97	3.71
JGPP	368.44	38.93	77.83	24.53	6.76	148.05	4.02
Sipat	262.71	29.04	22.86	1.05	2.99	55.94	2.13

Source	Units (MU)	Fixed charges	Variable charges	FPA charges	Other charges	Total	Per Unit Cost
NTPC-SAIL Bhilai	1046.03	180.74	181.44	0.00	9.45	371.63	3.55
RGPPL	137.05	18.16	26.66	0.00	0.00	44.82	3.27
Tata Power – Haldia	282.53	0.00	111.60	0.00	0.00	111.60	3.95
Subtotal	4129.52	397.01	632.67	127.79	58.21	1215.68	2.94
Eastern Region							
KHSTPP-2	18.10	1.87	2.74	1.38	0.01	6.00	3.32
Subtotal	18.10	1.87	2.74	1.38	0.01	6.00	3.32
NPCIL							
KAPS	98.24	0.00	20.97	0.00	0.34	21.32	2.17
TAPS	311.69	0.00	119.86	0.00	0.08	119.93	3.85
Subtotal	409.94	0.00	140.83	0.00	0.42	141.25	3.45
Power purchase from other sources							
Power purchase from Indian E. Exchange	139.91	0.00	60.46	0.00	0.00	60.46	4.32
UI	137.66	0.00	0.00	0.00	71.43	71.43	5.19
Solar	5.00	0.00	8.50	0.00	0.00	8.50	16.99
Non Solar	20.00	0.00	7.80	0.00	0.00	7.80	3.90
Subtotal	371.57	0.00	186.88	0.00	0.00	186.88	5.03
External Losses	192.24						
Total Power Purchase	4736.89	398.89	849.80	129.17	171.95	1549.80	3.27

Table 12: 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
KSTPP 1&2	526.57	16.84	53.28		7.65	77.77	1.48
KSTPS 3	180.01	21.23	14.67		2.29	38.18	2.12

Source	Units (MU)	Fixed charges	Variable charges	FPA charges	Other charges	Total	Per Unit Cost
VSTPP-I	352.95	16.32	63.77		5.23	85.32	2.42
VSTPP-II	292.58	18.79	46.70		12.83	78.32	2.68
VSTPP- III	315.71	31.89	54.10		6.58	92.57	2.93
KAWAS	423.41	38.11	133.00		8.33	179.44	4.24
JGPP	337.67	42.82	107.89		7.44	158.14	4.68
Sipat – I	232.81	31.95	24.36		3.29	59.60	2.56
Sipat – II	141.43	23.50	21.92		2.50	47.92	3.39
NSPCL – Bhilai	1135.74	198.81	226.55		10.40	435.75	3.84
RGPPL	274.11	19.97	61.32		0.00	81.29	2.97
Tata Power – Haldia	282.83	0.00	111.60		0.00	111.60	3.95
Mauda	125.71	32.00	14.46		0.00	46.46	3.70
Subtotal	4621.24	492.22	933.62	0.00	66.53	1492.37	3.23
Eastern Region							
KHSTPP-2	18.97	2.06	4.97		0.01	7.03	3.71
Subtotal	18.97	2.06	4.97	0.00	0.01	7.03	3.71
NPCIL							
KAPS	88.71	0.00	20.83		0.34	21.17	2.39
TAPS	327.65	0.00	138.59		0.08	138.67	4.23
Subtotal	416.35	0.00	159.42	0.00	0.42	159.84	3.84
Power purchase from other sources							
Solar	20.11	0.00	30.17	0.00		30.17	15.00
Non Solar	130.73	0.00	50.98	0.00	0.00	50.98	3.90
Subtotal	150.84	0.00	81.15	0.00	0.00	81.15	5.38
Arrears for NTPC and PGCIL			64.00			64.00	
External Losses	201.06						
Total Power Purchase	5004.32	494.28	1243.16	0.00	66.96	1804.40	3.61

7.4 Transmission and Other Charges

1. Transmission charges payable to PGCIL are based on the total capacity allocation in the transmission network. ED-DNH has a mix of firm and infirm capacity allocation from various Central Generating Stations which is revised by the Ministry of Power at regular intervals. Therefore, considering the changing capacity allocation, ED-DNH has estimated the transmission charges for FY 11-12 is 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 10% over the estimated FY 10-11 transmission charges has been considered in view of the increase in transmission charges. Further, ED-DNH has taken into account the additional capacity share in the new stations and an escalation of 10% for the ensuing year for estimation of Inter-State transmission charges.
3. Other charges like LC charges to NTPC and PGCIL for FY 12-13 has been considered based on the LC charges estimated for FY 11-12.

