True up for FY 2011-12 & Aggregate Revenue Requirement & Tariff Petition for FY 2013-14

Main Text & Formats (Volume I)

Submitted to:

Joint Electricity Regulatory Commission Gurgaon

By

ELECTRICITY DEPARTMENT OF DADRA & NAGAR HAVELI



November 2012

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 13-14 for Union Territory of Dadra and Nagar Haveli under Section 61, 62 and 64 of the Electricity Act, 2003 AND

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.
- This is a Petition indicating the Aggregate Revenue Requirement (ARR) of ED-DNH and Tariff Revision Proposal of ED-DNH for the FY 13-14 (Financial Year 2013-14).

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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, Formats and Annexure (Volume II)

Chapter 1: Introduction

1 ED-DNH Profile

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 as well.

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 840 MW from Central Generating Stations including 164 MW from NTPC-SAIL joint venture at Bhilai and 38 MW from Ratnagiri gas based power plant(RGPPL). Besides, ED-DNH has entered into a long term agreement with EMCO Energy Limited (GMR) to supply 200 MW power from its Plant in Maharashtra (600MW). Power supply from the said plant is expected to start from April 2013.

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 11-12, 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 11-12. ED-DNH has made necessary arrangement with various power generation companies to bridge the energy deficit in its periphery and to meet the energy demand for FY 12-13 and FY 13-14.

Power demand is primarily dependent on the HT and LT industrial consumers contributing approximately 98% of the total sales in FY 11-12. This 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 5000 MU by the end of FY 2013-14. In view of this huge power requirements, ED-DNH had proposed a number of schemes to be implemented during FY 12-13 to FY 13-14 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 Vindyachal Super Thermal Power Project (VSTPP) – IV, North Karanpura Super Thermal Power Station (NKSTP) and Barh Super Thermal Power Project (BSTPP). 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 Vindyachal 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 (till March 2013) and Ratnagiri Gas and Power Pvt. Ltd. (RGPPL) for supply of 70 MW and 38 MW power respectively. Firm and non-firm allocations from NTPC-SAIL Bhilai extension project has been increased to 164 MW. In addition to this willingness is also given for 50 MW power each from expansion of NSPCL Bhilai power plant, Jagdishpur Thermal Power Plant and Rourkela Thermal Power Plant.

2 Contents of this Petition

This Petition covers the truing up for FY 11-12, revised estimates for FY 2012-13 and the basis, assumptions and projections of individual elements constituting the determination of ARR for FY 13-14. 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 and third Tariff Order for FY 11-12 and FY 12-13 were issued on 13th September 2011 and 31st July 2012 respectively. The Commission in its Tariff Order for FY 12-13 has approved the ARR for FY 12-13 based on the actual cost for FY 10-11 and estimated expenses for FY 11-12. Further, Commission has approved revision in retail tariff to meet the revenue deficit for FY 12-13.

Chapter 2: True Up for FY 2011-12

1 Principles for True Up for FY 11-12

As per JERC Terms and Conditions for determination of Tariff Regulations, 2009, the Hon'ble Commission shall undertake the True Up of licensee for FY 11-12 based on the comparison of the actual performance of the past year with the approved estimates for such year.

In line with the provisions of JERC Regulations, ED-DNH is filing for True Up for the year FY 11-12. Information provided in the True Up for FY 11-12 is based on the Annual Accounts and principles adopted by the Hon'ble Commission in its previous orders on Interest on Term Loan, Return on Equity, Interest on Working Capital and Depreciation. This actual performance has been compared with the approved parameters as per the order dated 13th September, 2011 and the revised parameters in the Tariff Order dated 31st July, 2012 for the FY 11-12.

Accordingly, revised Aggregate Revenue Requirement, revenue and gap for FY 11-12 are given in the following paragraphs of this chapter.

2 Energy Sales for FY 11-12

The actual energy sale for FY 11-12 has been shown below along with approved values by Hon'ble Commission vide Tariff Order dated 13th September, 2011 and the revised sales approved in the Tariff Order dated 31st July, 2012. The actual energy sales as per the audited annual accounts for FY 11-12 are as under:

			(MU)
Particulars	FY 11-12	FY 11-12	FY 11-12
	Approved (13 th September, 2011)	Approved (31st July, 2012)	Actual
Domestic	59.00	56.22	56.22
Commercial	24.00	27.81	27.81
Agriculture	2.00	3.00	3.00
LT Industry	154.00	152.19	152.19
HT/EHT Industry	3982.00	3990.20	3990.20

Table 1: Category wise Energy Sales

Particulars	FY 11-12	FY 11-12	FY 11-12
	Approved (13 th September, 2011)	Approved (31st July, 2012)	Actual
Public Lighting	3.00	5.12	5.12
Temp. Supply	1.00	2.60	2.60
Total Sales	4,225.00	4,237.14	4,237.14

The ED-DNH requests the Hon'ble Commission to approve the actual sales of FY 11-12.

3 Distribution Loss for FY 11-12

In FY 11-12, the actual distribution losses were 4.94% as against the approved level of 6.86%. The table below highlights the comparison of actual distribution losses of the ED-DNH against the distribution loss approved by the Hon'ble Commission vide its Tariff Order dated 13th September 2011 and the revised losses approved in the Tariff Order dated 31st July 2012.

Table 2: Distribution Loss

			(%)
Particulars	FY 11-12	FY 11-12	FY 11-12
Approved (13 th September, 2011)		Approved (31 st July, 2012)	Actual
Distribution Loss	6.86%	5.69%	4.94%

The ED-DNH requests the Hon'ble Commission to approve the distribution loss of FY 11-12.

3.1 Energy Requirement and Energy Balance

Based on the actual energy sales and the transmission & distribution loss units, the actual energy requirement for ED-DNH has been furnished below. The energy requirement has been met through various sources as described in the subsequent sections.

Particulars	FY 11-12	FY 11-12	FY11-12
	Approved (13 th September, 2011)	Approved (31 st July, 2012)	Actual
Sales	4,225.00	4,237.16	4,237.14
Add: Losses	282.00	255.64	220.13
T&D Losses	6.86%	5.69%	4.94%
Energy Required at Periphery	4,507.00	4,492.80	4,457.27
Transmission loss	195.60	170.57	175.67
Transmission loss (%)	4.16%	3.61%	3.61%
Energy to be purchased	4,702.00	4,725.07	4,866.30
Surplus/ (Deficit) Power	0.00	61.69	233.36

Table 3: Energy Requirement and Energy Balance

It can be seen from the above table that the net energy requirement for sale to retail consumers in FY 11-12 was 4866.30 MU as compared 4725.07 MU approved by the Hon'ble Commission vide its Tariff Order dated 31st July, 2012.

3.2 Power Purchase Cost

ED-DNH sources power from Central Generating Stations like Korba, Vindyachal, Kahalgaon, Kawas, Tarapur and Kakrapar atomic power stations of NPCIL etc. The power procured during FY 11-12 as against that approved by the Hon'ble Commission is provided in the table below.

Table 4:	Power	purchase	cost for FY 11	-12
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	FY 11-12(Approved (13th September, 2011)			FY 11-12(Actual)		
Source (Rs. Crs)	Units Purchased	All Charges Total	Per Unit Cost	Units Purchased	All Charges Total	Per Unit Cost
NTPC Stations						
Total	2910.00	660.79	2.27	2769.67	783.90	2.83
NPCIL						
KAPPS	70.00	15.19	2.17	98.98	22.62	2.29

		11-12(Approve September, 20		FY	11-12(Actua	վ)
Source (Rs. Crs)	Units Purchased	All Charges Total	Per Unit Cost	Units Purchased	All Charges Total	Per Unit Cost
TAPP 3&4	250.00	68.25		272.69	71.42	
Total	320.00	83.44	2.61	371.67	94.04	2.53
Others						
Ratnagiri	180.00	64.82	3.60	99.31	42.48	4.28
Tata Power - Haldia	0.00	0.00	0.00	267.36	103.71	
Bhilai Unit-I &II(NTPC)	1290.00	316.92	2.46	1113.78	458.91	4.12
Subtotal	1470.00	381.74	2.60	1480.45	605.10	4.09
Power purchase from Other Sources						
Power purchase from Indian E. Exchange	0.00	0.00	0.00	103.32	35.31	3.42
UI	0.00	0.00	0.00	141.19	50.31	3.56
RP Obligation	0.00	49.53	0.00	0.00	17.44	0.00
Subtotal	0.00	49.53	0.00	244.51	103.06	4.21
Misc. Arrears		54.47	0.00		14.76	0.00
Gross Power Purchase	4700.00	1175.50		4866.30	1586.10	
External Losses	195.00			175.67		
Total Power Purchase	4505.00	1175.50	2.61	4690.63	1586.10	3.38
PGCIL CHARGES		107.69			123.57	
WRLDC		0.14			6.50	
Other		4.42			6.51	
Grand Total of Charges - Net	4505.00	1287.75	2.86	4690.63	1722.68	3.67

The power purchase depends on various parameters such as the energy sales, distribution loss, energy requirement and the energy availability. The variation in the power purchase cost from the Tariff Order is on account of variation in sales and variation in actual cost with respect to the base rate along with purchase of power from short-term sources to meet the shortfall during the year.

The Hon'ble Commission had approved a power purchase cost of Rs. 1692.71 Crore disallowing additional UI purchase of Rs. 5.21 Crore against the UI underdrawl/overdrawl beyond 49.5 Hz frequency from April 2011 to March 2012. Now the ED-DNH has claimed a power purchase cost of Rs. 1722.68 Crore based on the annual accounts for FY 11-12. The ED-DNH requests the JERC to allow the UI purchase during FY 11-12 without any penalty as the ED-DNH has already incurred that amount. Therefore, the ED-DNH has included that total UI amount paid in the total power purchase cost for FY 11-12.

The ED-DNH over drew 141.19 MU at the cost of Rs. 50.31 Crore and under drew 233.35 MU at the cost of Rs. 69.08 Crore. Overall the ED-DNH under drew 92.15 MU at the cost of Rs. 18.77 Crore.

The ED-DNH requests the Hon'ble Commission to approve the power purchase cost as shown in the annual account for FY 11-12 without any deduction.

4 **Operation and Maintenance Expenses**

Operations and Maintenance (O&M) Expenses of the company consists of the following elements:

- Employee Expenses
- Repairs and Maintenance Costs
- Administrative and General Expenses

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

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

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

The Hon'ble Commission had approved the O&M cost at Rs. 10.19 Crore and Rs. 11.28 Crore vide Tariff Order dated 13th September, 2011 and 31st July, 2012 respectively.