Table 13: Total Power Purchase Cost for FY 11-12 and FY 12-13 (in Rs. Crore)

Particulars	FY 11-12 (Revised Estimate)			FY 12-13 (Projected)		
	Energy available at DNH Periphery (MUs)	Total Cost (Rs. Cr)	Per Unit Cost (Rs/kWh)	Energy available at DNH Periphery (MUs)	Total Cost (Rs. Cr)	Per Unit Cost (Rs/kWh)
Gross Power Purchase Cost	4736.89	1549.80	3.27	5004.32	1804.40	3.61
Transmission Charges		108.28			119.11	
Other Charges		0.20			0.22	
Total Power Purchase Cost (including Transmission Cost)		1658.29	3.50		1923.73	3.84

8 Operation & Maintenance Costs

1. Operation and Maintenance expenses comprise of the following heads:
 - **Employees Expenses** which includes the salaries, dearness allowances, dearness pay, other allowances and retirement benefits 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, regulatory and consultancy fees such as energy auditing and chartered accountant fees, conveyance and travel expenses, water charges 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 ED-DNH to segregate the O&M expenses under different accounting heads. In this regard a specialized accounting firm has been appointed by ED-DNH. 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 during the processing of ARR petition of FY 12-13.
3. Summary of the past five year operation and maintenance expense is summarized in table below:

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

Year	O&M Expense
	Actual
FY 06-07	3.99
FY 07-08	4.09
FY 08-09	5.53
FY 09-10	7.20
FY 10-11	8.09

4. The total O&M expense for FY 10-11 was Rs. 8.09 Crore as compared with FY 09-09 total O&M expense of Rs. 7.20 Crore, an increase of over 12%. The

increase in operation and maintenance cost in FY 10-11 was primarily due to increase in A&G expenses.

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

8.1 Employee Expense

- 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 and pension 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.
- Based on the various expense head related to employee booked during six months of FY 11-12, ED-DNH has estimated the total employee cost for full year of FY 11-12 as Rs. 3.50 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 five year moving average growth rate from FY 04-05 as per the WPI index is presented in the table below:

Table 15: Wholesale Price 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%				

It can be seen from foregoing table that the WPI index for FY 11-12 and FY 12-13 would likely to be 152.65 and 163.28 as per the existing trend of WIP index. Accordingly five year moving average growth rate for FY 11-12 and FY 12-13 would be 6.96% and 6.69% respectively.

To estimate the salary cost hike for FY 12-13 6.69% growth rate has been considered.

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. The detailed breakup of employee cost for FY 10-11, FY 11-12 and FY 12-13 is summarized in table below:

Table 16: Employee Expense (Rs. Crore)

Particulars	FY2010-11 (Actual)	FY2011-12 (Revised Estimate)	FY2012-13 (projected)
Salaries & Allowances			
Basic Pay	1.80	1.54	1.64
Dearness Pay	0.42	0.39	0.42
Dearness Allowance	0.43	1.22	1.30
House Rent Allowance	0.09	0.09	0.10
Other allowances	0.11	0.22	0.23
Bonus	0.04	0.04	0.05
Total	2.90	3.50	3.74
Terminal Benefits			
Gratuity	0.05	-	-
Total	0.05	-	-
Grand total	2.95	3.50	3.74

4. ED-DNH would like to pray to the Hon'ble Commission that salaries/employee cost increase should be considered as uncontrollable factor specially factors like DA/Basic hike through Government, revision through 6th Pay Commission etc. Therefore, ED-DNH requests the Hon'ble Commission to approve the employee costs as projected in the foregoing table 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 ED-DNH was Rs. 3.91 Crore. The revised estimate of R&M expense for FY 11-12 is Rs. 6.58 Crore. The increase in R&M cost for FY 11-12 is due to outsourcing of operation and maintenance activity of EHV substations to third party agency. Also, the 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.
3. The estimated R&M expense for FY12-13 is Rs. 8.10 Crore. The escalation of cost from the previous year expenses of Rs. 6.58 Crore is due to outsourcing of additional EHV sub-stations to third party agencies as ED-DNH is facing severe shortages of staff for proper O&M of the substations.
4. The R&M cost for FY 10-11, FY 11-12 & FY 12-13 is summarized in table below:

Table 17: Repairs & Maintenance Expense (Rs. Crore)

Particular	FY 09-10	FY 10-11	FY 12-13
	Actual	Revised Estimate	Projected
R&M Expense	3.91	6.58	8.10

5. ED-DNH 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.

8.3 Administration & General Expense

1. Administrative and General (A&G) expense comprise of various sub-heads including the following:
 - Telephone, postage & telegrams charges;
 - Travel and conveyance expenses;
 - Consultancy and regulatory fees; and
 - Consumer indexing fee
2. The actual A&G expense for FY 10-11 was Rs. 1.23 Crore. As against f Rs. 0.29 Crore approved by the Commission for FY 10-11 in the Tariff order for ED-DNH dated 01 November 2011. ED-DNH would like to submit that in the past the department used to book the consultancy and legal fee in the power

purchase head. Therefore, the escalation of cost in A&G expenses was re-allocation of consultancy and regulatory expenses from power purchase to A&G expenses.

3. ED-DNH has considered the A&G expense of Rs. 2.24 Crore for FY 11-12. The Commission has approved Rs. 0.14 Crore for FY 11-12. For FY 11-12, the A&G expense would include charges 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.
5. ED-DNH would like to highlight that it has already completed the energy auditing and consumer indexing exercise in 5 feeders on pilot basis. ED-DNH would further like to take this exercise on the remaining 172 feeders and Rs. 1 Crore each has been further provisioned from FY 11-12 and FY 12-13.

For FY 12-13 the A&G expenses has been projected at Rs. 2.38 Crore in consideration of the above expenses.

ED-DNH, therefore, requests the Hon'ble Commission to approve the net A&G expenses projected for the control period.

8.4 Total Operation and Maintenance Expense

Based on the employee, R&M and A&G expense projected above, the total O&M expenditure for FY 10-11, 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 ED-DNH.

Table 18: Total O&M Expense (Rs. Crore)

O&M Expenditure	FY 09-10	FY10-11	FY12-13
	Estimated	Revised Estimate	Projected
Employee Cost	2.95	3.50	3.74
R&M Cost	3.91	6.58	8.10
A&G Expenditure	1.23	2.24	2.38
Total O&M Expenditure	8.09	12.32	14.22

9 Capital Expenditure Plan

1. The present transmission and distribution infrastructure of ED-DNH does not have adequate standby source arrangement for restoring the power supply in case of major breakdowns. Further, considering the increase in demand from HT & LT consumers, ED-DNH would be required to undertake significant capital expenditure for system augmentation and strengthening. System augmentation would not only help ED-DNH in handling increased load but would also ensure better quality of supply and network reliability to the consumers. Though, ED-DNH T&D loss levels are quite low, the capital expenditure would help in further reduction of T&D losses.
2. ED-DNH would like to submit that as per the directives of the Hon'ble Commission, it has already taken up the task of preparing an "Asset Register" pertaining to the transmission and distribution assets of the department. A specialized accounting firm has been appointed for this purpose. Identification and classification of assets have been completed. The consultant is now in process to finalize the Asset Register of ED-DNH. The same is likely to complete by the end of November 2011.
3. ED-DNH each year drafts 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 compared with the requested funds, 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.
4. For FY 12-13, the ED-DNH has proposed a draft Annual Plan for various schemes to be carried out during the year. A copy of the Draft Annual Plan for FY 12-13 is enclosed at Annexure III. The details of annual plan for FY 12-13 is summarized below:

Table 19: Annual Plan for FY 12-13

Annual Capital Expenditure Plan	FY 12-13
(Rs. Crore)	Annual Plan
New Schemes	11.45

Annual Capital Expenditure Plan	FY 12-13
(Rs. Crore)	Annual Plan
Continuing Schemes	49.85
Total Capital Expenditure	61.30

5. The details of the capital expenditure schemes proposed in FY 12-13 are summarized in table below:

Table 20: Capital Expenditure Plan for FY 12-13

Proposed Scheme	Amount Rs. Crore
Existing Scheme	11.45
Reduction of T&D losses and up-gradation of Laboratory	0.20
Normal development work	4.00
Establishment of 66/11kV, 2 X 15 MVA sub-station at village Telegram	0.50
Establishment of 66/11kV, 2 X 15 MVA sub-station at village Styli	0.50
Establishment of 66/11kV, 2 X 20 MVA sub-station at village Athol	1.00
Establishment of 66/11kV, 2 X 20 MVA sub-station at village Waghdhara	0.25
Establishment of 220/66kV, 2 X 160MVA sub-station at village Khadoli	1.00
Establishment of 66/11kV, 2 X 15 MVA sub-station at village Kala	4.00
New Schemes	49.85
Scheme for integrated solution for electrical work	5.00
Up-gradation and modernization and providing spare power transformers at Masat, Rakholi, Amlu, Khadoli and other sub-stations of UT DNH	2.00
Augmentation (hot line stringing) of 66 kV 2 nd circuit line into D/C line with panther conductor on existing Kharadpada-Dadra line	0.50
Establishment of new 66/11 kV 2X20 MVA sub-station at Dapada Chinchpada	1.00
Establishment of new 66/11 kV, 2X20 MVA sub-station at Piparia	5.00
Establishment of new 66/11 kV sub-station at Silli-Kuvapada	0.50

Proposed Scheme	Amount Rs. Crore
Establishment of new 220/66 kV 2X160 MVA sub-station at Waghchipa	3.00
Construction of new office building at Silvassa	0.75
Erection of 220 kV multi-circuit lines to connect 220 KV Khadoli, Saily sub-stations from proposed 400/220 kV Kala sub-station to Khadoli	10.00
Augmentation 10 MVA to 20 MVA power transformer at 66/11 kV, Khadoli sub-station	0.50
Augmentation of 220/66 kV Khadoli sub-station from 2X160 MVA to 3X160 MVA capacity	5.00
Augmentation of 66/11 kV Khanvel sub-station from 30 MVA to 50 MVA capacity	0.50
Erection of 66 kV bay at Khanvel sub-station for 66 kV incoming line and Hindalco Bay	0.10
Scheme for providing Automatic Meter Reading (AMR) to HT consumers	1.00
Erection of 220 kV multi-circuit lines to connect 220 KV Khadoli, Saily sub-stations from proposed 400/220 kV Kala sub-station to Khadoli	10.00
Underground and establishment of 66/11 kV GIS S/S in Silvassa Town	5.00
Total Capital Expenditure	61.30

6. Out of the Rs. 61.30 Crore capital expenditure proposed in FY 12-13 by ED-DNH, Rs. 10 Crore would be incurred for establishment of 220 kV multi-circuit lines to connect 220 kV Khadoli sub-station from the proposed 400/220 kV Kala sub-station to Khadoli in Dadra & Nagar Haveli. This scheme would provide another 220 kV power source for the upcoming industries in the UT of Dadra & Nagar Haveli. With the rapid industrial growth in the UT the existing system is inadequate for providing quality and reliable power supply to the industries. Therefore, to ensure continuous and reliable power supply to the industry, ED-DNH intends to connect 220 kV Khadoli sub-station with the proposed 400/200 kV Kala sub-station of PGCIL.
7. Another scheme is to establishment of 66/11kV, 2 X 15 MVA sub-station at village Kala. The scheme is already approved by CEA vide letter no. DPED/UT/331-9(DNH)/2009/18 dated 04 January 2010. The UT Administration of Dadra and Nagar Haveli has also accorded its approval vide letter no. DNH/ELE/Sil-II/68/2010/336 dated 10 February 2010. The said work has already taken up and the work is under process. The total cost to be incurred under this project would be Rs. 4 Crore in FY 12-13.