During FY 11-12, ED-DNH incurred actual O&M expense of Rs. 11.83 Crore which is inclusive of Employee cost of Rs. 4.75 Crore, Repair & Maintenance Charges of Rs. 5.13 Crore and Administration & General Expenses of Rs. 1.95 Crore as given in the table below:

Particulars	FY 11-12	FY 11-12	(Rs. Cr.) FY11-12
	Approved (13 th September, 2011)	Approved (31 st July, 2012)	Actual
Employee Cost	3.25	2.95	4.75
R&M	6.80	6.58	5.13
A&G	0.14	1.75	1.95
O&M Expenses	10.19	11.28	11.83

 Table 5: Operation & Maintenance Expenses for FY 11-12

The ED-DNH requests the Hon'ble Commission to approve the actual O&M expenses incurred by the department for FY 11-12.

5 Capital Expenditure & Capitalization

The actual capital expenditure incurred by ED-DNH during the FY 2010-11 was Rs. 46.86 Crore, which is lower than that approved by the Hon'ble Commission in its tariff order dated 13th September, 2011 and 31st July, 2012. The capital expenditure incurred and capitalization for FY 11-12 against that approved by the Hon'ble Commission is as shown below:

Table 6: Capital Ex	xpenditure and Capitali	zation for FY 11-12
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			(Rs. Cr.)
Particulars	FY 11-12	FY 11-12	FY11-12
	Approved (13 th September, 2011)	Approved (31st July, 2012)	Actual
Capital Expenditure	58.98	42.00	46.86
Capitalization	40.14	27.61	3.99

6 Depreciation

The depreciation has been worked out after applying the Depreciation rates as per the JERC (Terms and Conditions for determination of Tariff), Regulations, 2009. Accordingly, the depreciation so arrived and approved depreciation for FY 11-12 are as shown below:

	- I		(Rs. Cr.)
Particulars	FY 11-12	FY 11-12	FY11-12
	Approved (13 th September, 2011)	Approved (31st July, 2012)	Actual
Opening GFA	19.94	68.22	471.11
Addition during the year	40.14	27.16	3.99
Closing GFA	60.08	95.38	475.10
Average GFA	40.01	81.80	473.11
Depreciation during the year	2.11	4.24	19.92

The ED-DNH requests the Hon'ble Commission to approve the depreciation amount as shown in the annual account for FY 11-12.

7 Interest and Finance Charges

For assessing interest on Loans in FY 11-12, ED-DNH has considered the Opening Balance of Loans for FY 11-12 as approved by the Hon'ble Commission in its Tariff Order dated 31st July, 2012 for the Review of the ARR for FY 11-12. The normative loan addition in FY 11-12 has been computed as 70% of the capitalization for FY 11-12 which works out to Rs. 2.79 Crore. The capitalization for FY 11-12 was Rs. 3.99 Crore as per the annual accounts for FY 11-12.

In line with the approach adopted by the Hon'ble Commission in its tariff order dated 31st July, 2012, 10% of the opening loans have been considered as the repayment during the year. Further the rate of interest has been considered as equal to the SBI PLR at 14.75%.

The total Interest & Financial charges for FY 11-12 computed by ED-DNH as against approved by the Hon'ble Commission is as shown below:

			(Rs. Cr.)
Particulars	FY 11-12	FY 11-12	FY11-12
	Approved (13 th September, 2011)	Approved (31 st July, 2012)	Actual
Opening Loan	0.00	47.75	47.75
Loan for additional Capex (70:30 debt-equity)	0.00	19.01	2.79
Loan Repayment (10% of Opening Balance)	0.00	4.78	2.39
Closing Loan	0.00	61.99	48.16
Interest Cost on Avg. Loans	0	7.13	7.07

Table 8: Interest on Loan for FY 11-12

The ED-DNH requests the Hon'ble Commission to approve the interest and finance charges for FY 11-12.

8 Interest on Working Capital

The interest on working capital has been calculated based on the normative principles outlined by the Hon'ble Commission in the JERC (Terms and Conditions for determination of Tariff), Regulations, 2009.

ED-DNH has computed interest on working capital at 14.75% as equal to the SBI PLR. The interest on working capital for FY 11-12 incurred by ED-DNH against that approved by the Hon'ble Commission is as shown below:

			(Rs. Cr.)
Particulars	FY 11-12	FY 11-12	FY11-12
	Approved (13 th September, 2011)	Approved (31 st July, 2012)	Actual
O&M expense for 1 month	0.85	0.95	0.99
Power Purchase Cost for 1 month	111.85	134.12	143.56
Fuel cost for two months	0.00	0.00	0.00
Total Working Capital requirement	112.70	135.05	144.54
Interest on Working Capital	13.24	15.34	21.32

Table 9: Interest on Working Capital for FY 11-12

 $(\mathbf{D}_{\mathbf{n}}, \mathbf{C}_{\mathbf{n}})$

The ED-DNH requests the Hon'ble Commission to approve the interest on working capital as computed above for FY 11-12.

9 Return on Equity

As per the Tariff regulations issued by the Hon'ble Commission, a return at 16% on the equity base is considered as reasonable and hence allowed by Hon'ble Commission. Accordingly, ED-DNH has computed the Return on Equity considering a rate of return at 16%.

The return on equity has been computed at 16% on average equity based upon the opening balance of equity for FY 11-12 and additions during the year as equal to 30% of the capitalization during FY 11-12. The return on equity for FY 11-12 is as shown below:

Table 10: Return on Equity for FY 11-12

Particulars	FY 11-12	FY 11-12	FY11-12
	Approved (13 th September, 2011)	Approved (31 st July, 2012)	Actual
Return on Equity	0.00	1.99	0.10

The ED-DNH requests the Hon'ble Commission to approve the return on equity for FY 11-12.

10 Non Tariff Income

The actual Non-Tariff Income of ED-DNH for FY 11-12 was Rs. 10.23 Crore as against Rs. 3.40 Crore approved by the Hon'ble Commission as given in the table below:

Table 11:	Non	Tariff	Income	for	FY	11-12
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			(Rs. Cr.)
Particulars	FY 11-12	FY 11-12	FY11-12
	Approved (13 th September, 2011)	Approved (31st July, 2012)	Actual
Non tariff Income	3.40	3.93	10.23

The non tariff income includes meter rent of Rs. 0.62 Crore and delayed payment surcharge of Rs. 9.61 Crore. It can be seen that the actual Non-tariff income of the

department is more than the figure approved by the Hon'ble Commission. This is due to higher realization on account of delayed payment of surcharge from the consumers.

The ED-DNH requests the Hon'ble Commission to approve the Non Tariff Income for FY 11-12.

11 Aggregate Revenue Requirement for FY 11-12

Based on above expenses, table below summarizes Aggregate Revenue Requirement for FY 11-12 for ED-DNH in comparison with values approved by the Hon'ble Commission in the last two Tariff Orders:

			(Rs. Cr.)
Particulars	FY 11-12	FY 11-12	FY11-12
	Approved (13 th September, 2011)	Approved (31st July, 2012)	Actual
Power Purchase Cost	1,342.22	1,692.71	1,722.68
O&M Expense	10.19	11.28	11.83
Depreciation	2.11	4.24	19.92
Interest Cost on Long-term Capital Loans	0.00	7.13	7.07
Interest on Working Capital Loans	13.24	16.36	21.32
Return on Equity	0.00	1.99	0.10
Provision for Bad Debt	0.07	6.97	0.00
Less:			
Non-Tariff Income	3.40	3.93	10.23
Annual Revenue Requirement	1,364.43	1,736.75	1,772.69

Table 12: Aggregate Revenue Requirement for FY 11-12

The ED-DNH requests the Hon'ble Commission to approve the actual ARR of the department for FY 11-12.

12 Revenue for FY 11-12

During the FY 11-12, ED-DNH's actual revenue amounted to Rs. 1812.02 Crore (including the amount received on account of PPCA charges) as against Rs. 1358.51

Crore and Rs. 1736.38 Crore as approved by the Hon'ble Commission vide its Tariff Order dated 13th September, 2011 and 31st July, 2012 respectively.

			(Rs. Cr.)
Particulars	FY 11-12	FY 11-12	FY11-12
	Approved (13 th September, 2011)	Approved (31 st July, 2012)	Actual
Revenue from sale of power	1,358.51	1653.05	1742.94
Revenue from Surplus Power Sale	0.00	83.33	69.08
Total Revenue	1358.51	1736.38	1812.02

Table 13: Revenue for FY 11-12

13 Revenue (Gap) / Surplus for FY 11-12

The Hon'ble Commission in Order dated 13th September, 2011 has approved a total Aggregate Revenue Requirement of Rs. 1364.43 Crore for FY 11-12. Further, the Commission has computed the revised ARR in the Order dated 31st July, 2012 of Rs. 1736.75 Crore. ED-DNH has arrived at the Revised Aggregate Revenue Requirement for FY 11-12 of Rs. 1772.69 Crore.

This revised Aggregate Revenue Requirement is compared against the revised income under various heads including revenue with existing tariff of Rs. 1742.94 Crore, and revenue from sale of surplus energy of Rs. 69.08 Crore summing up to a total revenue of Rs. 1812.02 Crore. Accordingly, total revenue surplus of ED-DNH for FY 11-12 is computed at Rs. 39.33 Crore as depicted in the Table below:

Table 14:	Revenue Gap for FY 11-12
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		(Rs. Cr.)
Particulars	FY 11-12	FY11-12
	Approved (31 st July, 2012)	Actual
Annual Revenue Requirement	1736.75	1,772.69
Revenue from sale of power	1653.05	1,742.94
Revenue from Surplus Power Sale	83.33	69.08
Revenue (Gap)/Surplus	(0.37)	39.33

The Hon'ble Commission is requested to approve above mentioned revenue (gap)/surplus for FY 11-12.

14 Truing up for FY 2010-11

The Hon'ble Commission in its Tariff Order for FY 2012-13 has provisionally Trued up the ARR for FY 2010-11 as the assets were not verified by the auditor. Now, ED-DNH requests the Hon'ble Commission to True up the ARR for FY 2010-11 as the assets of ED-DNH have been audited by the statutory auditor. The verified asset register is being submitted to the Hon'ble Commission along with this petition.

Chapter 3: ARR & Tariff Petition for FY 2013-14

ED-DNH is submitting its ARR and Tariff petition for the determination of tariff for FY 13-14 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 13-14.

The following sections explain in detail the basis and forecasts of the following elements for FY 13-14:

- 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.