8. ED-DNH has prepared an Integrated Solution for electrical network. This will include GIS mapping and consumer metering as well as various automation/modernization work in the existing transmission and distribution network in Dadra & Nagar Haveli. The aforesaid scheme was cleared by CEA. A capital cost of Rs. 5 Crore has been envisaged for this project.
9. ED-DNH has prepared a scheme for establishment of 66/11 kV, 2X20 MVA sub-station at Piparia by looking at the future power demand in this region. CEA has already provided its technical sanction for this project and the UT Administration has also provided approval for this project. The above will be carried out in FY 12-13 and the envisaged capital expenditure for this project will be Rs. 5 Crore.
10. 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 21: Capital Expenditure & Capitalization for FY 11-12 and FY 12-13

Capital Expenditure & Capitalization (Rs. Crore)	FY 11-12 Revised Estimate	FY 12-13 Projected
Capital Expenditure	42.00	61.13
Asset Capitalization	40.14	45.00
Capital Work in Progress	5.86	3.46

10 Gross Fixed Assets

1. ED-DNH had Rs. 452.29 Crore of Opening Gross Fixed Assets (GFA) in FY 11-12. ED-DNH has further proposed capital expenditure of Rs. 42.00 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. 27.16 Crore have been estimated to be added in the GFA during FY 11-12.

3. For FY 12-13, ED-DNH has proposed Rs. 61.13 Crore capital expenditure out of which Rs. 43.72 Crore estimated to be capitalized. The details of the system augmentation and capital expenditure scheme proposed by ED-DNH during FY 12-13 are provided at Annexure IV.
4. A summary of the Opening and Closing GFA and capitalization has been summarized in table below:

Table 22: Opening and Closing GFA (in Rs. Crore)

Particulars	Opening GFA	Additions during the Year	Closing GFA
FY 2010-11 (Actual)	432.35	19.94	452.29
FY 2011-12 (Revised Estimate)	452.29	27.16	479.45
FY 2012-13 (Projected)	479.45	43.72	523.17

11 Depreciation

1. 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 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, ED-DNH has applied the following depreciation rates as specified by CERC in the Tariff Regulations for FY 2009-14.

Table 23: Depreciation rate specified by CERC

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 ED-DNH:

Table 24: Depreciation (in Rs. Crore)

Particulars	FY 10-11	FY 11-12	FY 12-13
Rs. Crore	Actual	Revised Estimate	Projected
Opening GFA	432.35	452.29	479.45
Additions	19.94	27.16	43.72
Closing GFA	452.29	479.45	523.17
Average GFA	442.32	465.87	501.31
Depreciation Amount	19.80	21.04	22.91
<i>Average Depreciation Rate</i>	4.38%	4.39%	4.38%

12 Interest & Financial Costs

12.1 Interest on Long-term / Capital Loans

1. The entire capital expenditure of ED-DNH since its inception has been funded by the Central Government through Budgetary supports each year upto FY 10-11. Therefore, the department does not have any loan liabilities.
2. However, ED-DNH 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 ED-DNH would work as a separate commercial utility and therefore would be utilizing the debt facilities from FY 2012-13 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. 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 25: Total Interest on Long-term Loans

Interest on Long-term Loans	FY 12-13
Rs Crore	Projected
Opening Loan (50% of the Opening GFA)	0.00
Addition in Loan (70% of Asset Capitalization)	30.60
Repayment of Loan (10% of Opening Balance)	1.53
Closing Loan Amount	29.07
Average Loan	14.54
<i>Interest Rate on Loan</i>	14.75%
Total Interest Cost on Long-term Loans	2.14

- Therefore, ED-DNH requests the Hon'ble Commission to approve the interest cost on long-term loans as projected above.

12.2 Interest on Working Capital Borrowings

- ED-DNH has computed the Interest on Working Capital for FY 10-11 and FY 11-12 based on normative basis as per the JERC (Terms and Conditions for Determination of Tariff) Regulations, 2009.
- Since ED-DNH is an integrated utility, the working capital requirement for FY 11-12 and FY 12-13 has been computed considering the following parameters:
 - One month Power purchase cost
 - One month Employees cost
 - One month Administration & general expenses
 - One month Repair & Maintenance expenses.
 - Sum of two month requirement for meeting Fuel cost.
- A rate of interest of 14.75% has been considered for FY 11-12 and FY 12-13 on the working capital requirement, being the SBI Prime Lending Rate as on 13 August 2011. 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.”

4. The normative interest on working capital for FY 11-12 and FY 12-13 considering the above methodology is summarized in
5. Table 26 below:

Table 26: Interest on Working Capital

Interest on Working Capital	FY 11-12	FY 12-13
Rs Crore	Revised Estimate	Projected
One Month Power Purchase Cost	138.19	160.31
One Month Employee Cost	0.29	0.31
One Month R&M Cost	0.55	0.68
One Month A&G Cost	0.19	0.20
Two Month Fuel Cost	-	-
Total Working Capital requirement	139.22	161.50
Rate of Interest on Working Capital	14.75%	14.75%
Total Interest on Working Capital	20.53	23.82

13 Return on Equity

6. As per the JERC (Terms and Conditions for Determination of Tariff) Regulations, 2009, ED-DNH is entitled for a Return on Equity (RoE). However, the Rate of return has not been specified in the Regulations issued by JERC.
7. 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. ED-DNH 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 ED-DNH is primarily a transmission and distribution utility with no generating assets.

8. However, considering that the other State Electricity Regulatory Commissions in India are allowing a RoE of 16% for distribution business, ED-DNH has claimed RoE of 16% for FY 12-13 in its Petition.
9. 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.
10. Return on equity for ED-DNH has been computed as Rs 1.16 Crore for FY 12-13 as detailed in Table 27 below:

Table 27: Return on Equity

Return on Equity	FY 12-13
Rs Crore	Projected
Opening GFA (net of Consumer contribution)	0.00
Addition in Equity (30% of Asset Capitalization)	13.11
Closing Equity Amount	13.11
Average Equity Amount	6.56
<i>Rate of Return on Equity</i>	16.00%
Return on Equity	1.05

14 Provision for Bad & Doubtful Debts

1. ED-DNH has considered provision for Bad and Doubtful Debts as 0.5% of the receivables in the revenue requirement for FY 11-12 and FY 12-13.
6. ED-DNH requests the Hon'ble Commission to approve the provision for bad & doubtful debts as summarized in the Table below:

Table 28: Provision for Bad & Doubtful debts

Provision for Bad & Doubtful Debts	FY 11-12	FY 12-13
Rs Crore	Revised Estimate	Projected
Receivables	1,648.42	1,530.07

Provision for Bad & Doubtful Debts	FY 11-12	FY 12-13
Rs Crore	Revised Estimate	Projected
Provision for Bad & Doubtful Debts as 0.50% of Receivables	0.50%	0.50%
Provision for Bad & Doubtful Debts	8.24	7.65

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. The non-tariff income of Rs. 3.80 Crore for FY 11-12 has been estimated based on the 6 month actual non-tariff income of Rs. 1.90 Crore and the non-tariff income for the balance six months has been projected on pro-rata basis.
3. For FY 12-13, an increase at 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 29: Non-tariff Income

Particulars	FY 11-12	FY 12-13
Rs Crore	Revised Estimate	Projected
Non-tariff Income	3.80	3.99

16 Aggregate Revenue Requirement

1. Table 30 summarizes ED-DNH's Aggregate Revenue Requirement for FY 11-12 and FY 12-13
2. Aggregate Revenue Requirement for FY 12-13 is estimated to be Rs 1,982.32 Crore.

Table 30: Aggregate Revenue Requirement

Annual Revenue Requirement	FY11-12	FY12-13
Rs. Crore	RE	Projected
Power Purchase Cost	1,658.29	1,923.73
O&M Expense	12.32	14.22
Depreciation	21.04	22.91
Interest Cost on Long-term Capital Loans	-	2.14
Interest on Working Capital Loans	20.13	23.82
Return on Equity	-	1.05
Provision for Bad Debt	8.24	7.65
Less: Non-Tariff Income	3.80	3.99
Annual Revenue Requirement	1,716.62	1,991.54

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 31 and category wise tariff prevalent in the UT of Dadra & Nagar Haveli.
2. Revenue from sale of power at existing tariff is estimated to be Rs. 1,609.69 Crore and Rs. 1,511.10 Crore in FY 11-12 and FY 12-13 respectively, as shown in Table 31. The estimated revenue for FY 11-12 is based on the six month actual revenue at the exiting tariff structure. The revenue for remaining six months of FY 11-12 has been computed based on the retail tariff notified by the Commission in the Tariff Order for FY 11-12 dated 13 September 2011. The fuel purchase adjustment surcharge approved by the Hon'ble Commission is being levied to during the period June 2011 to September 2011 and has also been included in the remaining six month revenue estimation for FY 11-12.

3. Further, ED-DNH has computed the revenue for the entire FY 12-13 based on the tariff notified by the Hon'ble Commission in the Tariff Order for FY 11-12 dated 13th September, 2011. However, ED-DNH has not considered any revenue on account of fuel price adjustment charge during FY 12-13.
4. During FY 11-12, ED-DNH has estimated a surplus power of 240 MUs based on the energy available and sale to various consumer categories. This surplus power is primarily available to ED-DNH due to additional allocation of 38 MW from RGPPL, additional 25MW from NTPC-SAIL Bhilai and 70 MW from Tata Power Haldia stations for one year i.e. FY 11-12. ED-DNH has sold approximately 130 MUs during the first 6 months of FY 11-12 at an average rate of Rs. 1.60 per unit. Revenue from sale of balance surplus units during the remaining six months has been computed at the same rate.
5. However, as also mentioned in the power purchase section above, ED-DNH has projected a surplus energy of 14 MUs for FY 12-13. The table below summarizes the revenue from sale of power at existing tariff for FY 11-12 & FY 12-13:

Table 31: Revenue from Sale of Power at Existing Tariff (Rs. Crore)

Revenue @ Existing Tariff (Rs Crore)	FY 11-12 Revised Estimate	FY 12-13 Projected
Domestic	16.89	13.50
Commercial	7.64	8.19
Agriculture	0.22	0.19
LT Industry	44.51	47.62
HT/EHT Industry	1,538.52	1439.54
Public Lighting	1.19	1.32
Temp. Supply	0.74	0.74
Total revenue from existing tariff	1,609.69	1,511.10
Revenue from Surplus Power Sale	38.73	18.96
Total Revenue	1,648.42	1,530.07

18 Coverage of Revenue Gap

1. Revenue from sale of power within UT (category-wise) is determined in Table 31 and revenue from the sale of surplus power to outside Dadra & Nagar Haveli has been considered at Rs. 3 per unit for the FY 12-13.
2. Table 32 summarizes the Revenue Gap at existing tariff at Rs. 461.47 Crore for FY 12-13.
3. As depicted in Table 32, total Revenue Gap of Rs. 461.47 Crore for the FY 12-13 is proposed to be covered through Additional Revenue from proposed tariff revision of Rs. 502.97 Crore (Revenue at proposed tariff is covered in detail in Formats enclosed with this petition). The category-wise increase in the revenue due to proposed tariff revision is shown in Table no 35.
4. In addition, there is estimated Revenue Gap of Rs. 68.20 Crore in FY 11-12, for which suitable recovery mechanism need to be evolved separately.

Table 32: Revenue Gap

Annual Revenue Requirement	FY 11-12	FY 12-13
Rs Crore	Estimated	Projected
Total ARR	1,716.62	1,991.54
Revenue @ Existing Tariff	1,609.69*	1,511.10**
Revenue from Surplus Power Sale	38.73	18.96
Total Revenue	1,648.42	1,530.07
Revenue (Gap)/Surplus	(68.20)	(461.47)
Covered by		
Additional Revenue @ Proposed Tariff		502.97
Total		502.97
Net (Gap)/Surplus	-----	41.50

* Estimated Revenue from existing tariff for FY 11-12 includes sale of power as per existing tariff rate approved by JERC by Tariff Order 13 September 2011 and PPCA charges of Rs. 0.91 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 13 September 2011 but exclusive of PPCA charge for all the consumer categories.

19 Average Cost of Supply

1. Table 33 summarizes Average Cost of supply and total average realization at the existing tariff approved by the Hon'ble Commission.

Table 33: 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 ED-DNH	3.86	4.24
Average Realization *	3.71**	3.26***
Revenue Gap at Existing Tariff	-0.15	-1.01
Additional revenue at Proposed Tariff depicted in Table 32		-0.98

* Includes Revenue Realization from Surplus Power Sale available to ED-DNH

** For Average Realization for FY11-12, revenue realization calculated as per the existing tariff rate approved by JERC vide tariff order dated 13 September 2011 and PPCA charges of Re. 0.91/unit levied on all consumers, except domestic, agriculture and BPL category of consumers.

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

20 New Initiatives

A) Increase in the number of employees in ED-DNH

1. ED-DNH would like to submit that the present employee strength of ED-DNH is grossly inadequate. The present staff strength of ED-DNH is 120 out of which 84 staff working in the technical cadre and remaining 36 staff are in the non-technical cadre. At present recruitment process in ED-DNH has been stopped.
2. Consumer to employee ratio of ED-DNH is 715 for technical manpower and 1667 for non-technical manpower, which is lower than the neighbouring DISCOMs in Gujarat and Maharashtra. The following table present a comparative analysis of the technical and non-technical manpower of ED-DNH with the DISCOMs in Gujarat and Maharashtra.

Table 34: Consumer to Technical and Non-technical manpower ratio

DISCOMs	Consumer to	Consumer to	Consumer to
Rs Crore	Technical Manpower ratio	Non-Technical Manpower ratio	Total Manpower ratio
UGVCL	585	878	351
MGVCL	672	930	418
PGVCL	524	673	211
MSEDCL	457	559	251
ED-DNH	714	1667	500

It is evident from the foregoing table that the average number of consumers served by the ED-DNH staff is comparatively much higher than that of the other DISCOMs in Gujarat and Maharashtra.

3. Most of the critical department of ED-DNH such as O&M and billing departments have inadequate staff. The workload on the existing staff is huge and maintaining the service quality as specified by the JERC's Standards of Performance Regulations, 2009 is becoming a sever challenge for the existing staff.
4. Further, future corporatization of ED-DNH would require specialized staff in the emerging areas such as IT and HR and Finance.

5. ED-DNH would require additional staff in the following disciplines"
 - 25 nos. of fresh Junior Engineers i.e. at the entry level;
 - 50 nos. of fresh ITI craftsmen i.e. at the entry level;
 - 2-3 IT experts through parallel recruitment process; and
 - 4-5 MBA graduates for HR and Finance through parallel recruitment process
6. Additional salary burden of ED-DNH would be around Rs. 2 Crore.
7. ED-DNH requests the Hon'ble Commission for the approval increase of the staff strength of ED-DNH.

B) New Domestic Slab

ED-DNH 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.