1 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:

Consumers	FY 11-12	
	Actual	
Domestic	34,170	
LIGH	14,110	
Commercial	6,852	
Agriculture	1,048	
LT Industry	2,306	
HT/EHT Industry	830	
Public Lighting	227	
Temporary Supply	200	
Total	59,743	

Table 15: Category wise number of Consumers

2. Table 16 summarizes category wise actual energy sales from FY 07-08 to FY 11-12 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.

Sales (MU)	FY 07-08	FY 08-09	FY 09-10	FY 10-11	FY 11-12
Domestic	41.00	41.00	47.00	54.13	53.75
Commercial	14.00	18.00	19.00	20.69	27.81
Agriculture	3.00	3.00	3.00	2.26	3.00
LT Industry	150.00	115.00	125.00	147.23	152.19
HT/EHT Industry	2732.00	2889.00	3131.00	3668.28	3990.20

Sales (MU)	FY 07-08	FY 08-09	FY 09-10	FY 10-11	FY 11-12
Public Lighting	2.00	2.00	2.50	2.74	5.12
Temp. Supply		1.00	1.50	1.64	2.60
Total Sales	2942.00	3069.00	3329.00	3,896.99	4,237.14

- 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 12-13 and FY 13-14 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 12-13 was 2,317.31 MU and energy billed was Rs 967.27 Crore.
- 5. The energy sales for FY 12-13 & FY 13-14 have been determined based on CAGR for past years and 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 five-year CAGR has been considered for estimation of sales in domestic, HT/EHT industry and public lighting categories. For FY 12-13, the actual six month energy sales has been analyzed and the trend in the growth of half yearly FY 12-13 sales is observed to be similar to the annual growth 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 in LT industry category is 9.79%. Therefore, for FY 13-14, a reasonable growth rate of 9.79% has been considered for projecting the sales LT consumers. In the commercial category a CAGR of three years has been considered to project the sales for FY 2013-14. 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 13-14 energy sales.

- 8. Table 1717 summarizes category wise revised energy sales for FY 12-13 and projected energy sales for FY 13-14 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.

Sales (MU)	FY 12-13	Adjusted	FY 13-14
	Estimated	CAGR	Projected
Domestic	59.68	7.00%	63.86
Commercial	30.19	15.60%	34.91
Agriculture	3.82	0.00%	3.82
LT Industry	161.01	9.79%	176.78
HT/EHT Industry	4,353.56	12.60%	4902.31
Public Lighting	4.33	26.49%	5.48
Temp. Supply	2.14	1.68%	2.35
Total Sales	4,614.74		5,189.51

 Table 17: Projected Category wise Energy Sales for FY 12-13 & FY 13-14

2 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 11-12, the ED-DNH had been able to achieve T&D loss level of 4.94%.
- 3. ED-DNH has considered the T&D loss of 4.80% for FY 12-13. ED-DNH proposes to reduce the T&D losses to 4.70% for FY 13-14 as summarized in Table 18 below:

T&D Losses	FY12-13	FY13-14
	Revised Estimate	Projected
T&D Losses (%)	4.80%	4.70%

Table 18: T&D Losses

- 4. Considering the proposed capital expenditure in transmission and distribution network during FY 12-13 and FY 13-14, the ED-DNH expects to reduce the losses by approximately 0.10% in FY 13-14.
- 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 are one of the lowest in the country.
- 6. It's quite difficult to reduce losses by more than 0.1% p.a., due to low base loss level of 4.94% in Dadra & Nagar Haveli. It requires significant effort and resources to reduce losses even by 0.1%. 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.

3 Energy Requirement of the System

- 1. Overall energy sales to various categories are estimated to grow at approximately 9.00% and 10.00% each year during FY 12-13 and FY 13-14. Thus, the overall energy requirement is projected to be 5,189.66 MU and 5,612.82 MU in FY 12-13 and FY 13-14 respectively, an increase of around 9.50% each year, as shown in Table 19.
- 2. As depicted in Table 19, energy requirement of the Dadra & Nagar Haveli for FY 13-14 has increased by approximately 8.15%.

Energy Balance	FY12-13	FY13-14
	Revised Estimate	Projected
Sales (MU)	4,615	5,190
Add: T&D Losses (MU)	233	256
T&D Losses (%)	4.80%	4.70%
Energy Required at Periphery (MU)	4,847	5,445
Energy Available (MU)	5,190	5,737
Surplus/ (Deficit) Power (MU)	342	291

Table 19: Energy Requirement of the System

4 Energy Availability

- 1. 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, Vindhyachal, 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 12-13 and FY 13-14 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
 - Ratnagiri Gas Power Plant (RGPPL)
 - 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 overdrawal from the Grid (UI). In FY 11-12, energy drawn from UI and energy exchange formed 5% of the total availability.

4. For projecting of the energy availability for FY 12-13, six months actual power purchase has been considered. For projection of FY 13-14 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.

4.1 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 12-13 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 12-13, power purchase from various sources was 2655.81 MU and Rs. 958.97 Crore was incurred towards power purchase cost. Therefore, the power availability for remaining six months i.e. October 2012 to March 2013 has been estimated based on the firm and infirm allocation of ED-DNH notified by the Western Region Power Committee (WRPC) dated 24th May, 2012. The energy allocation from various generating stations is summarized in table below:

Name of the plant	Weighted average infirm allocation	Weighted Average firm allocation	Weighted average total allocation
KSTPP	69.21	0.00	69.21
KSTPS -III	21.80	2.20	24.00
VSTPP-I	44.25	5.00	49.25
VSTPP-II	35.69	4.00	39.69
VSTPP- III	36.14	6.00	42.14
KAWAS	55.99	25.00	80.99
JGPP	56.46	2.00	58.46
Sipat – I	57.56	6.00	63.56
Sipat – II	36.13	4.00	40.13
KHSTPP - II	3.50	3.50	3.00
NPCIL – KAPS	10.80	2.00	12.80

 Table 20: Energy Allocation from Central Generating Stations

Name of the plant	Weighted average infirm allocation	Weighted Average firm allocation	Weighted average total allocation
NPCIL - TAPP 3&4	39.45	7.00	46.45
Total	463.99	63.70	530.19

- Additional power allocation of 70 MW from Tata Power Haldia Plant and 38 MW from RGPPL has been considered for the purpose of FY 12-13 power availability projection.
- 4. Moreover, power allocation of 40.13 MW from Sipat II has been considered for FY 12-13.
- 5. Actual units purchased in the first six months of FY 12-13 and allocation of 164 MW from NTPC-SAIL Bhilai has been considered for the remaining six months of FY 12-13.
- 6. 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 12-13.
- 7. For projecting the power availability for FY 13-14, ED-DNH 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/2012/684 dated 24thMay 2012 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 13-14. Further the entire allocation from RGPPL of 38 MW has also been considered for projecting power availability for FY 2013-14.
- ED-DNH has considered power purchase from VSTPP-IV, Mauda-I and Mauda-II power plant for the FY 2013-14. Out of the total plant capacity of 500 MW, ED-DNH will get around 50 MW from October 2013 from VSTPP-IV.

Further, ED-DNH will also get 25 MW additional allocation from Mauda-II power plant from April 2013 and 25 MW from Mauda-I power plant from July 2013.

- 10. Additionally, the ED-DNH is in the process of procuring power from EMCO Energy Limited (GMR) power plant in Maharashtra through competitive bidding guidelines of Ministry of Power through Case-I route for which the petition has already been filed before the Hon'ble JERC.
- 11. Power purchase quantum from the NTPC stations for the second half of the current year and FY 13-14 has been calculated based on the installed capacity of each plant and by applying the average of previous three and half years (FY 10 to FY 12, FY 13 first six months) PLF 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 12-13.
- 12. For gas based generating stations i.e. Kawas (KGPP) and Gandhar (GGPP) weighted average PLF of FY 10-11, FY 11-12 and FY 12-13 (for the first six months) have been taken into account.
- 13. Auxiliary consumption of 9% and 3% has been considered for coal and gas based generating stations, respectively.
- 14. Actual external transmission losses (PGCIL losses) on power purchase for FY 11-12 was 3.61%. The recent 52 week moving average of regional losses was found to be 3.56%. 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, 3.56% external transmission losses have been applied on the gross power purchase for FY 12-13 and FY 13-14 respectively. Table 21 below lists down station wise estimated power purchase for FY 12-13 and FY 13-14.

Particulars	FY12-13	FY13-14
	Revised Estimates	Projected
NTPC Stations		
KSTPP 1&2	490.05	497.32
KSTPS 3	184.81	179.85

Table 21: Power Purchase for FY 12-13 and FY 13-14

Particulars	FY12-13	FY13-14
	Revised Estimates	Projected
VSTPP-I	329.90	330.25
VSTPP-II	271.34	273.36
VSTPP- III	305.48	303.33
VSTPP- IV	-	179.36
KAWAS	362.25	416.59
JGPP	306.78	331.16
Sipat-I	423.67	440.98
Sipat-II	280.42	272.78
NSPCL - Bhilai	1211.08	1135.74
Mauda-I	-	135.42
Mauda-II	-	180.57
Subtotal	4165.79	4676.71
Eastern Region		
KHSTPP-2	17.97	18.97
Subtotal	17.97	18.97
NPCIL		
KAPS	88.22	89.72
TAPS	319.69	327.19
Subtotal	407.92	416.91
Others		
RGPPL	212.30	274.11
Tata Power - Haldia	573.33	565.06
Subtotal	785.64	839.17
Power purchase from Other Sources		
Power purchase from Indian E. Exchange	0.00	0.00
UI	6.71	0.00
Subtotal	6.71	0.00
External Losses	194.36	214.86
Total Power Purchase	5189.66	5736.91

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

4.2 Energy Requirement & Availability

 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 12-13 and FY 13-14.