C) Proposed Consumer Categories

ED-DNH requests the Hon'ble Commission to accept its proposal to create new consumer categories for the HT industrial consumers, namely "continuous" and "non-continuous" HT categories.

Since, ED-DNH is drawing costly power from the grid during the peak hours to meet the industrial demand ED-DNH would like to propose the following tariff structure for the industrial consumers.

- Industrial consumers drawing non-continuous power will be encouraged to draw power during the off-peak hours and accordingly incentivized by charging lower tariffs.
- Industrial consumers drawing continuous power during the peak as well as off-peak hours will be charge higher tariffs.

21 Directives

1. The Hon'ble Commission vide Tariff Order dated November 1, 2011 had issued a set of directives to be followed by ED-DNH to comply with the JERC (Terms and Conditions of Determination of Tariff) Regulations, 2009.
2. In line with the directives, ED-DNH has been taken several steps to comply with the directives and appraised the Commission on the same vide an Action Plan/Action Taken Report submitted on 13 July 2011.
3. The Hon'ble Commission issued further directives to ED-DNH vide "Tariff Order for ARR and Tariff Determination for the Union Territory of Dadra and Nagar Haveli for the Financial Year 2011-12", dated 13 September 2011 in the same line as issued in the previous Tariff Order.
4. This purpose of this section is to appraise the Hon'ble Commission on progress made by ED-DNH on this matter since the issuance of the aforesaid tariff order.

A) Annual Statement of Accounts

ED-DNH has appointed a specialized Chartered Accountant/Auditing firm – M/s Soni Jhwar & Co., a Surat vide order no. ELE/Deptt /NIT/CA/2010/ 772 dated 07 June 2011.

All the historical data pertains has been given to the Chartered Accountant. The initial segregation and classification under the major accounting heads has been completed by the Chartered Accountant. The firm is now in the process to finalizing the past accounts of ED-DNH under the commercially accepted principles. The aforesaid process is likely to complete by the mid of December 2011. Upon finalization of the accounts, ED-DNH will submit the same to the Hon'ble Commission by December 2011.

B) Preparation of Asset and Depreciation Registers

The aforesaid CA firm is also in process to prepare the asset and depreciation registers. The work is in the final stage and ED-DNH would submit the final asset and depreciation by the end of December.

C) Management Information System (MIS)

ED-DNH would like to highlight that a computerized system has been implemented and accordingly all the records pertains to power purchase, sales, revenue and other associated costs have maintained properly.

D) Billing Efficiency / Collection Efficiency

As per the estimate of ED-DNH the collection efficiency by the end of FY 11-12 would reach to 95.5% against target set by the Commission of 100%.

ED-DNH would like to submit that at present the billing department is grossly understaffed. The existing staff in the billing department are finding hard to cope with the ever increasing billing and collection pressures. To improve this situation, ED-DNH has hired manpower on contractual basis. However this arrangement was not so successful.

In order to improve the billing and collection efficiency, ED-DNH is now planning to hire a specialized agency for these tasks. This type of arrangement is practiced in various other states in India such as Gujarat, Delhi, Haryana and Himachal Pradesh and would like to bring good results in DNH as well.

ED-DNH is in the process to finalization of the terms of conditions for hiring specialized agency for this purpose and would likely to float a tender in the first half of the next calendar year.

E) Collection of Arrears

ED-DNH has already prepared the analysis of arrears of 2010-11 and same has been submitted to the Hon'ble Commission. ED-DNH is now doing this exercise regularly for collection of the arrears.

F) Line Losses and System Augmentation

ED-DNH would like to highlight that the line losses in its territory in the FY 10-11 was 6.85%, which is one of the lowest in the country. Further, ED-DNH has set to target to reduce the line losses to 6.50% in FY 11-12 and 6.30% in FY 12-13.

In order to reduce the system losses, ED-DNH has proposed a number of capex schemes such as augmentation of D/C circuit line, augmentation of new 220/66 kV and 66/11kV substations and automatic meter system for the HT consumers.

ED-DNH is regularly calculating the T&D losses of 66 kV and 11kV feeders. In this regard, ED-DNH has appointed ERDA, Vadodara to calculate the T&D losses for the following five feeders:

Feeder	Sub-station
Silvassa Town – I	Akli
Dadra –V	Dadra
Kherdi	Khanvel

Feeder	Sub-station
Arthal rural	Kharadpara
Silvassa Town – 4	Aqli

ED-DNH would conduct similar studies for the rest of the feeders as well. This task is expected to complete by FY 12-13.

G) Contribution of Consumers for Capital Investment

It is to inform that all the capital investments are made from Government plan fund. ED-DNH either can lay the service line of relevant voltage level i.e. 66kV and 11kV line and recover the expenditure from the consumer or ask the consumer to lay the service line at his own cost as being done in other states like Gujarat and Maharashtra.

ED-DNH would also like to inform that it is following the notification of Development Rules notified by the Administration. Hence, in ED-DNH the service line laid by the consumer under the supervision of the department to ensure planning, safety and provisions of the IE Rules.

Under these circumstances, it is reiterated that consumer has no contribution for enhancement of capital infrastructure and it is being done by the department. However, ED-DNH has initiated the process to maintain separate register for such work.

H) Metering of Consumer Installations / Replacement of Non-Functional / Defective Meters.