Energy Balance	FY12-13	FY13-14
	Revised Estimate	Projected
Sales (MU)	4,615	5,190
Add: T&D Losses (MU)	233	256
T&D Losses (%)	4.80%	4.70%
Energy Required at Periphery (MU)	4,847	5,445
Energy Available (MU)	5,190	5,737
Surplus/ (Deficit) Power (MU)	342	291

Table 22: Energy Balance

4.3 **Power Purchase Cost**

- 1. The cost of purchase from the central generating stations for FY 12-13 and FY 13-14 is estimated based on the following assumptions:
 - The cost of power purchase for FY 12-13 is based on actual power purchase bills, received by the ED-DNH during the first six months of FY 12-13. Each element of the power purchase cost i.e. fixed, variable and other cost has been estimated for each generating station by considering 6 month (Apr 12 to Sept. 12) 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 prorata basis by considering the actual cost for six months of FY 12-13.
 - Fixed cost for FY 13-14 has been projected considering a 10% escalation over the estimated fixed cost for various stations for FY 12-13. 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 for each NTPC generating stations for FY 13-14 has been projected based on the actual average variable cost per unit for the first six months of FY 12-13. For some of the plants like Kawas, JGPP, VSTPP-I, VSTPP-II and VSTPP-III the per unit variable cost for FY 2013-14 has been kept at the same level as that of FY 2012-13 as there was no increase in the variable cost during FY 2012-13 in these plants. For other NTPC stations the variable cost has been escalated keeping in view the actual escalation on the actual variable cost of power purchase over the first six months of FY 12-13.
- The ED-DNH has projected other charges for FY 13-14 at similar level as estimated for full year of FY 12-13.
- For nuclear plants i.e. KAPS single part tariff with 11% escalation on the actual per unit charges for FY 12-13 has been considered for FY 13-14 whereas for TAPP Units 3 & 4, single part tariff with 3.75% escalation on the actual per unit charges for FY 12-13 has been considered for FY 13-14.
- 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 12-13. An escalation of 9% for increase in fuel cost, fixed charges, other charges, etc. has been used for projecting the power purchase cost from NTPC-SAIL for FY 2013-14.
- For RGPPL an escalation of 8% in fixed cost and 5% for increase in fuel cost has been used from projecting the power purchase cost for RGPPL.
- ED-DNH has purchased 80,000 non solar renewable certificates at a cost of Rs. 14.50 Crore in the first six months of FY 2012-13 to meet its renewable purchase obligation. Further ED-DNH is also exploring the possibility to establish Solar Power Plant of its own at Velugam village as sufficient land is available at proposed 66/11 KV Velugam Sub-Station to meets its solar power obligation. The RPO has also been accounted for in the projected power purchase cost for FY 2013-14 as well.
- 2. The Total Power Purchase cost from various sources for FY 12-13 and FY 13-14 is summarized in Table below:

Source	Units Purchased	Fixed Charges	Variable Charges	Other Charges	All Charges Total	Per Unit Cost
NTPC Stations						
KSTPP 1&2	490.05	27.94	46.56	5.67	80.18	1.64
KSTPS 3	184.81	26.91	17.33	2.28	46.53	2.52
VSTPP-I	329.90	20.52	49.70	17.26	87.48	2.65
VSTPP-II	271.34	20.54	38.15	9.91	68.60	2.53
VSTPP- III	305.48	34.14	43.16	7.81	85.11	2.79
KAWAS	362.25	59.53	91.43	(1.21)	149.75	4.13
JGPP	306.78	49.97	71.84	0.85	122.66	4.00
Sipat-I	423.67	52.92	55.87	5.53	114.33	2.70
Sipat-II	280.42	35.16	32.88	(1.54)	66.50	2.37
NSPCL - Bhilai	1211.08	199.10	289.38	34.56	523.05	4.32
Subtotal	4165.79	526.73	736.31	81.13	1344.17	3.23
Eastern Region						
KHSTPP-2	17.97	2.24	3.75	0.26	6.26	3.48
Subtotal	17.97	2.24	3.75	0.26	6.26	3.48
NPCIL						
KAPS	88.22	0.00	20.16	0.00	20.16	2.29
TAPS	319.69	0.00	88.46	0.08	88.54	2.77
Subtotal	407.92	0.00	108.63	0.08	108.71	2.66
Others						
RGPPL	212.30	35.61	48.68	0.00	84.29	3.97
Tata Power - Haldia	573.33	0.00	221.95	0.00	221.95	3.87
Subtotal	785.64	35.61	270.63	0.00	306.24	3.90
Power purchase from Other Sources						
Power purchase from Indian E. Exchange	0.00	0.00	0.00	0.00	0.00	0.00
Short Term	6.71	0.00	1.09	0.00	1.09	1.63
RPO	0.00	0.00	14.50	0.00	14.50	0.00

Table 23: Power Purchase Cost for FY 12-13 (in Rs. Crore)

Source	Units Purchased	Fixed Charges	Variable Charges	Other Charges	All Charges Total	Per Unit Cost
Subtotal	6.71	0.00	15.59	0.00	15.59	23.24
Misc. Arrears					6.97	
External Losses	194.36					
Total Power Purchase	5189.66	564.58	1134.92	81.48	1787.95	3.43

Table 24: Power Purchase Cost for FY 13-14 (in Rs. Crore)

Source	Units Purchased	Fixed Charges	Variable Charges	Other Charges	All Charges Total	Per Unit Cost
NTPC Stations						
KSTPP 1&2	497.32	30.73	50.56	6.24	87.53	1.76
KSTPS 3	179.85	29.61	20.21	2.51	52.33	2.91
VSTPP-I	330.25	22.57	49.76	18.99	91.32	2.77
VSTPP-II	273.36	22.60	38.43	10.90	71.93	2.63
VSTPP- III	303.33	37.55	42.86	8.59	89.00	2.93
VSTPP- IV	179.36	60.00	20.71	0.00	80.71	4.50
KAWAS	416.59	65.48	105.14	0.00	170.62	4.10
JGPP	331.16	54.96	77.55	0.94	133.45	4.03
Sipat-I	440.98	58.21	85.27	6.09	149.57	3.39
Sipat-II	272.78	38.68	39.98	0.00	78.66	2.88
NSPCL - Bhilai	1135.74	219.01	295.52	38.02	552.55	4.87
Mauda-I	135.42	30.00	30.94	0.00	60.94	4.50
Mauda-II	180.57	31.00	50.25	0.00	81.25	4.50
Subtotal	4676.71	700.40	907.20	92.26	1699.86	3.63
Eastern Region						
KHSTPP-2	18.97	2.47	3.96	0.26	6.70	3.53
Subtotal	18.97	2.47	3.96	0.26	6.70	3.53
NPCIL						
KAPS	89.72	0.00	22.82	0.00	22.82	2.54
TAPS	327.19	0.00	93.93	0.08	94.01	2.87

Source	Units Purchased	Fixed Charges	Variable Charges	Other Charges	All Charges Total	Per Unit Cost
Subtotal	416.91	0.00	116.75	0.08	116.83	2.80
Others						
RGPPL	274.11	39.17	66.07	0.00	105.25	3.84
TATA Power - Haldia	565.06	0.00	219.11	0.00	219.11	3.95
Subtotal	839.17	39.17	285.19	0.00	328.45	3.91
Power purchase from Other Sources						
Power purchase from Indian E. Exchange	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
RPO	0.00	0.00	25.24		25.24	0.00
Subtotal	0.00	0.00	25.24	0.00	25.24	0.00
Misc. Arrears						
External Losses	214.86					
Total Power Purchase	5736.91	742.04	1338.34	92.61	2172.99	3.79

4.4 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 12-13 is based on the actual transmission charges for six months of FY 12-13 and pro-rata allocation of the same for remaining six months.
- 2. For projecting the PGCIL transmission charges for FY 13-14, an escalation of 7% over the estimated FY 12-13 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 for the ensuing year for estimation of Inter-State transmission charges.
- 3. Other charges like LC charges to NTPC and PGCIL for FY 13-14 has been considered based on the LC charges estimated for FY 12-13.

Particulars	FY 12-13 (Revised Estimate)			FY 13	3-14 (Proje	cted)
	Energy available at DNH Periphery (MU)	Total Cost (Rs. Cr)	Per Unit Cost (Rs/kWh)	Energy available at DNH Periphery (MU)	Total Cost (Rs. Cr)	Per Unit Cost (Rs/kWh)
Gross Power Purchase Cost	5189.66	1787.95	3.45	5736.91	2172.99	3.79
Transmission Charges		120.22			128.63	
WRLDC charges		6.99			7.48	
Reactive charges		6.49			6.94	
MSTCL		3.50			3.75	
Other Charges		0.83			0.89	
Total Power Purchase Cost (including Transmission Cost)	5189.66	1925.97	3.71	5736.91	2320.68	4.05

Table 25: Total Power Purchase Cost for FY 12-13 and FY 13-14 (in Rs. Crore)

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

Year	O&M Expense	
	Actual	
FY 09-10	6.34	
FY 10-11	6.56	
FY 11-12	11.83	

Table 26: Operation & Maintenance Expense (Rs. Crore)

- 3. The total O&M expense for FY 11-12 was Rs. 11.83 Crore as compared with FY 10-11 total O&M expense of Rs. 6.56 Crore. The increase in operation and maintenance cost in FY 11-12 was primarily due to increase in Employee and R&M expenses.
- 4. The methodology adopted by ED-DNH for projecting the values of each component of the O&M expense for FY 12-13 & FY 13-14 has been explained in following section.

5.1 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.
- 2. Based on the various expense head related to employee booked during six months of FY 12-13, ED-DNH has estimated the total employee cost for full year of FY 12-13 as Rs. 5.17 Crore. Salary expenses for FY 13-14 is estimated based on the variation in the rate of WPI Index per anum published by the Office of Economic Adviser, Government of India.
- 3. For projecting the employee cost for FY 13-14, the Petitioner has considered an 8.94% escalation over the estimated employee cost for FY 12-13. The employee cost for FY 12-13 and FY 13-14 is summarized in table below:

Particular	FY 12-13	FY 13-14
	Revised Estimate	Projected
Employee Expense	5.17	5.64

Table 27: Employee Expense (Rs. Crore)

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.

5.2 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 11-12 for ED-DNH was Rs. 5.13 Crore. The revised estimate of R&M expense for FY 12-13 is Rs. 5.59 Crore.
- 3. The estimated R&M expense for FY13-14 is Rs. 6.09 Crore. The escalation of cost from the previous year expenses 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 12-13 & FY 13-14 is summarized in table below:

Particular	FY 12-13	FY 13-14
	Revised Estimate	Projected
R&M Expense	5.59	6.09

Table 28: Repairs & Maintenance Expense (Rs. Crore)

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.

5.3 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 11-12 was Rs. 1.95 Crore. 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. 2.12 Crore for FY 12-13. The Commission has approved Rs. 1.35 Crore for FY 12-13. For FY 12-13, 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 and is engaging a specialized consultation for carrying out this exercise on the remaining 156 feeders. Further ED-DNH is also conducting studies for load forecasting, development of software for Standard of Performance, FPPCA calculations, developing software for SLDC functioning etc. as has been directed by the Hon'ble Commission and will be engaging a specialized consultation for the same.

For FY 13-14 the A&G expenses has been projected at Rs. 2.31 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 FY 2013-14.

5.4 Total Operation and Maintenance Expense

Based on the employee, R&M and A&G expense projected above, the total O&M expenditure for FY 12-13 & FY 13-14 is summarized in table below. The Hon'ble Commission is requested to approve the total O&M expense as projected by ED-DNH.

O&M Expenditure	FY12-13	FY13-14
	Revised Estimate	Projected
Employee Cost	5.17	5.64
R&M Cost	5.59	6.09
A&G Expenditure	2.12	2.31
Total O&M Expenditure	12.89	14.04

Table 29: Total O&M Expense (Rs. Crore)

6 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 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.

3. For FY 13-14, the ED-DNH has proposed a draft Annual Plan for various schemes to be carried out during the year. The details of capital expenditure plan for FY 13-14 is summarized below:

Proposed Schemes	<u>Amount</u>
Normal Development work	4.00
Free Electric Connections	0.03
Augmentation of existing 220/66KV Kharadpada sub-	
station from 3X100 MVA to 4X100 MVA capecity	5.00
Establishment of 66/11 KV, 2x15 MVA sub station at village Kala	2.50
Establishment of 66/11 KV, 15 MVA sub station at village	
Velugam	0.25
Establishment of 66/11 KV, 2x20 MVA sub station at village Athal	5.00
Establishment of 66/11 KV, 2x15 MVA sub station at village	
Waghdhara	0.25
Establishment of 220/66 KV, 2 X 160 MVA sub-station at village Khadoli	1.00
Upgradeation of Meter Testing	2.20
Augmentation of 66 KV MOCB etc at Rakholi S/S	0.40
(A) Establishment of 220/66 KV 2x160 MVA sub station	0.40
with associted trans. line at village Waghchhipa	2.50
(B) Power evacution by laying of 66 KV substation for	
220/66 KV at Waghdhara S/S	5.00
Augmentation of 220/66 KV sub station at village Khadoli	
by 2x160 to 3x160 MVA capacity	7.00
(A) Integrated Solution for MBC , Asset Mangement, MDAS	
& Analysis Software	10.00
(B) Underground cabling & new GIS sub station in Silvassa	
town, Rakholi, Masat, Samarvarni, Dadra, Khanvel and	
Naroli	10.00
Establishment of 66/11 KV, 2x20 MVA sub station at village	0.10
Dapada	0.10
Establishment of 66/11 KV, 2x20 MVA sub station at village Piparia	1 00
Establishment of 66/11 KV, 2x20 MVA sub station at village	1.00
Silli, Kuvapada	0.10
Augmentation of 66/11 KV Velugam S/s from 15 MVA to	0.10
55 MVA capacity	0.25
Augmentation of 66/11 KV Kala S/s from 30 MVA to 55	
MVA capacity	0.25

Table 30: Capital Expenditure Plan for FY 13-14 (Rs. Crore)

Proposed Schemes	<u>Amount</u>
Augmentation of 66/11 KV Waghdhara S/s from 30 MVA	
to 55 MVA capacity	0.25
Upgradation & modernisation of existing 66/11 KV S/s at	
Amli, Khadoli, Masat, Rakholi & Dadra	2.00
Renovation of Office building / new CGRF building etc &	
Store Building	7.00
Erection of 66 KV bay at Khanvel Sub-station for 66 KV	
incoming line and Hindalco Bay.	0.40
Augmentation of 66/11KV Silli (Athola Dhodhfalia) sub-	
station from 30MVA to 60MVA	1.00
Interconnecting 220kv Transmission line from proposed	
400/220kv Kala Sub-station to 220/66kv Khadoli Sub-	
station.	7.00
Interconnecting 220kv Transmission line from proposed	
400/220kv Kala Sub-station to 220/66kv Khradpada Sub-	
station.	7.00
Total Capital Expenditure	81.48

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 12-13 and FY 13-14 is summarized in Table below:

Table 31: Capital Expenditure & Capitalization for FY 12-13 and FY 13-14

Capital Expenditure & Capitalization	FY 12-13	FY 13-14
(Rs. Crore)	Revised Estimate	Projected
Capital Expenditure	52.00	81.48
Asset Capitalization	46.42	61.60
Capital Work in Progress	48.35	68.23

7 Gross Fixed Assets

 ED-DNH had Rs. 475.10 Crore of Opening Gross Fixed Assets (GFA) in FY 12-13. ED-DNH has further proposed capital expenditure of Rs. 52.00 Crore during FY 12-13.

- Based on the actual capitalization of the first six months and estimated addition in GFA during the remaining six months of FY 12-13, assets amounting to Rs. 46.52 Crore have been estimated to be added in the GFA during FY 12-13.
- 3. For FY 13-14, ED-DNH has proposed Rs. 81.48 Crore capital expenditure out of which Rs. 61.60 Crore estimated to be capitalized.
- 4. A summary of the Opening and Closing GFA and capitalization has been summarized in table below:

Particulars	Opening GFA	Additions during the Year	Closing GFA
FY 11-12 (Actual)	471.11	3.99	475.10
FY 2012-13 (Revised Estimate)	475.10	46.52	521.62
FY 2013-14 (Projected)	521.62	61.60	583.22

Table 32: Opening and Closing GFA (in Rs. Crore)

8 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.

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%

Table 33: Depreciation rate specified by CERC

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 12-13 and FY 13-14. The Table below summarizes the asset-wise depreciation considered claimed by ED-DNH:

Particulars	FY 12-13	FY 13-14
Rs. Crore	Revised Estimate	Projected
Opening GFA	475.10	521.62
Additions	46.52	61.60
Closing GFA	521.62	583.22
Average GFA	498.36	552.42
Depreciation Amount	25.24	28.09
Average Depreciation Rate	4.95%	4.84%

Table 34: Depreciation for FY 12-13(in Rs. Crore)

9 Interest & Financial Costs

9.1 Interest on Long-term / Capital Loans

- The entire capital expenditure of ED-DNH since its inception has been funded by the Central Government through Budgetary supports each year upto FY 11-12. 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:

Interest on Long-term Loans	FY 12-13	FY 13-14
Rs Crore	Estimated	Projected
Opening Loan	48.16	78.31
Addition in Loan (70% of Asset Capitalization)	32.57	43.12
Repayment of Loan (10% of Opening Balance)	2.41	3.92
Closing Loan Amount	78.31	117.52
Average Loan	63.23	97.92
Interest Rate on Loan	14.75%	14.75%
Total Interest Cost on Long-term Loans	9.33	14.44

Table 35: Total Interest on Long-term Loans

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

9.2 Interest on Working Capital Borrowings

- ED-DNH has computed the Interest on Working Capital for FY 12-13 and FY 13-14 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
 12-13 and FY 13-14 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.
- A rate of interest of 14.75% has been considered for FY 12-13 and FY 13-14 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."

4. The normative interest on working capital for FY 12-13 and FY 13-14 considering the above methodology is summarized in Table 36 below:

Interest on Working Capital	FY 12-13	FY 13-14
Rs Crore	Revised Estimate	Projected
One Month Power Purchase Cost	160.50	193.39
One Month Employee Cost	0.43	0.47
One Month R&M Cost	0.47	0.51
One Month A&G Cost	0.18	0.19
Two Month Fuel Cost	0.00	0.00
Total Working Capital requirement	161.57	194.56
Rate of Interest on Working Capital	14.75%	14.75%
Total Interest on Working Capital	23.83	28.70

Table 36: Interest on Working Capital

10 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 and FY 13-14 in its Petition.
- 9. Return on equity has been computed based on 30% normative equity for capitalization during FY 12-13 and FY 13-14 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 1.31 Crore for FY 12-13 and Rs. 3.90 Crore for FY 13-14 as detailed in Table 37 below:

Return	FY 12-13	FY13-14
Rs Crore	Estimated	Projected
Opening Equity	1.20	15.15
Addition in Equity (30% of Asset Capitalization)	13.96	18.48
Closing Equity Amount	15.15	33.63
Average Equity Amount	8.18	24.39
Rate of Return on Equity	16.00%	16.00%
Return on Equity	1.31	3.90

Table 37: Return on Equity

11 Provision for Bad & Doubtful Debts

- 1. ED-DNH has considered provision for Bad and Doubtful Debts as 1% of the receivables in the revenue requirement for FY 12-13 and FY 13-14.
- 6. ED-DNH requests the Hon'ble Commission to approve the provision for bad & doubtful debts as summarized in the Table below:

Provision for Bad & Doubtful Debts	FY 12-13	FY 13-14
Rs Crore	Revised Estimate	Projected
Receivables	1,921.62	2,151.84
Provision for Bad &Doubtful Debts as 0.50% of Receivables	1%	1%

Table 38: Provision for Bad & Doubtful debts

Provision for Bad & Doubtful Debts	FY 12-13	FY 13-14
Rs Crore	Revised Estimate	Projected
Provision for Bad & Doubtful Debts	19.22	21.52

12 Non-Tariff & Other Income

- 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 12-13 an increase of 5% p.a. has been considered over the actual non-tariff income of FY 11-12.
- 3. For FY 13-14, an increase at 5% p.a. has been considered over the estimated FY 12-13 non-tariff income. Details of the year wise non-tariff income is provided in table below:

Particulars	FY 12-13	FY 13-14
Rs Crore	Revised Estimate	Projected
Non-tariff Income	10.74	11.28

Table 39: Non-tariff Income

13 Aggregate Revenue Requirement

- 1. Table 40 summarizes ED-DNH's Aggregate Revenue Requirement for FY 12-13 and FY 13-14.
- 2. Aggregate Revenue Requirement for FY 13-14 is estimated to be Rs 2420.09 Crore.

Annual Revenue Requirement	FY12-13	FY13-14	
Rs. Crore	RE	Projected	
Power Purchase Cost	1,925.97	2,320.68	
O&M Expense	12.89	14.04	
Depreciation	25.24	28.09	
Interest Cost on Long-term Capital Loans	9.33	14.44	
Interest on Working Capital Loans	23.83	28.70	
Return on Equity	1.31	3.90	
Provision for Bad Debt	19.22	21.52	
Less: Non-Tariff Income	10.74	11.28	
Annual Revenue Requirement	2,007.04	2,420.09	

Table 40: Aggregate Revenue Requirement

14 Revenue at Existing Tariff

- 1. Revenue from sale of power for FY 12-13 & FY 13-14 is determined based on the energy sales estimated in Table 17 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. 1,921.62 Crore and Rs. 2,151.84 Crore in FY 12-13 and FY 13-14 respectively, as shown in Table 41. The estimated revenue for FY 12-13 is based on the six month actual revenue at the exiting tariff structure. The revenue for remaining six months of FY 12-13 has been computed based on the retail tariff notified by the Hon'ble Commission in the Tariff Order for FY 12-13 dated 31st July, 2012. The fuel purchase adjustment surcharge approved by the Hon'ble Commission is being levied to all the consumer categories except Domestic, LIG and Agriculture consumers, and has also been included in the remaining six month revenue estimation for FY 12-13.
- 3. Further, ED-DNH has computed the revenue for the entire FY 13-14 based on the tariff notified by the Hon'ble Commission in the Tariff Order for FY 12-13

dated 31st July, 2012 which is inclusive of the FPPCA charges approved by the Hon'ble Commission.

- 4. During FY 12-13, ED-DNH has estimated a surplus power of 342 MU 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 and 70 MW from Tata Power Haldia stations and also due to a minor recession being observed in the industries operating in ED-DNH. ED-DNH has sold approximately 106 MU of power during the first 6 months of FY 12-13 at an average rate of Rs. 3.00 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 291 MU for FY 13-14. The table below summarizes the revenue from sale of power at existing tariff for FY 12-13 & FY 13-14:

Revenue @ Existing Tariff	FY 12-13	FY 13-14
(Rs Crore)	Revised Estimate	Projected
Domestic	13.06	12.58
Commercial	9.60	10.87
Agriculture	0.43	0.28
LT Industry	55.27	59.78
HT/EHT Industry	1841.10	2066.28
Public Lighting	1.14	0.94
Temp. Supply	1.02	1.10
Total revenue from existing tariff	1,921.62	2151.84
Revenue from Surplus Power Sale	102.67	87.84
Total Revenue	2,024.30	2239.28

Table 41: Revenue from Sale of Power at Existing Tariff (Rs. Crore)

15 Coverage of Revenue Gap

Revenue from sale of power within UT (category-wise) is determined in Table
 41 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 and FY 13-14.

- 2. Table 42 summarizes the Revenue Gap at existing tariff at Rs. 180.81 Crore for FY 13-14.
- 3. As depicted in Table 42, total Revenue Gap for the FY 13-14 is proposed to be covered through the previous' surplus of Rs. 56.59 Crore carried over to FY 13-14 and Additional Revenue from proposed tariff revision of Rs. 124.22 Crore (Revenue at proposed tariff is covered in detail in Formats enclosed with this petition).

Annual Revenue Requirement	FY 12-13	FY 13-14
Rs Crore	Estimated	Projected
Total ARR	2,007.04	2,420.09
Revenue @ Existing Tariff*	1,921.62	2,151.84
Revenue from Surplus Power Sale	102.67	87.44
Total Revenue	2,024.30	2,239.28
Revenue (Gap)/Surplus	17.26	(180.81)
Covered by		
Previous Years' Surplus Carried Over	39.33	56.59
Additional Revenue @ Proposed Tariff	0.00	124.22
Total	39.33	180.81
Net (Gap)/Surplus	56.59	0.00

Table 42: Revenue Gap for FY 12-13 and FY 13-14

* Estimated Revenue from existing tariff for FY 12-13 and FY 13-14 includes sale of power as per existing tariff rate approved by JERC by Tariff Order 31st July, 2012 and PPCA charges for all categories except domestic, agriculture and LIG category of consumers.

16 Average Cost of Supply

1. Table 43 summarizes Average Cost of supply and total average realization at the existing tariff approved by the Hon'ble Commission.

Average Realization & Cost of Supply	FY 12-13	FY 13-14
(Rs/Unit)	Existing Tariff	Existing Tariff
Average Cost of Supply of ED-DNH	4.05	4.42
Average Realization *	4.08**	4.09
Revenue Gap at Existing Tariff	0.03	(0.34)
Net Revenue (Gap)/Surplus(Includes (gap)/surplus of previous year)	0.11	(0.23)
Additional revenue at Proposed Tariff depicted in Table 42		0.23

Table 43: Average Cost of Supply & Revenue Realization

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

** For Average Realization for FY12-13 and FY 13-14, revenue realization calculated as per the existing tariff rate approved by JERC vide tariff order dated 31st July, 2012 and PPCA charges levied on all consumers, except domestic, agriculture and LIG category of consumers.

17 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.

Tariff Structure	Existing	FY 12-13	K Factor	Propose	d FY 13-14
	Energy Charges (Rs/kWh)	Fixed Charges	for FPPCA formula for FY 2013-14	Energy Charges (Rs/kWh)	Fixed Charges
LT-D/Domestic					
Ist 50 Units	1.10		0.28	1.10	
51 to 200 Units	1.70		0.43	1.70	
201 to 400 Units	2.20		0.56	2.20	
Beyond 401 Units	2.50		0.63	2.50	
LIGH		Rs. 5/HP	0.00		Rs. 5/HP
LT-C/Commercial					
1st 100 Units	2.25		0.57	2.35	
Beyond 100 Units	3.00		0.76	3.10	
LT- Ag/ Agriculture					
Upto 10 HP	0.65		0.00	0.65	
10 HP to 99 HP	0.95		0.00	0.95	
LTP Motive Power					
Upto 20 HP of Connected Load	3.00		0.82	3.10	
Above 20 HP Connected Load	3.00	Rs. 20/HP	0.82	3.10	Rs. 20/HP
LT-PL/Public Lighting					
Public Lighting	1.60		0.40	2.00	
НТ					
HTC General					
50000 units	3.70	Rs. 75/kVA	0.98	4.00	Rs. 100kVA
50000 to 5 lakh units	3.80	Rs. 75/kVA	1.01	4.10	Rs. 100kVA

Table 44: Proposed Tariff Structure for FY 13-14

Tariff Structure	Existing FY 12-13		K Factor	Proposed FY 13-14	
	Energy Charges (Rs/kWh)	Fixed Charges	for FPPCA formula for FY 2013-14	Energy Charges (Rs/kWh)	Fixed Charges
Beyond 5 lakh units	3.85	Rs. 75/kVA	1.02	4.15	Rs. 100 kVA
HTC Ferro					
First 300 Units per kVA	2.70	Rs. 500/kVA	0.98	2.95	Rs. 550/kVA
Next 200 units per kVA	3.40	Rs. 500/kVA	1.16	3.65	Rs. 550/kVA
Above 500 units per kVA	3.70	Rs. 500/kVA	1.23	3.95	Rs. 550/kVA

Chapter 4: Compliance on Directives

The Hon'ble Commission vide Tariff Order dated 31st July, 2012 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.

In line with the directives, ED-DNH has been taken several steps to comply with the directives. The 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.

1. Directive 1: Segregation of T&D losses and loss reduction trajectory:

The Petitioner is directed to furnish segregation of losses into transmission and distribution losses in the first instant and further segregated distribution losses into technical and commercial losses separately in their next ARR and tariff petition, along with the status report on energy accounting and T&D losses.

Compliance:

The ED-DNH has evaluated T&D losses for the financial year 11-12 on the basis of total power purchase at DNH peripheral and total units billed to the various categories of consumers. Moreover ED-DNH has also invited tender for implementing energy audit and evaluate component wise AT & C losses along with GIS mapping.

In addition to above a scheme for integrated solution for the electricity has also been approved by Central Electricity Authority & SFC(still awaited). This scheme in turn will provide overall solution for the energy auditing and evaluation of AT&C losses as well as indexing of all categories of consumers by implementing GIS mapping & simulation of all related data.

2. Directive 2: Load Forecasting study:

The Petitioner is directed to conduct a detailed load forecasting study for short term (2-5 years), medium term (7-10 years) and long term (15-25 years) in order to understand the load requirements in their area at various periods and submit to Commission along with next ARR and tariff petition.

Compliance:

The ED-DNH already appointed M/s Panacean Energy Solutions Pvt. Ltd., Mumbai to carry out the study for short term (2-5 years), medium term (7-10 years) and long term (15-25 years) in order to understand the load requirements. The department will submit the report to the Hon'ble Commission by the end of January 2013.

3. Directive 3: Long Term PPA, overdrawl/underdrawl under UI mechanism and Banking of Power

The Petitioner is directed to enforce already signed long term PPA in line with their base load requirements to avoid short term power purchases from bilateral sources, power exchanges and U.I beyond the prudent level so as to minimize the impact on ARR. Further , the commission also directs the licensee to separately show in the review/true-up petition the date wise/time wise details of all short term Power purchases including quantum, rate & amount and grid frequency in case of U.I. over drawls/under drawls and should furnish the sources & cost of Power for purchase of energy from each of Renewable Energy sources at the true-up stage and should make necessary arrangements for long term PPA for purchase of Power from Renewable Sources of Energy. Further, the Commission also directs the petitioner to explore the possibility of banking of surplus power which will ensure optimal utilization of the available power.

Compliance:

ED-DNH has invited competitive bid for procurement of 200 MW power on long term basis, following e-tendering process as per Standard Bidding Guidelines of Ministry of Power under Case-I route. The lowest bidder was finalized and the petition for the approval of PPA in respect of procurement of 200 MW power on Long Term basis has been filed before Joint Electricity Regulatory Commission. Moreover, ED-DNH is in receipt of proposal from various traders for banking of power. The ED-DNH will invite the competitive bids from the interested firms on this issue.

4. Directive 4: Online Bill Payment:

The facility of online payments may be made more visible in a consumer friendly manner and extra charge (if any) on online payment should be discontinued forthwith. The Petitioner is directed to introduce multiple payment gateways for online collection and status of 'Online Bill Payment Facility' be submitted within three months.

Compliance:

ED-DNH has explored various possibilities to introduce online payment facility to all consumers. ED-DNH has entered into discussions with Dena Bank and HDFC Bank as well as Agencies like Billdesk to lend their services on the matter.

Moreover, ED-DNH is operating two numbers of Any Time Payment Machines (ATPM) to receive the payment either in cash or Cheque through this Machine, and more machines will be installed shortly.

5. Directive 5: Renewable Purchase obligation:

The petitioner is directed to stagger the purchase over the year to avoid bunching of purchase at high cost towards the end of the year.

Compliance:

ED-DNH would like to submit that the Ministry of Power in a process to formulate the guidelines for the procurement of Renewable Energy through competitive bidding process. ED-DNH will explore the possibility of purchase the power form Solar Energy after the guidelines are finalized by MOP.

Moreover ED-DNH has also invited tender by following e-tendering process to procure Non-Solar Energy to the tune of 150 MU. The lowest bidder was selected for procurement of 61 MU i.e M/s. Betul Non Convential Energy Pvt. Ltd for the year 2013-14. The petition is already filed for the approval of PPA for the procurement of 61 MU before JERC.

The ED-DNH has procured 80,000 Non-Solar Certificates amounting Rs. 14.50 Crore to meet the RPO obligation for the year 2012-13 upto October 2012.

ED-DNH is also exploring the possibility to establish Solar Power Plant of its own at Velugam village as sufficient land is available at proposed 66/11 KV Velugam Sub-Station. The ED-DNH has invited an offer from BHEL, a Government undertaking for establishment of the said Solar Power Plant. The capacity of the proposed power plant will be approximately 5MW.

6. Directive 6: Rural Electrification:

The petitioner is directed to submit the status of rural electrification in their area along with the detailed plan for rural electrification with the timeline proposed to achieve the complete electrification of rural area.

Compliance:

It is submitted that, 100% electrification of all the villages of UT Dadra and Nagar Haveli has already been done since long. The Electrification of some isolated hamlets and migrated hamlets has been done through normal development schemes of the department under budgetary allocation of funds on work to work basis.

7. Directive 7: Capital expenditure:

The petitioner is directed to submit the detailed statement of capital expenditure incurred and capitalization for every quarter, within 15 days in the subsequent quarter.

Compliance:

It is submitted that the status of capital expenditure incurred during the first 2 quarters for the current financial year i.e. April, May, June – 2012 and July, August, September – 2012 has been prepared and is being enclosed along with the petition as **Annexure III**.

8. Directive 8:Enforcement Cell:

The petitioner is directed to submit the status of the functioning of enforcement cell and quarterly progress report detailing number of cases, amount involved, amount of revenue fines recovered, (to be shown separately in ARR), sub-judice cases, and reduction in losses as a consequence.

Compliance:

It is submitted that the Electricity Department Dadra and Nagar Haveli has a separate division for Lab & Vigilance to monitor and conduct vigilance check on all consumer categories. The quarterly progress report will be submitted to the Hon'ble Commission shortly.

9. Directive 9: Data on the consumption and load profile of Advertisement Hoardings, Sign boards, Signage's etc.

The Petitioner is directed to separately capture the data regarding consumption and the load profile of the users of advertisement hoardings, signboards, signage's etc. and propose tariff for this category separately in the next tariff petition, so that the differential tariff for this category could be set as they draw power during the peak hours.

Compliance:

It is submitted that the department does not maintain any record separately for the consumption and load profile of the users of advertisement, hoardings, signboards, signage's etc. The initiative has been taken to segregate such type of consumers and evaluate the data regarding consumption and load profile of such users so that the same can be accommodated with differential tariff for this category to draw power during the peak hours.

10. Directive 10:Assessment of the open access consumers

The Petitioner is directed to provide an assessment of the number of open access consumers greater than 1 MW to the Commission by September 30' 2012. The Petitioner to provide the detailed scheme to operationalize open access scheme including setting up of the STU and SLDC (nodal agency) by the power department of the appropriate government.

Compliance:

It is submitted that the department has notified the procedure for according open access for the long term and short term open access. The list of consumers 1 MW and above has been evaluated and submitted to the Hon'ble Commission. The matter for evaluation of wheeling charges, losses charges and cross subsidiary etc for Open Access Customer is under progress in consultation with M/s Panacean Energy Solutions Pvt Ltd, Mumbai. The U.T Dadra & Nagar Haveli already has notified State Transmission Utility (STU) and has established SLDC with a nodal officer i.e. Deputy Engineer (N/Z).

11. Directive 11: Short-term procurement of power by the licensee

As per the Ministry of Power resolution dated May 15' 2012, the licensee is directed to comply with the guidelines for short term procurement of power by distribution licensees through tariff based bidding process.

Compliance:

ED-DNH has invited competitive bid for procurement of 200 MW power on long term basis, following e-tendering process as per Standard Bidding Guidelines of Ministry of Power under Case-I route. The lowest bidder was finalized and the petition for the approval of PPA in respect of procurement of 200 MW power on Long Term basis has been filed before Joint Electricity Regulatory Commission. Presently there is not any proposal for procurement of power through short term bidding process.

12. Directive 12: Standard of Performance:

The Commission has notified the JERC (Standards of Performance) Regulation 2009, wherein the guaranteed and overall standards of performance are prescribed to ensure the quality of supply. The petitioner is bound to adhere to the Regulations prescribed and impart the stipulated performance standards. The Commission in this regard directs the Petitioner to submit the information regarding the standards of performance achieved for FY 11-12 within one month from the issue of this order. Further, the licensee should ensure timely submission of the information as per the requirement laid down in the JERC (Standards of Performance) Regulation, 2009.

Compliance:

The SOP data upto August, 2012 has been submitted to the Hon'ble Commission and from now onwards the quarterly data as per the requirement will be submitted to the Hon'ble Commission. The ED-DNH is in the process to develop software for availing the data of each complaint centre and office details on month on month basis.

13. Directive 13: Security Deposit

The Commission in its previous order had directed to follow the provisions of Clause 6.10 of JERC (Electricity Supply Code) Regulations 2010. Wherever existing mode of deposit i.e. bank guarantee, fixed deposit etc. is different from that provided in the Regulation, the same be replaced by those as specified therein. The petitioner is directed to submit the present status versus regulations requirement.

Compliance:

The ED-DNH would like to submit that it has issued a notice that all the concerned consumers who have submitted bank guarantee shall replace their bank guarantees with either cash or bankers cheque or fixed deposit. The Silvassa Industries Association have filed a petition with the Hon'ble Commission to continue with the bank gurantees in the future.

14. Directive 14 :Forecasting Power requirements

The licensee is directed to improve the forecasting of the requirement of Energy basically for the Industry to help plan for Power Purchase at a reasonable cost, rather than spot purchase.

Compliance:

ED-DNH would like to submit that it has already appointed M/s Panacean Energy Solutions Pvt. Ltd., Mumbai to carry out the study for load forecasting for short term (2-5 years), medium term (7-10 years) and long term (15-25 years) to improve the forecasting of the requirement of energy so that it procures energy at a reasonable rate. Further looking to the existing and pending power applications the department has invited competitive bid for procurement of 200 MW power on long term basis, following e-tendering process as per Standard Bidding Guidelines of Ministry of Power under Case-I route. The lowest bidder was finalized and the petition for the approval of PPA in respect of procurement of 200 MW power on Long Term basis has been filed before Hon'ble Commission.

15. Directive 15 Energy Audit Expenses

The Petitioner is directed to submit all the documents establishing capability and rate reasonability for awarding the work of energy audit within two weeks of issuance of this Tariff order so as to check the reasonableness of the expenditure. The matter has been discussed in relevant Chapters of this order.

Compliance:

ED-DNH has invited tender for implementing energy audit and evaluate component wise AT & C losses along with GIS mapping. As soon as the tendering process is complete ED-DNH will submit all the relevant documents to the Hon'ble Commission.

16. Directive 16 : Continuous & Non-Continuous Industries

A scheme is to be framed by the Petitioner to meet industry demand for uninterrupted supply & its commercial mechanism.

Compliance:

ED-DNH is in a process for framing a scheme to meet industry demand for uninterrupted supply & its commercial mechanism. As soon as the scheme is finalized, ED-DNH will submit it to the Hon'ble Commission for its approval.

17. Directive 17 : Assets verification

The third party physical verification is required to be done by the competent firm of Chartered Accountant. The assets not employable for delivery of service to the consumer as useful assets should be written off.

Compliance:

ED-DNH would like to submit that third party physical verification of its assets is being done by a competent firm of Chartered Accountant. The fixed asset register is being enclosed along with this petition as **Annexure II**.

18. Directive 18: Roadmap for reduction in cross-subsidy

The petitioner is directed to propose a road map for an increase in the tariff rate which progressively reduces to bring the gap between per unit tariff and the average cost of supply over a period of 5 years in two phases i.e. first 3 years from FY 2012-13, FY 2013-14 and FY 2014-15 a review thereafter and further reduction during FY 2015-16 and FY 2016-17.

Compliance:

The ED-DNH will submit the roadmap to the Hon'ble Commission shortly.

19. Directive **19** : Overdrawls/Underdrawls beyond the frequency band specified by CERC

As per the CERC (Unscheduled Interchange charges and related matters) Principle Regulations and its amendments thereof applicable for FY 11-12 and Press Notification issued by Ministry of Power on 23rd July 2009 and after verification of the data submitted by the Petitioner, Commission is mandated to disallow the additional UI charges of Rs. 5.21 Crores against the UI over-drawl/underdrawl beyond 49.5 Hz frequency from April 2011 to March 2012, imposed on the utility under the UI regulations of CERC(as amended from time to time) for overdrawl during the period when the frequency was below 49.5 Hz (amended to 49.7 Hz vide CERC order dated 5th March 2012) and it will not be a pass through in the aggregate revenue requirement of the Petitioner for FY 11-12. As such penal rate which have been imposed as Unscheduled Interchange charges should be stated separately and very clearly and those payments which are in the nature of damages should not be shown as purchase of Power because it is on account of poor management of Load by ED-DNH. The ED-DNH is directed to forecast their demand more precisely and plan the Power purchase in advance. The burden of additional UI charges would have to be borne by the petitioner from their own finances and will not be allowed to pass this on to the consumers. Therefore, the Commission directs the licensee to separately show the date wise/time wise details of all short term Power purchases including quantum, rate & amount and grid frequency in case of U.I. over drawls/under drawls.

Compliance:

The details of the UI over drawls/under drawls are being enclosed along with the tariff petition (soft copy).

20. Directive 20 : Interest on Security Deposit

As per Clause 47(4) of the Electricity Act, 2003 and as specified in regulation 25 of JERC Tariff Regulations 2009, *the distribution licenses shall pay interest on security deposit collected from the consumers, equivalent to the bank rate or more as may be specified by the Commission.* On account of provisions mentioned in the Act and regulation, Commission directs the petitioner, that the petitioner must pay the interest on consumer security deposit for FY 2012-13 (at the Bank Rate i.e. 9.5026% per annum applicable as on 1st April 2012) with effect from 1st April 2012 to the consumers on their security deposit irrespective of petitioner's constraints and should explicitly mention the same as the 'Interest on security deposit for FY 2012-13' on the bills of the consumers. **Any non-compliance in this regard shall be viewed seriously by the Commission**.

Compliance:

The ED-DNH has already directed consumers to replace the bank guarantee with fixed deposit. Further, the Silvassa Industries Association has filed a petition before Hon'ble Commission to retain the procedure for accepting the bank guarantee.

Tariff Schedule

General Terms and Conditions:

- 1) 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.
- 2) Unless otherwise agreed to, these tariffs for power supply are applicable for supply at one point only.
- 3) Supply to consumers having contracted load between 100 kVA to 1500 kVA shall be at 11 KV and for more than 1500 kVA up to 25000 kVA at 66 KV; though for dedicated feeders, the consumer would get contracted load up to 2500 kVA on 11kV system. The consumer who requires load more than 25000 kVA load, the supply voltage shall be at 220 KV level.
- 4) The 11 kV consumers who desire to take power more than 1500 kVA and up to 2500 kVA on 11 kV system shall lay down separate dedicated feeder with both end metering at their own cost and shall pay 15% supervision charges to the department and also pay the development charges at the rate of Rs. 1000 per kVA for the load in excess of 1500 kVA to the licensee.
- 5) 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 unauthorized use of electricity and shall be dealt with for assessment under the provisions of section 126 of the Electricity Act, 2003 & Supply Code Regulation notified by JERC.
- 6) If the consumer fails to pay the energy bill presented to him by the due date, the Department shall have the right to disconnect the supply after giving 15 days' notice as per provision of the Act & Supply Code Regulation.
- 7) Fixed charges, wherever applicable, will be charged on pro-rata basis from the date of release of connection. 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.
- 8) The billing in case of HT/EHT shall be on the maximum demand recorded during the month or 75% of contracted demand, whichever is higher. If in any month, the recorded maximum demand of the consumer exceeds its contracted demand,

that portion of the demand in excess of the contracted demand shall be billed at double the normal rate. Similarly, energy consumption corresponding to excess demand shall also be billed at double the normal rate. The definition of the maximum demand would be in accordance with the provisions of the Supply Code Regulation. If such over-drawl is more than 20% of the contract demand then the connections shall be disconnected immediately.

Explanation: Assuming the contract demand as 100 kVA, maximum demand 120 kVA and total energy consumption as 12000 kWh, then the consumption corresponding to the contract demand will be 10000 kWh (12000*100/120) and consumption corresponding to the excess demand will be 2000 kWh. This excess demand of 20 kVA and excess consumption of 2000 kWh will be billed at twice the respective normal rate. Such connections drawing more than 120 kVA, shall be disconnected immediately.

- 9) Unless specifically stated to the contrary, the figures of energy charges relates to paise per unit (kWh) charge for energy consumed during the month.
- 10) Delayed payment surcharge shall be applicable to all category of consumers. Delayed payment surcharge of 2% per month or part thereof shall be levied on all arrears of bills. Such surcharge shall be rounded off to the nearest multiple of one rupee. Amount less than 50 paise shall be ignored and amount of 50 paise or more shall be rounded off to next rupee. In case of permanent disconnection, delayed payment surcharge shall be charged only upto the month of permanent disconnection.
- 11) The adjustment on account of Fuel and Power Purchase Cost variation shall be calculated in accordance with FPPCA formula separately notified by the Commission under the Regulation. Such charges shall be recovered / refunded in accordance with the terms and conditions specified in the FPPCA formula.
- 12) The values of the 'K' factor applicable for the different consumer categories for use in the FPPCA formula shall be as specified in this Tariff Order for FY 2013-14.
- 13) Schedule of other charges approved in this Tariff Order will remain in force until it is amended by the Commission.

The detailed tariff Schedule is outlined as under:

DETAILED TARIFF SCHEDULE

I. (A) Domestic Category

Applicable to private houses, hostels, hospitals run on Non-commercial lines, Charitable, Educational and Religious Institutions for light, Fans, Radios, domestic heating and other household appliances including water pumps up to 2 HP.

1. Energy Charges

Usage(Units/Month)	Energy Charge (Ps./Unit)
0-50 units	110
51-200 units	170
201-400 units	220
401 and above	250

(B) Power Supply to Low Income Group (Up to 2x40 W bulbs only)

Power supply to low income group connections will be charged at Rs. 5 per service connection per month. For any unauthorized increase in the load beyond 2x40 watts, penal charges at the rate of Rs. 10 per month per point will be levied and the installation will be liable for disconnection.

II. Non-Domestic Category/Commercial

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

1. Energy Charges

Usage(Units/Month)	Energy Charge (Ps./Unit)
1-100 units	235
101 units and above	310

III. Industrial-LT

Applicable to all Low Tension Industrial Motive Power Connections including water works/pumps with sanctioned load upto 99 HP.

1. Energy Charges

Usage(Units/month)	Energy Charge (Ps./Unit)-
For all units	310

2. Fixed Charges

	Tariff (Rs./HP/month) or part thereof
Upto 20 HP	NIL
	Rs 20.00/- per
For loads above20	HP or part
HP	thereof

3. Power Factor Charges

Any motive power connection above 3 HP running without proper capacitors installed so as to maintain Power Factor 0.90 as per Commission's regulation 11/2010 shall be charged extra 2.5 % of units consumed as additional power factor charges. Payment of the power factor charge won't exempt the consumer from his responsibility to maintain the power factor. In case of abnormal power factor decrease, the department will give the consumer 15 days' time to install appropriate capacitors and maintain the standard power factor. If the consumer is not able to rectify the problem within the notice time, the connection will be liable for disconnection. ED-DNH reserves the right to install a suitable capacitor at its

own cost and recover the cost thereof as arrears of energy charges. In case the monthly average power factor is less than 0.70 lagging, the installation is liable for disconnection after due notice.

IV. HT/EHT Category

A. High Tension Consumer

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

1. Fixed Charges(Demand Charges)

For Billing Demand	Charges (Rs./kVA/month) or part thereof
Up to Contract Demand	Rs. 100/-
In Excess of Contract Demand	Rs 200/-

2. Energy Charges

Usage(Units/Month)	Tariff (Ps./Unit)
1-50,000 units	400
50,001-500000 units	410
500001 and above	415

- 3. **Penalty Charges**: Twice the applicable Charges.
- a) Penalty charges will be levied on those units which are drawn beyond the contact demand. These Units will be worked out on pro-rata basis co relating the total consumption of the month with billing demand.
- b) If Industries are overdrawing power by more than 20% of the Contract demand, their electricity connection will be disconnected immediately.

4. Power Factor Charges

The power factor of the consumer if, less than 0.90; for every 0.01 of the power factor decrease, 0.5% of the total units consumed will be charged extra as surcharge at the rate of 500 ps/unit. Payment of the power factor charge won't exempt the consumer from his responsibility to maintain the power factor. In case of abnormal power factor decrease, the department will give the consumer 15 days' time to install appropriate capacitors and maintain the standard power factor. If the consumer is not able to rectify the problem within the notice time, the connection will be liable for disconnection. In case the monthly average power factor is less than 0.70 lagging, the installation is liable for disconnection after due notice.

5. 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. HT Industrial (Ferro Metallurgical/ Steel Melting/ Steel Rerolling/Power Intensive)
- 1. Fixed Charges(Demand Charges)

For Billing Demand	Tariff (Rs./kVA/month) or part thereof
Up to Contract Demand	Rs. 550/-
In Excess of Contract Demand	Rs 1100/-

2. Energy Charges

Usage(Units/Month)	Tariff (Ps./Unit)
First 300 units / kVA	295
Next 200 units / kVA	365
Above 500 units / kVA and above	395

- 3. **Penalty Charges**: Twice the applicable Charges.
- c) Penalty charges will be levied on those units which are drawn beyond the contact demand. These Units will be worked out on pro-rata basis co relating the total consumption of the month with billing demand.
- d) If Industries are overdrawing power by more than 20% of the Contract demand, their electricity connection will be disconnected immediately.

4. Power Factor Charges

The power factor of the consumer if, less than 0.90; for every 0.01 of the power factor decrease, 0.5% of the total units consumed will be charged extra as surcharge at the rate of 500 ps/unit. Payment of the power factor charge won't exempt the consumer from his responsibility to maintain the power factor. In case of abnormal power factor decrease, the department will give the consumer 15 days' time to install appropriate capacitors and maintain the standard power factor. If the consumer is not able to rectify the problem within the notice time, the connection will be liable for disconnection. In case the monthly average power factor is less than 0.70 lagging, the installation is liable for disconnection after due notice.

V. Agriculture

Agriculture or poultry loads upto 99 HP sanctioned load will be considered in this category.

1. Energy Charges

Usage	Tariff (Ps./Unit)
For connected load upto 20 HP	65
Beyond 10 HP and upto 99 HP connected load	95

VI. Public Lighting

1. Energy Charges

Usage	Tariff (Ps./Unit)
For all units	200

VII. 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 Tariff 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.

VIII. Schedule of Other Charges

a. Meter Rent

S.No.	Meter type	Tariff (in Rs.)/Month or part thereof
1	Single Phase	Rs 10
2	Three Phase	Rs 25
3	LT Meter with MD indicator	Rs 200
4	Tri- vector Meter	Rs 500

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

b. Reconnection Charges

S.No.	Connection type	Tariff (in Rs.)/Month or part thereof
1	Single Phase LT	Rs 50

2	Three Phase LT	Rs 100
3	HT	Rs 1000

c. Service Connection Charges

S.No.	Connection type	Tariff (in Rs.)/Month or part thereof
1	Single Phase LT	Rs 250
2	Three Phase LT	Rs 1000
3	HT (First 500 kVA)	Rs 10000
4	HT (Beyond 500 kVA)	Rs 1000 per 100 kVA or part thereof

d. Extra Length Charge

S.No.	Connection type	Tariff (in Rs.)/Month or part thereof
1	Single Phase	Rs 25/meter
2	Three Phase	Rs 50/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.

e. 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 ED-DNH.

f. Testing Fee for various Metering Equipment

S.No.	Types of Metering Equipment	Fee per unit (in Rs.)
1	Single Phase	100
2	Three Phase	300
3	Three Phase Tri-vector Meter (0.5 Class) Industrial LT Consumer	500

4	Three Phase Tri-vector Meter (0.5 Class) 11 KV HT Consumer	500
5	Three Phase Tri-vector Meter (0.2 Class) 66KV 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

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

S.No.	Types of Connection	Fee per test report (in Rs.)
1	Single Phase Lighting / Domestic	10
2	Three Phase Lighting / Domestic	25
3	Single Phase Lighting / Non Domestic	50
4	Three Phase Lighting / Non Domestic	100
5	Three Phase LT Industries	250
6	Single Phase / Three phase Agriculture / Streetlight / Public Lighting & others	50
7	HT Industries upto 500 kVA	1000
8	HT Industries upto 2500 kVA	5000
9	HT Industries above 2500 kVA	10000

Prayer

- 1. ED-DNH requests the Honorable Commission to:
 - Admit and approve the Aggregate Revenue Requirement of FY 13-14 as submitted herewith.
 - Make the proposed Retail Supply Tariffs applicable from April 1, 2013.
 - Approve the proposal for Aggregate Revenue Requirement and Tariff Hike for FY 13-14.
 - Admit and approve the Trued up ARR for FY 11-12.
 - 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:

Formats