By the following the Directive of the Hon'ble Commission, ED-DNH has already float a tender to procure the meters to be installed in the un-metered LIG category of consumers. Defective and stopped meters will be replaced during this process as well.

I) Consumer bills

The format of the revised energy bill has already been submitted to the Hon'ble Commission for their suggestions and comments on the same. ED-DNH once again requests the Hon'ble Commission for their comments and suggestions on the revised energy bill format.

J) Demand Side Management (DSM) and Energy Conservation

ED-DNH has initiated to formulate a detailed plan for DSM and to engage an accredited agency like ERDA to chalk out various energy conservation measures. The work has already given for five feeders on a pilot basis and

for the rest of the feeders will be given to the accredited agencies on tendering process. ED-DNH has already initiated this process.

22 Tariff Proposal for FY 12-13

1. ED-DNH submits to the Commission that the sales to LT industrial and HT/EHT category form approximately 98% of the total sales within the UT of Dadra & Nagar Haveli. However, the per unit revenue realization from this category is below the average cost of supply leading to revenue losses for ED-DNH. 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 35: Proposed Tariff Structure for FY 12-13

Tariff Structure	Existing FY 11-12		Proposed FY 12-13		
	Energy Charges (Rs/kWh)	Fixed Charges	Energy Charges (Rs/kWh)	Fixed Charges	
Low Income group (LIG)		24/per connection /Month		10/per 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		
600 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					
Upto 20 HP of Connected Load	2.50		3.40		
Above 20 HP Connected Load	2.50	Rs. 15/HP	3.40	Rs. 25/HP	
LT-PL/Public Lighting					
Public Lighting	3.23		3.23		
HT					
HTC General					
50000 units	2.95	Rs. 60/KVA	4.07	Rs.120 / KVA	For connected

Tariff Structure	Existing FY 11-12		Proposed FY 12-13		
	Energy Charges (Rs/kWh)	Fixed Charges	Energy Charges (Rs/kWh)	Fixed Charges	
50000 to 5 lakh units	3.10	Rs. 60/KVA	4.22	Rs.120 / KVA	load >500KVA, Rs.500/KVA
Beyond 5 lakh units	3.15	Rs. 60/KVA	4.27	Rs.120 / KVA	
Penal charges for exceeding contracted demand	8.00	Rs 180/KVA or part there of	8.00	Rs. 360/KVA	Beyond 500 KVA Rs. 1500/KVA
HTC Ferro					
First 300 Units per KVA	2.05	Rs. 450/KVA	3.17	Rs. 600/KVA	
Next 200 units per KVA	3.05	Rs. 450/KVA	4.17	Rs. 600/KVA	
Above 500 units per KVA	3.55	Rs. 450/KVA	4.67	Rs. 600/KVA	
Penal charges for exceeding contracted demand	8.00	Rs 900/KVA or part there of	8.00	Rs 900/KVA or part there of	

* 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. In its previous Tariff Order for ED-DNH issued on 13 September 2011, the Hon'ble Commission has increased the electricity tariffs domestic and agriculture consumers in the following order:
 - Domestic
 - Slab 0-50 units – by 60 paisa/unit i.e. 60% increase over the previous tariff
 - Slab 51-200 units – by 65 paisa/unit i.e. 41% increase over the previous tariff
 - Slab 201-400 units – by 100 paisa/unit i.e. 50% increase over the previous tariff
 - 401 units and above – by 100 paisa/unit i.e. 44% increase over the previous tariff
 - LIG – by Rs. 19 per connection per month i.e. 400% increase over the previous tariff

- Agriculture
 - For connection load upto 10 HP – by Rs. 195 paisa/unit i.e. 400% increase over the previous tariff
 - Beyond 10 HP and upto 99 HP connected load – by 180 paisa/unit i.e. 200% increase over the previous tariff
- 2. ED-DNH would like to submit that due to rapid industrialization the power demand in its territory has increased considerably in the industrial consumer categories. Almost 98% of the total electricity in the ED-DNH territory is consumed by the industrial categories and remaining 2% 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/Exchange and other GENCOs.
- 3. The revised tariff issued by the Hon'ble Commission vide its Tariff Order dated 13 September 2011 mainly affects the domestic and BPL categories which contributes only 1.4% of the total power consumption in the ED-DNH 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 ED-DNH territory is only 0.05% 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 DNH 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 consumers from the PPCA formula.

6. Based on the revenue from proposed tariff, ED-DNH would have a surplus of Rs. 41.50 Crore during FY 12-13 which can be utilized towards any variation in projected expenses as against actual expenses during the period.
7. ED-DNH requests the Hon'ble Commission to approve the fuel purchase adjustment formula for FY 12-13 as well, which can take care of any variation in the ARR over and above the approved level by the Commission for FY 12-13.

The proposed tariff schedule is separately enclosed as Annexure I.

23 Prayer

1. ED-DNH requests the Honorable Commission to:
 - Admit and approve the Aggregate Revenue Requirement of FY 12-13 as submitted herewith.
 - Make the proposed Retail Supply Tariffs applicable from April 1, 2012.
 - Approve the proposal for Aggregate Revenue Requirement and Tariff Hike for FY 12-13.
 - 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

BY THE APPLICANT THROUGH

PETITIONER

Electricity Department of Dadra and Nagar Haveli.

Silvassa

Dated: