

TARIFF ORDER

True-up of ARR of FY 2011-12, Review of ARR of FY 2012-13 and

Determination of Aggregate Revenue Requirement &

Retail Tariff for FY 2013-14,

Petition no.92/2012

For Electricity Department, Dadra & Nagar Haveli

JOINT ELECTRICITY REGULATORY COMMISSION

For the State of Goa and Union Territories

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March 25' 2013

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2	Public Notices published by the Petitioner for inviting objections/suggestions on the ARR & tariff petition FY 2013-14 (petition no. 92 /2012)				
3	Public Notices published by the Commission for intimation of public hearing on the ARR & tariff petition FY 2013-14 (petition no. 92/2012)				
4	List of objectors				

List of Abbreviations

Abbreviation		Full Form		
A&G	:	Administration & General Expenses		
Act	:	The Electricity Act, 2003		
ARR	:	Aggregate Revenue Requirement		
CAGR	:	Compound Annualized Growth rate		
Capex	:	Capital Expenditure		
CAG	:	Comptroller and Auditor General of India		
CEA	:	Central Electricity Authority		
CERC	:	Central Electricity Regulatory Commission		
COD	:	Commercial Operation Date		
Commission/JERC	:	Joint Electricity Regulatory Commission for the State of Goa and Union		
		territories		
CKt. Km	:	Circuit Kilometer		
DNHIA	:	Dadra & Nagar Haveli Industries Association		
DISCOM/DNH	:	Electricity Department, Dadra and Nagar Haveli		
D/C	:	Double Circuit		
DS	:	Domestic Supply		
EA 2003	:	The Electricity Act, 2003		
FC	:	Fixed Charges		
FPA	:	Fuel Price Adjustment		
FPPCA	:	Fuel & Power Purchase Cost adjustment		
FY	:	Financial Year		
GFA	:	Gross Fixed Assets		
HP	:	Horse Power		
HSD	:	High Speed Diesel Engines		
HT	:	High Tension		
JERC/	:	Joint Electricity Regulatory Commission for the State of Goa and Union		
Commission		territories		
KVA	:	Kilo Volt Ampere		
KWh	:	Kilo Watt Hour		
LPS	:	Late Payment Surcharge		
LT	:	Low Tension		
LIG / LIGH	:	Low Income Group Housing		

Abbreviation		Full Form	
PPCA	:	Power Purchase Cost Adjustment	
MU	:	Million Unit	
MW	:	Mega Watt	
MYT	:	Multi Year Tariff	
NDS	:	Non Domestic Supply	
O/H	:	Over head	
O&M	:	Operation & Maintenance	
PLF	:	Plant Load Factor	
RoE	:	Return on Equity	
RPO	:	Renewable Purchase Obligation	
R&M	:	Repair & Maintenance	
SCL	:	Sanctioned Connected Load	
S/C	:	Single Circuit	
SBI PLR	:	SBI Prime Lending Rate	
SIA	:	Silvassa Industries Association	
SIMA	:	Silvassa Industries & Manufacturing Association	
T&D	:	Transmission & Distribution	
UoM	:	Unit of Measurement	
VAR	:	Volt Ampere Reactive	
VC	:	Variable Charges	

Before the

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

CORAM

Dr. V.K. Garg, Chairperson Sh. S.K. Chaturvedi, Member

Petition No. 92/2012

In the matter of

True-up of Aggregate Revenue Requirement for FY 2011-12, Review of ARR of FY 2012-13 and Aggregate Revenue Requirement (ARR) & Retail Tariff for the Financial Year 2013-14, of the Electricity Department, Union Territory of Dadra and Nagar Haveli

And in the matter of

Electricity Department, Union Territory of Dadra and Nagar Haveli

.....Petitioner

ORDER

Date: 25th March 2013

1. INTRODUCTION

1.1 JERC Formation

In exercise of the powers conferred by Section 83 of the Electricity Act, 2003 the Central Government constituted a two member (including Chairperson) Joint Electricity Regulatory Commission for all Union Territories except Delhi to be known as "Joint Electricity Regulatory Commission for Union Territories" with headquarters at Delhi as notified vide notification no. 23/52/2003 – R&R dated May 2' 2005. Later on with the joining of the state of Goa, the Commission came to be known as "Joint Electricity

Regulatory Commission for the State of Goa and Union Territories" as notified on May 30' 2008. The Joint Electricity Regulatory Commission for the State of Goa and Union Territories (Andaman & Nicobar Islands, Chandigarh, Dadra and Nagar Haveli, Daman & Diu, Lakshadweep and Puducherry) started functioning with effect from September 2008. Office of the Commission is presently located in the district town of Gurgaon, Haryana.

1.2 Electricity Department, UT of Dadra and Nagar Haveli

The Electricity Department, UT of Dadra and Nagar Haveli herein called ED-DNH, is responsible for procurement, transmission and distribution of electricity to the various consumer categories in the UT of Dadra and Nagar Haveli.

As submitted by the petitioner,

Quote "The Electricity Department of UT of DNH draws the bulk power supply from the Central Generating Stations in Western Region and also has some allocation from Eastern Region Central Generating Station 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 distribution 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." unquote

DNH has highest per capita consumption of Electricity in India with 11708.59¹ KWh against India's average of 778.63 KWh, because of high industry consumption and low population base.

1.3 Filing of Petition

Electricity Department, UT of Dadra and Nagar Haveli has filed its petition for determination of Aggregate Revenue Requirement (ARR) & Retail Tariff for distribution and retail sale of electricity for FY 2013-14 under section 61, 62 & 64 of the Electricity Act, 2003, ED DNH has submitted its ARR and Tariff petition for FY 2013-14 on November 30'2012.

The Electricity Department, UT of Dadra and Nagar Haveli has prayed to the Hon'ble Commission:-

- a) Admit and approve the Aggregate Revenue Requirement of FY 2013-14 as submitted herewith.
- b) Make the proposed Retail Supply Tariffs applicable from April 1, 2013.
- c) Approve the proposal for Aggregate Revenue Requirement and Tariff Hike for FY 2013-14.
- d) Admit and Approve the Trued up ARR for FY 2011-12.

Source: This information was given by the Minister of State for Power Shri K.C.Venugopal in a written reply to a question in Lok Sabha on May 20'2012; also published on the website of Times of India on May 20'2012; Desh Gujarat, Ahmedabad on May 20'2012

- e) 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.
- f) Submit necessary additional information required by the Commission during the processing of this petition.
- g) And pass such other and further orders as are deemed fit and proper in the facts and circumstances of the case

1.4 Admission of Petition

After initial scrutiny and analysis of the petition, the Commission as per its letter dated December 24' 2012 admitted the petition for approval of Aggregate Revenue Requirement (ARR) and Tariff for FY 2013-14. The Petitioner was directed to publish the summary of the petition for proposed ARR and Tariff for FY 2013-14 in leading newspapers of the union territory and upload the petition on the website of the Petitioner. The copy of the admission order is enclosed as **Annexure 1** to this order.

Electricity Department, UT of Dadra and Nagar Haveli had published a public notice on December 03'2012 in the leading newspapers of UT of Dadra and Nagar Haveli indicating therein the proposed ARR and Tariff for the FY 2013-14 inviting suggestions/objections from the public. The copies of the newspaper clippings wherein public notices were published by the petitioner for the information to the stakeholders, are enclosed as **Annexure 2** to this order.

1.5 Interaction with the petitioner

This Order has referred at numerous places to various actions taken by the "Commission". It is pertinent to mention for the sake of clarity, that the term "Commission" unless otherwise specified in most of the cases also refers to the Staff of the Commission for carrying out the technical due diligence & validation of data of the petitions filed by the utilities, obtaining and analyzing information and clarifications received from the utilities and submitting relevant issues for consideration of the 'Commission'.

The Commission's Staff held discussions with the Petitioner/Petitioner's representative, obtained information/clarifications wherever required and carried out technical validation with regard to the information provided.

Commission's staff interacted regularly with the Petitioner to seek clarifications and justification on various issues essential for the analysis of the tariff petition. The Commission's staff and the Petitioner

also discussed key issues related to the petition, which included Power purchase cost, estimated sales, gross fixed assets, security deposit and revenue submitted to the Commission, etc.

On January 17'2013, the representatives of the Department along with the representatives of the Commission conducted the technical validation session at the Commission's office. The Commission vide letter dated January 21'2013 sought clarifications/additional data on the issues/discrepancies highlighted during the technical validation session. This included clarifications on the compliance of directives, mismatch of certain components including revenue figures claimed with the audited accounts for FY 2011-12, mismatch of Power purchase units with REA.

The Petitioner submitted its replies, in response to the queries raised by the Commission's office, which were necessary for computation of the ARR and the resultant tariff of the Petitioner thereof through letter and through email dated January 30'2013.

Various queries were raised by the Commission; the petitioner clarified most of the queries with the last email dated January 30'2013. Commission has to rely on the information made available by the petitioner through emails and letters without waiting for affidavits which, many times has been revised by the petitioner in subsequent submissions.

SI. Date **Action by** Subject 30.11.2012 ED-DNH Petition submission 1. 24.12.2012 Admission of the Petition 2. Commission 04.12.2012. Publication of Public notice on ARR and Tariff Petition for FY 2013-14 3. **ED-DNH** 05.12.2012 for inviting suggestions/comments from stakeholders Deficiencies pointed out by the Commission on ARR and Tariff Petition 4. 14.12.2012 Commission 5. 07.01.2013 **ED-DNH** Additional Information submitted by the petitioner Technical Validation Session held in JERC for the ARR of FY 2013-14 6. 17.01.2013 Commission 7. 21.01.2013 Deficiencies pointed out during the Technical Validation held in JERC Commission for the ARR of FY 2013-14 30.01.2013 Reply of the Deficiencies pointed out during the Technical Validation 8. **ED-DNH** held in JERC for the ARR of FY 2013-14

Table 1.5.1: Formal interaction with the petitioner

1.6 Public hearing process

A public notice was published by the Petitioner for inviting objections/ suggestions from its stakeholders on the ARR and Tariff petition in the leading newspapers as detailed below.

S. No. Date Language Name		Name of Newspaper	
1.	05.12.2012	Gujarati	Divya Bhaskar-Surat Edition
2.	04.12.2012	04.12.2012 Hindi Nishpaksh Jan Sansaar – Silvas	
3.	04.12.2012	English	DNA- Mumbai Edition

Table 1.6.1: public notice published by the Petitioner

The petitioner also uploaded the petition on Electricity Department, DNH website (http://www.dnh.nic.in/) for inviting objections and suggestions on their petition.

Interested parties / stakeholders were requested to file their objections / suggestions on the petition. The copies of newspaper cutting of public notice are attached as **Annexure 2** to this order.

1.7 Notice for public hearing

Commission published public notices in the leading newspapers giving due intimation to stake holders, consumers, objectors and the public at large about the public hearing to be conducted by the Commission as per the mentioned schedule:

S. No	Date	Venue of Hearing	Time & Category of Consumers	Subject
•		Donaid ant Hall		ARR of FY 2013-14 & True-up of FY 2011-12
1.	07.02.2013	President Hall, Hotel Yatri Niwas, Prithiviraj Chauhan Road, (Naroll Road), Silvassa – 396230	From 11:00 AM onwards For all consumers- domestic/non-domestic Commercial), LT industries and HT Industries.	Uniform consumer categorization, voltage wise contract load/demand and Terms & Conditions of LT and HT supply, Road map for cross-subsidy.
				Effectiveness of the functioning of CGRF.

Table 1.7.1 : Schedule of Public hearing at Dadra and Nagar Haveli

Table 1.7.2: Public notice published by Commission

S.No.	Date	Language	Name of Newspaper
1.	23.01.2013	Hindi	Navbharat Times – Mumbai Edition
2.	23.01.2013	Gujarati	Gujarat Samachar – Surat Edition
3.	23.01.2013	English	Times of India – Mumbai Edition
4.	23.01.2013	Hindi	Nishpaksh Jan Sansaar – Silvassa Edition
5.	23.01.2013	English	Free Press Journal – Mumbai Edition
6.	23.01.2013	Gujarati	Divya Bhaskar – Surat Edition

Table 1.7.3: Repeat Public notice published by Commission

S.No.	Date	Language	Name of Newspaper
1.	05.02.2013	Hindi	Navbharat Times – Mumbai Edition
2.	05.02.2013	Gujarati	Gujarat Samachar – Surat Edition
3.	05.02.2013	Hindi	Nishpaksh Jan Sansaar – Silvassa Edition
4.	05.02.2013	English	Free Press Journal – Mumbai Edition
5.	05.02.2013	Gujarati	Divya Bhaskar – Surat Edition

The copies of public notice published by the Commission for intimation of public hearing are attached as **Annexure 3** to this order.

Commission received four written objection / suggestion on the petition before the date of public hearing. The Commission forwarded those to the Petitioner for communicating their reply to the objections raised by the objector.

During the public hearing, each objector was provided an opportunity to present his views on the petition filed by the Petitioner. All those present in the hearing, irrespective of whether they had given a written objection or not, were given an opportunity to express their views. Stakeholders who raised their concerns on the spot were replied to, by the officers of the utility orally on the spot. The list of all objectors is attached at **Annexure 4** to this order.

The list includes the objectors:

- 1. Those who gave their written objections & did not intend to present orally during the public hearing
- 2. Those who gave their written objections & expressed desire to present orally also during the public hearing

- 3. Those who gave their written objections but had not desired to express orally, but later chose to present orally also. They were also given an opportunity to present orally before the Commission during the public hearing;
- 4. Stakeholders who did not give their written objection or prior intimation, but participated in the hearing on the spot
- 5. Stakeholders who did not give their written objection or prior intimation, but participated in the hearing on the spot and also gave written submissions

All these objections/suggestions were responded to by the Licensee during the hearing itself. Later Licensee submitted their written reply for all written objections/suggestions of the stakeholders.

The issues and concerns expressed by stakeholders have been examined by the Commission. The major issues discussed during the public hearing, the comments/replies of the utility and the views of the Commission thereon, have been summarized in **Chapter 4** of this order.

2. BRIEF SUMMARY OF ARR & TARIFF PETITION

2.1 Introduction

In exercise of powers conferred on Joint Electricity Regulatory Commission for the Goa and Union Territories under Section 61 read with Section 181 of the Electricity Act, 2003 (36 of 2003) and all other powers enabling it in this behalf, the Joint State Electricity Regulatory Commission for the State of Goa and Union Territories notified the (Terms and Conditions for Determination of Tariff) Regulations, 2009. These regulations came into force from the date of their publication in the official Gazette i.e. February 9' 2010. These Regulations are applicable to the State of Goa and the Union Territories of Andaman and Nicobar Islands, Chandigarh, Dadra and Nagar Haveli, Daman and Diu, Lakshadweep and Puducherry.

As discussed in para no. 1.3 and 1.4 of Chapter no. 1, Electricity Department, UT of Dadra and Nagar Haveli filed its petition for determination of Aggregate Revenue Requirement and Tariff for FY 2013-14 to the Commission on November 30' 2012 under 61, 62 & 64 of the Electricity Act 2003 and relevant provisions mentioned in JERC (Terms and Conditions for Determination of Distribution Tariff) Regulations, 2009. In accordance with the directions given by the Commission, the ED-DNH had submitted its true-up petition for FY 2011-12 and Review of FY 2012-13 along with audited accounts of FY 2011-12 were submitted on November 30' 2012 with a request for final truing up of ARR of FY 2010-11 on the basis of verified asset registers.

After initial scrutiny & analysis of the information submitted with ARR and Tariff Petition filed by ED-DNH; the petition was admitted subject to removal of infirmities to the extent possible. The Commission has taken the aforesaid petition on record as 'petition no. 92/2012' on December 24'2012.

2.2 Petition Summary for ARR for FY 2013-14, Review of FY 2012-13 and True-up of FY 2011-12

The 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 and proposal for retail tariff for FY 13-14. Commission issued the first Tariff Order for Electricity Department of Dadra & Nagar Haveli (ED-DNH) on November 01' 2010 and subsequently the second and third Tariff Order for FY 11-12 and FY 12-13 were issued on September 13' 2011 and July 31' 2012 respectively. The Commission in its Tariff Order for FY 2012-13 has approved the ARR for FY 2012-13 based on the actual cost for FY 2010-11 and estimated expenses for FY 2011-12. Further, Commission has approved revision in retail tariff to meet the revenue deficit for FY 2012-13.

The Petitioner has submitted the ARR & Tariff petition for the determination of Tariff for FY 2013-14 on the basis of the principles outlined in Tariff Regulations notified by Commission. 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. Based on the estimates and projections for FY 2013-14, the Aggregate Revenue Requirement excluding non-tariff income by ED-DNH for FY 2013-14 has been proposed at Rs. 2332.65 Crores. The brief summary of petitioner's proposal as submitted in the petition for FY 2013-14 is presented below:

Table 2.2.1 : Brief Summary of ARR for FY 2013-14, Review of FY 2012-13 and True-up of ARR for FY 2011-12 submitted by the petitioner (Rs. in Crores)

Sr. No.	Particulars	(FY 2011-12) True-Up Petition	(FY 2012-13) Estimates submitted in FY 13-14 petition	(FY 2013-14) Petitioner Submission
1	2	3	4	5
1	Cost of fuel	1	-	-
2	Cost of power purchase	1722.68	1,925.97	2,320.68
3	Employee costs	4.75	5.17	5.64
4	R&M expenses	5.13	5.59	6.09
5	Administration and general expenses	1.95	2.12	2.31
6	Depreciation	19.92	25.24	28.09
7	Interest and finance charges	7.07	9.33	14.44
8	Interest on working capital & Interest on Security Deposit	21.32	23.83	28.7
9	Return on Equity	0.1	1.31	3.9
10	Provision for Bad Debt	0	19.22	21.52
11	Advance Against Depreciation	-	-	-
12	Total Revenue Requirement	1,782.92	2,017.78	2,431.37
13	Less: Non-Tariff Income	10.23	10.74	11.28
14	Less: Revenue from Sale through UI	69.08	102.67	87.44
15	Less: Revenue from Sale of Power- Exchanges	0	0	0
16	Net Revenue Requirement (12-13- 14-15)	1,703.61	1,904.37	2,332.65
17	Revenue from Retail Sales at Existing Tariff including FPPAC	1742.94	1,921.62	2,151.84
18	Net Gap (16-17)	(39.33)	(17.25)	180.81
19	Gap for the previous year	0	(39.33)	(56.58)
20	Total gap (18+19)	(39.33)	(56.58)	124.23

Sr. No.	Particulars	(FY 2011-12) True-Up Petition	(FY 2012-13) Estimates submitted in FY 13-14 petition	(FY 2013-14) Petitioner Submission
1	2	3	4	5
21	Additional revenue from proposed tariff			124.23
22	Revenue Gap/ (Surplus), if any, after proposed tariffs (19-20)	(39.33)	(56.58)	0
23	Budgetary Support from Government			0
24	Net Final Revenue Gap/ (Surplus) (22-23)	(39.33)	(56.58)	124.23
25	Energy sales (MU)	4,237	4,615	5,190
26	Cost of Supply (12/25)*10 ² (Rs./KWh)	4.21	4.37	4.69

2.3 Summary of the Tariff Proposal for FY 2013-14

The Petitioner had submitted that the

Quote "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." **Unquote**

The table mentioned below summarizes the existing and proposed tariff structures for various consumer categories.

² Used for conversion purposes (Crores to Million)

Table 2.3.1 : Brief Summary of Tariff Proposal for FY 2013-14 submitted by the petitioner

Tariff Structure	Existing tariff applicable for FY 12-13 as per the tariff order dated 31.07.2012		Revised tariff proposed for FY 2013-2014		
	Energy Charges (Rs/kWh)	Fixed Charges	K Factor for FPPCA formula	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	
Low Income Group		Rs. 5.00 ³	0.00		Rs. 5.00 ⁴
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	
HT					
HTC General					
50000 units	3.70	Rs. 75/KVA	0.98	4.00	Rs. 100/KVA
50000 to 5 lakh units	3.80	Rs. 75/KVA	1.01	4.10	Rs. 100/KVA
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

³ Per consumer/month ⁴ Per consumer/month

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Tariff Structure	Existing tariff applicable for FY 12-13 as per the tariff order dated 31.07.2012		Revised tariff proposed for FY 2013-2014		
	Energy Charges (Rs/kWh)	Fixed Charges	K Factor for FPPCA formula	Energy Charges (Rs/kWh)	Fixed Charges
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

2.4 Prayer to the Commission

The petitioner has submitted the following to the Commission:

Quote"

- 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 2011-12.
- 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."

Unquote

3. APPROACH OF THE ORDER FOR DETERMINATION OF ARR & TARIFF FOR FY 2013-14

3.1 Introduction

As discussed in earlier Chapter of this order, Electricity Department of UT of Dadra & Nagar Haveli had filed its petition for determination of Aggregate Revenue Requirement and Tariff for FY 2013-14 to the Commission on November 30' 2012 under section 61, 62 & 64 of the Electricity Act, 2003 and relevant provisions mentioned in JERC (Terms and Conditions for Determination of Distribution Tariff) Regulations, 2009.

3.2 Review Order – Commission's findings in the matter of Review Petition no. 86/2012 on the Tariff Order dated July 31'2012 filed by ED, UT of Dadra and Nagar Haveli

The petitioner aggrieved of the Commission's Tariff order for FY 2012-13 had filed a review petition which was decided by the Commission vide its above captioned order. The relevant excerpts of Review Order dated **January 24'2013** in the matter of Review Petition no. 86/2012 have been summarized below:

- 1. Review Order dated January 24'2013 in the matter of Review Petition no. 86 of 2012 Electricity Department of UT of Dadra and Nagar Haveli had filed a review petition under section 94 (1) (f) of the Electricity Act, 2003 (hereinafter referred as 'the Act') and Regulation 74 of Joint Electricity Regulatory Commission (Conduct of Business) Regulations 2009 (in short referred as 'the Regulations') for review of order dated July 31'2012 passed by the Commission in petition no. 62 of 2012 filed by the petitioner for True up of Annual Revenue Requirements for the year 2010-11, Reviewing the Annual Revenue Requirements for the year 2011-12 and Approval of the Annual Revenue Requirements and determination of tariff for the year 2012-13. Commission's findings on the points raised by the petitioner for review are summarized below:
 - a. Approval of the Gross Fixed Assets for the year 2010-11 and consequential effect on Depreciation and Return on Equity/Capital Base.

Commission's findings

Quote

"2.1.9. In view of the above, even if the typographical errors are ignored, the auditor's report, notes to the accounts, comment on the fixed assets & depreciation registers, does not specify that the opening value of gross fixed assets & importantly, the assets and depreciation registers furnished by the

department could not provide the crucial information to ascertain the assets that are effectively/actually deployed for the year for which tariff is being fixed or claimed. Therefore the Commission rejects the contention of the petitioner and directed to submit the verified & required information for consideration by the Hon'ble Commission as stated in the tariff order dated July 31'2012.

2.1.10. ED- DNH is directed to indicate the value list of Assets being used for rendering the services in the ARR of 2013-14 or alternatively indicate as to what % of Gross block be considered on ad hoc basis & the basis thereof which can be considered in the true up which is due in the ARR for FY 2013-14."

Unquote

b. Disallowance of Power Purchase Cost on account of net UI purchases.

Commission's findings

Quote

- "2.2.7. Commission rejects the contention of the petitioner that there is an inherent mistake in the calculation of UI sale/purchase. The petitioner should understand the fact that Rs.35.80 Crores has been computed as the net impact of UI under and over drawl. The petitioner in its revised submission had submitted the UI purchase of Rs. 67.68 Crores and considered Rs. 38.73 Crores from UI Sale. Thereby the net impact of the above transaction made by the petitioner is a net UI purchase of Rs. 28.95 Crores (as per the petition), which was calculated on the basis of six months data. The Commission in its tariff order had clearly specified that the actual weekly transactions for full year of FY 2011-12 have been considered for prudence check. This would be prudent to mention that the petitioner has also now submitted the reconciliation sheet of UI sale/purchase of FY 2011-12, which shows the net UI sale of 89.50 Million units and a net revenue of Rs. 30.58 Crores from UI transactions during FY 2011-12, which after verification from the REA reports for the first six months and WRPC reports for next six months comes out to be 61.69 million units.
- 2.2.8. The basic difference is the approach used by the petitioner for projecting UI sale/purchase, trend of UI transaction from April to October 2011 was the only basis for projection. It is to be highlighted that the trend has taken a complete reversal in the later part of the year, there was an under drawl of UI happened during November 2011 till March 2012.
- 2.2.9. Further it may also be clarified here that the Commission has not disallowed any UI transactions or power purchase cost. It may be perused from the table 7.7.1 of the Tariff order in contention where the petitioner's submission of the power purchase cost has been summarized. The petitioner had submitted the actual power purchase cost at 1712.79 Crores for the FY 2011-12 which includes the UI over drawl charges of Rs 67.68 Crores. The Commission for the purpose of approval has considered the over drawl and under drawl of UI together, considering which the petitioner's submission of power purchase cost other than UI over drawl comes to Rs 1645.11 Crores (Rs 1712.79 Crores Less Rs 67.68 Crores). The

Commission against the said amount has considered Rs 1645.18 Crores towards UI transactions. Therefore it may be seen that there has not been any disapproval of Power purchase cost. Accordingly the Commission has considered the cost of UI over drawl and under drawl together which has resulted in a net over drawl as indicated in the Para 2.2.5 above.

2.2.10. The Commission, however, has noted the facts submitted by the petitioner based on the actual UI data along with the UI bills for complete year FY 2011-12 and is of the view that since the petitioner has already filed petition for true-up of ARR for FY 2011-12, Review of ARR for FY 2012-13 along with petition for Approval of ARR & determination of tariff for FY 2013-14, it will be appropriate to consider this issue during disposal of the petition for true-up of ARR for FY 2011-12."

Unquote

c. Transmission & Distribution losses considered by the Hon'ble Commission.

Commission's findings

Quote

"2.3.2.The Commission informed that all the power purchase bills submitted by the petitioner for part of the year FY 2011-12 were checked and compared with REA account from WRPC website. The petitioner's contention on the consideration of losses has been evolved due to the variation of units considered by the petitioner and the Commission for FY 2011-12. The petitioner has contested that the units considered by the Commission are at large variance with the submission of the petitioner and REA which in-turn has affected the calculation of the losses for the FY 2011-12. The Commission has dealt with the issue of variation in units considered for power purchase at para 2.2. Therefore, in view of the clarification provided by the Commission at Para 2.2 this issue does not survive. The Commission also finds that this issue will automatically be redressed during disposal of the petition for true-up of ARR for FY 2011-12 already filed by the petitioner along with petition for Approval of ARR & tariff determination for FY 2013-14."

Unquote

d. Incorrect computation of the refund of FPPCA charges to consumers.

Commission's findings

Quote

- "2.4.2. The petitioner has submitted that the Commission has wrongly considered the UI charges and the power purchase cost which has resulted in wrong computation of the refund of FPPCA.
- 2.4.3. Commission in this regard likes to reiterate that the appropriate clarification & approach followed by the Commission has already been explained in the previous paragraphs regarding the power purchase cost and UI charges. In view of the above, this issue does not survive."

Unquote

e. Interest on FPPCA charges provided by the Hon'ble Commission.

Commission's findings

Quote

"2.5.2.Commission likes to place reliance on the relevant provision of Electricity Act,2003 in this regard

Quote"

- 62. Determination of tariff
- (4) No tariff or part of any tariff may ordinarily be amended more frequently than once in any financial year, except in respect of any changes expressly permitted under the terms of any fuel surcharge formula as may be specified.
- (5) The Commission may require a licensee or a generating company to comply with such procedures as may be specified for calculating the expected revenues from the tariff and charges which he or it is permitted to recover.
- (6) If any licensee or a generating company recovers a price or charge exceeding the tariff determined under this section, the excess amount shall be recoverable by the person who has paid such price or charge along with interest equivalent to the bank rate without prejudice to any other liability incurred by the licensee".

"Unquote [Emphasis supplied]

The sub-section (4) of section 62 of Electricity Act, 2003 clearly specifies that amount recovered from the fuel surcharge formula is a part of tariff and sub-section (6) of section 62 of Electricity Act, 2003 says that in case of recovery of charge exceeding the tariff by the licensee, the excess amount shall be recovered by the licensee along with interest equivalent to the bank rate. The prevailing bank rate is 9.5% for FY 2012-13, therefore in view of sub-section (5) of section 62 of Electricity Act, 2003; Commission considers it reasonable to give the interest to the consumers due to excess recovery of charge due to fuel surcharge formula from April"

Unquote

f. Inter-state transmission losses.

Commission's findings

Quote

"It is to be highlighted that the petitioner has itself shown the trend of reduction in the interstate losses. The first six months of FY 2011-12 show 3.65% as actual losses then there is no

point considering 3.9% as considered by the petitioner. However, the Commission has considered the actual figures of regional pool losses of 3.61% during FY 2011-12 as inter-state loss of ED-DNH for FY 2011-12 and approves the same for review of ARR of FY 2011-12. Further as regards to the losses considered in the FY 2012-13 the Commission has considered losses at the 52 weeks moving average losses as recorded by WRPC. The losses so considered arrived at 3.56%. The Commission as indicated above for FY 2011-12 has considered the actual pooled losses submitted by the petitioner during the technical validation session and in the supplementary submissions after prudence check.

As can be observed from the above, the estimates of inter-state losses considered by the Commission are reasonable in view of the progressive reduction trend seen in the interstate losses in the western region which cannot be ignored. However, the petitioner would not be penalized for the variation in the interstate transmission losses. The Commission also finds that this issue will automatically be redressed during disposal of the petition for true-up of respective ARRs."

Unquote

g. Power Factor Rebate and Surcharge provided by the Hon'ble Commission.

Commission's findings

Quote

"2.7.2.Commission is of the view that the petitioner has asked only for penalty for low power factor i.e. imposing penalty for non-efficiency of the consumer in maintaining the power factor at specified value and not being awarded for efficiency in maintaining high power factor. It is against the provisions contained in JERC terms and conditions of determination of tariff Regulations. Further, it is also against the principle of natural justice. It cannot be a one way track. Efficiency and non-efficiency both have to be suitably recognized and rewarded positive or negative as the case may be. Now, the petitioner has submitted the actual billing details of top 25 consumers in HTA and top 25 consumers for HTB for the 3/6 months to make an analysis of the impact of the power factor incentive and surcharge approved in the tariff order dated 31st July,2012. The Commission has accepted the data for further analysis. As the effect of the observations on the basis of data provided at this juncture cannot be retrospective and therefore the net effect, if any will be considered at the time of truing up on the basis of actual figures for FY 2012-13"

Unquote

h. Error in the Fixed Charges for LT Industrial consumers stipulated by the Hon'ble Commission

Commission's findings

Quote

"2.8.2.Commission accepts this submission of the petitioner. The fixed charges approved for the LT industrial category above 20 HP is Rs. 20 per HP and not Rs. 5 per HP. Therefore the same shall be read as Rs. 20 per HP instead of Rs. 5 per HP on page no. 231 in accordance with the tariff approved for FY 2012-13 on page no. 226 of the order dated July 31'2012"

Unquote

The Commission has taken due-cognizance of the above stated review order dated January 24'2013 while disposing the Petition for True-up of ARR for FY 2011-12, Review of ARR of FY 2012-13 and Approval of ARR and determination of tariff for FY 2013-14.

3.3 Approach for True-up of FY 2011-12 and Review of FY 2012-13

The Petitioner in its petition has requested for the True-up of FY 2011-12 and review of the ARR for FY 2012-13 (based on the half yearly actuals), which was determined earlier by the Commission in its ARR order dated July 31'2012. The petitioner has also requested the Commission to True-up the ARR for FY 2010-11 based on the assets verified by the statutory auditor. The True-up of ARR for FY 2011-12 and Review of ARR for FY 2012-13 are to be carried out as per the provisions of regulation 8 of JERC Tariff Regulations, 2009, which is as under:

Quote

"The Commission shall undertake a review along with the next Tariff Order of the expenses and revenues approved by the Commission in the Tariff Order. While doing so, the Commission shall consider variations between approvals and revised estimates/pre-actuals of sale of electricity, income and expenditure for the relevant year and permit necessary adjustments/ changes in case such variations are for adequate and justifiable reasons. Such an exercise shall be called 'Review'.

After audited accounts of a year are made available, the Commission shall undertake similar exercise as above with reference to the final actual figures as per the audited accounts. This exercise with reference to audited accounts shall be called 'Truing Up'.

The Truing Up for any year will ordinarily not be considered after more than one year of 'Review'.

The revenue gap of the ensuing year shall be adjusted as a result of review and truing up exercises.

While approving such expenses/revenues to be adjusted in the future years as arising out of the Review and / or Truing up exercises, the Commission may allow the carrying costs as determined by the Commission of such expenses/revenues. Carrying costs shall be limited to the interest rate approved for working capital borrowings.

For any revision in approvals, the licensee would be required to satisfy the Commission that the revision is necessary due to conditions beyond its control.

In case additional supply is required to be made to any particular category, the licensee may, any time during the year make an application to the Commission for its approval. The application will demonstrate the need for such change of consumer mix and additional supply of power and also indicate the manner in which the licensee proposes to meet the cost for such change of consumer mix and additional supply of power.

The Commission may consider granting approval to such proposals provided the cost of additional supply is ordinarily met by the beneficiary category"

Unquote

In view of the above, the Commission has reviewed the variations between approvals and actuals of sale of electricity, income and expenditure for FY 2011-12; and also the revised estimates based on half yearly actuals for sale of electricity, income and expenditure for FY 2012-13 as submitted by the petitioner and permitted necessary adjustments in cases where variations are for reasonable and justifiable reasons.

The detailed analysis & treatment of each component is provided in Chapter 5 (True-Up of ARR for FY 2011-12) and Chapter 6 (Review of ARR for FY 2012-13) of this Order.

3.4 Approach for Determination of ARR & Retail Tariff for FY 2013-14

In this regard various provisions of the JERC's Tariff Regulations 2009 pertaining to business of the integrated utility are relevant and Commission is guided by the principles contained in Section 61 of the Act among others to examine the Sales forecast, Power purchase quantum, and other income & expenditure.

The Commission, while determining the tariff is guided by the principles contained in Section 61 of the Act, namely

- a) The principles and methodologies specified by the Central Commission for determination of the tariff applicable to generating companies and transmission licensees;
- b) The generation, transmission, distribution and supply of electricity are conducted on commercial principles;

- c) The factors which would encourage competition, efficiency, economical use of the resources, good performance and optimum investments;
- d) Safeguarding of consumers' interest and at the same time, recovery of the cost of electricity in a reasonable manner;
- e) The principles rewarding efficiency in performance;
- f) Multi-year tariff principles;
- g) That the tariff progressively reflects the cost of supply of electricity and also, reduces and eliminates cross-subsidies within the period to be specified by the Appropriate Commission;
- h) The promotion of co-generation and generation of electricity from renewable sources of energy;
- i) The National Electricity Policy and Tariff Policy;
- j) In addition to above the Commission is bound by the Renewable Energy purchase obligations, as specified in JERC (Procurement of Renewable Energy) Regulations, 2010.
- k) Relevant directions given by the Hon'ble APTEL in the judgment in O.P. no. 1 of 2011.

The Commission has considered the audited figures of income & expenditure submitted by the Petitioner for FY 2011-12 and half yearly actuals for FY 2012-13 to form the basis for projection of income and expenditure for FY 2013-14. Further, the Commission has relied on the actual data of FY 2011-12 and FY 2012-13 (actuals for 6 months) provided by the petitioner during technical validation sessions held after the submission of petition. The detailed analysis & treatment of each component is provided in Chapter 7 (Aggregate Revenue Requirement for FY 2013-14) of this Order.

4. SUMMARY OF OBJECTIONS RAISED, PETITIONER'S RESPONSE AND COMMISSION'S VIEWS

4.1 Public response to the Petition

Before admission of the ARR & Tariff Petition for the FY 2013-14, the Petitioner had published the summary of ARR and Tariff proposal in the newspapers and the copies of the petition made available to the general public, posted the petition on their website duly inviting comments/objections from public as per provision of the JERC (Conduct of Business) regulations 2009.

4.2 Public Hearing

A public hearing was held at Dadra and Nagar Haveli as per the below mentioned schedule:

S. No	Date	Venue of Hearing	Time & Category of Consumers	Subject
1.	07.02.2013	President Hall, Hotel Yatri Niwas, Prithiviraj Chauhan Road, (Naroll Road), Silvassa – 396230	From 11:00 AM onwards For all consumers- domestic/non-domestic Commercial), LT industries and HT Industries.	ARR of FY 2013-14 & True-up of FY 2011-12 Uniform consumer categorization, voltage wise contract load/demand and Terms & Conditions of LT and HT supply, Road map for cross-subsidy.
				Effectiveness of the functioning of CGRF.

Table 4.2.1: Schedule of Public hearing at Dadra and Nagar Haveli

During the public hearing, all objectors were asked if they have received replies to their objections from the licensee. Some of the objectors conveyed their receipt and satisfaction thereof, while others indicated the delayed receipt of the responses from the petitioner. However they did not say anything about the reply. Thus it was ascertained by the Commission before the hearing that everyone got the reply to his/her objections/suggestions.

Each objector was provided an opportunity to present his views on the petition filed by the Petitioner. All those present in the hearing, irrespective of whether they had given a written objection or not, were given equal opportunity to express their views. Stakeholders who raised their concerns on the spot were replied to by the officers of the utility orally on the spot. The list of all objectors is attached at **Annexure 4** to this order.

The list includes the objectors:

- 1. Those who gave their written objections & did not intend to present orally during the public hearing
- 2. Those who gave their written objections & expressed desire to present orally also during the public hearing
- 3. Those who gave their written objections but had not desired to express orally, but later chose to present orally also. They were also given an opportunity to present orally before the Commission during the public hearing;
- 4. Stakeholders who did not give their written objection or prior intimation, but participated in the hearing on the spot
- 5. Stakeholders who did not give their written objection or prior intimation, but participated in the hearing on the spot and also gave written submissions
- 4.3 Objections/Suggestions, of stakeholders and response of Electricity Department, UT of Dadra & Nagar Haveli there to and Commission's views on petition no. 92/2012, previous year review and True-up

PART 1: General Issues and Comments

4.3.1 Refund on account of over recovery of FPPCA during FY 2011-12

Public Comments/Suggestions:

The main points raised by the Silvassa Industries Association, Dadra & Nagar Haveli Industries Association, and Silvassa Industries & Manufacturers Association in brief are as under:

1. The Commission passed the direction for refunding Rs. 81.11 crores with interest of 9.5% after the period from April 2012. It is highlighted that the department has still not refunded above amount to the consumers. The department should make the refunds as early as possible.

Petitioner's response:

The petitioner has submitted that ED-DNH had filed a review petition with the Commission regarding the amount to be refunded to the consumers on account of over recovery of FPPCA charges during FY 2011-12. After hearing the case the Commission has come out with an order that the exact amount to be refunded to the consumers will be ascertained in the true up of FY 2011-12. The ED-DNH will refund whatever amount is approved by the Commission to be refunded to the consumers in its true up order for FY 2011-12.

Views of the Commission:

Having considered the actual Power purchase cost of Rs. 1645.11 Crores of FY 2011-12 (excluding UI overdrawl charges of Rs. 67.68 Crores) submitted by the petitioner as part of additional information

for the ARR and Tariff Petition for FY 2012-13, final actual figures of Power purchase cost of Rs.1672.37⁵ Crores (excluding UI overdrawl charges of Rs. 50.30 Crores) as per the audited accounts furnished by the petitioner for FY 2011-12, the actual UI bills along with revisions bills and the audited accounts for the FY 2011-12, furnished by the petitioner as part of ARR & Tariff Petition for FY 2013-14.

As discussed in para 2.2.10 of Review Order dated January 24'2013, Commission has verified the weekly summary sheets/bills of UI from the WRPC (submitted by the petitioner) for the complete year of FY 2011-12 and for the purpose of this order has considered the over drawl and under drawl of UI separately.

The Commission had approved the power purchase cost of Rs 1342.19 Crores for FY 2011-12 in the order dated September 13′ 2011, the approved power purchase cost for FY 2011-12 in this order is considered at Rs 1648.34 Crores (i.e. Rs. 1717.42⁶ Crores minus Rs. 69.08⁷ Crores). The variation in the power purchase cost therefore comes to Rs. 306.15 Crores (i.e. Rs 1648.34 Crores minus Rs 1342.19 Crores) against which the utility has collected 348.80 Crores. The petitioner has thus collected an additional amount of Rs 41.86 Crores (Rs. 348.80 Crores – Rs. 306.15 Crores).

In view of the above, Commission is of the opinion that the petitioner made an over-recovery of Rs.41.86 Crores on account of FPPCA during the FY 2011-12, which was a must pay as per the directions given by the Commission in the tariff order dated July 31'2012. Further it is noted that the petitioner has not paid any refund to the consumers in compliance to the directions gave by the Commission in tariff order dated July 31'2012.

Thus, the amount to be refunded is Rs. 41.86 Crores on account of excess recovery of FPPCA Charges during FY 2011-12. The petitioner is directed to refund the additional amount of Rs 41.86 Crores in the ratio of 41.86/348.8 (i.e. for every Rs 100 recovered on account of FPPCA from a consumer, a refund of Rs. 12.03 would be made to that consumer). The consumer shall also be paid interest on the refunded amount at the rate of 9.5% per annum for the number of months starting from April 2012 (i.e. if the FPPCA refund is made on April 30' 2013 then interest for 13 months shall be paid). This interest expenditure shall not be a pass through in the ARR. The refund shall be through adjustment in the bills of consumers and it should be explicitly mentioned as the 'refund on account of over-recovery of FPPCA charges in FY 2011-12'. Further, the sub-section (4) of section 62 of Electricity Act, 2003 clearly specifies that amount recovered from the fuel surcharge formula is a part

⁵ It includes the payment made against the arrears attributed to revision of charges due to CERC regulations, income tax and variation in coal prices for FY 2011-12.

⁶ Power Purchase Cost of FY 2011-12 (including UI purchases) approved by the Commission as part of truing up of FY 2011-12 in this order. Refer para 5.8 of this order.

Revenue from Sale of Surplus Power through UI underdrawl in FY 2011-12. Refer para 5.17 of this order.

of tariff and sub-section (6) of section 62 of Electricity Act, 2003 says that in case of recovery of charge exceeding the tariff by the licensee, the excess amount shall be recovered by the licensee along with interest equivalent to the bank rate. The prevailing bank rate is 9.5% for FY 2012-13, therefore in view of sub-section (5) of section 62 of Electricity Act, 2003; Commission considers it reasonable to give the interest to the consumers due to excess recovery of charge due to fuel surcharge formula from April 2012".

4.3.2 Allowing Load up to 4000 KVA on 11 kV feeder

Public Comments/Suggestions:

The main points raised by the Silvassa Industries Association, Dadra & Nagar Haveli Industries Association, and Silvassa Industries & Manufacturers Association in brief are as under:

- 1. The stakeholders highlight that the directions given by the Commission 'Commission has noted the concerns of the stakeholders and will consider issuing the necessary directions as per the supply code regulations considering the system conditions of the area. The Petitioner is directed to carry out an assessment of load profile, (if not covered under energy audit study) of all the feeders in the area under jurisdiction along with the recommendations for appropriate CAPEX scheme for express feeders. The report should also indicate the loss level at all the feeders and reduction in loss after installation of express feeder'.
- 2. In spite of constant requests and reminders, the department has not come forward with their views. It is resubmitted by stakeholders that by not allowing load upto 4000 KVA on express feeder, department is insisting 66 KV lines for loads beyond 2500 KVA. Laying a 66 KV line is a very difficult task and also involves huge expenditure. Villagers normally do not permit erection of electricity polls in their fields. Therefore department must come out with a reasonable solution where local villagers are minimum disturbed. There is no technical problem in using express feeder lines up to the load of 4000 KVA. The permission is granted in neighboring states to use upto 4000 KVA. Even department themselves is drawing more than 4000 KVA power on 11 KV line.
- 3. It is prayed by the stakeholders to pass directions to the department to allow such requests of the consumers in the overall interests of not only consumers but also in the interests of preservations of national resources. The Commission should not wait for any further views of the department as they have been given adequate opportunity in this regard.

Petitioner's response:

The petitioner has submitted that they have made a note of the request of the stakeholders for allowing load upto 4000 KVA on 11 KV express feeder and petitioner is in agreement with the request of stakeholders.

Views of the Commission:

It is observed that the petitioner had submitted in the ARR and tariff petition for FY 2013-14 as under:

Quote "Supply to consumers having contractual 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 feeder, the consumer would get contracted load up to 2500 kVA on 11 kV system. The consumer who requires load more than 25000 kVA load, the supply voltage shall be at 220 kV level.

The 11 kV consumers who desire to take power more than 1500 kVA and up to 2500 kVA on 11 kVA system shall lay down separate 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." **Unquote**

However during the public hearing held on February 07'2013, the consumer associations have suggested to allow load up to 4000 kVA on 11 kV feeders. Now, the licensee after noting the suggestions of the consumers industry has agreed to the request of the industry.

It is however observed that as per Energy Audit Report as part of Volume-II of ARR & Tariff petition for FY 2012-13 on 30.11.2011, a number of 11 kV transformers appear to be over-loaded. The Commission therefore, directs that the licensee may agree to provide load up to 4000 kVA on 11 kV feeders provided appropriate technical steps are taken to safeguard the interest of the consumers and the equipment. This satisfies the grievances of 97% of the total consumers having connected load above 1500 kVA.

4.3.3 Partnering on 66 KV/Express Feeder Lines and raising the existing limit of power load on 66 KV lines

Public Comments/Suggestions:

The main points raised by the Silvassa Industries Association, Dadra & Nagar Haveli Industries Association, Silvassa Industries & Manufacturers Association and Bharatiya Janata Party, D&NH in brief are as under:

- 1. The stakeholder's submitted that, In view of the difficulties in laying 66 KV lines and also for optimum utilization of the lines already laid; it is request to the Commission that these lines should be permitted to be used by more than one consumer.
- 2. It is further submitted that petitioner is permitting only 25 MW load on 66 KV lines while, they themselves are using those lines for the load upto 50 MW. Therefore consumers should also be permitted to use those lines for higher loads than 25 MW; it is requested to the Commission to raise the limit of 25 MW to 50 MW for 66 KV lines.

3. It is also submitted by representatives of BJP, D&NH that in view of scarcity of land and chances of utilization of land of poor tribals by the Industrial consumers, which is not acceptable, requests that permission to increase load on existing express feeders should be granted to Industrial consumers, so that the requirement for erection of new line can be minimized and these lines should be permitted to be used by more than one consumers.

Petitioner's response:

The petitioner has submitted that they have made a note of the request of the stakeholders for allowing load higher than 25 MW on 66 KV lines.

Views of the Commission:

Commission has noted the concerns of the stakeholders and submissions of the petitioner in this regard; Commission directs to conduct the feasibility for allowing load higher than 25 MW on existing 66 KV lines in accordance with the system conditions and load profile. The petitioner may submit a proposal for consideration, wherever system is feasible to support the load higher than 25 MW on existing 66 KV lines in accordance with load and configuration of voltage level of feeder.

4.3.4 FDs instead of bank guarantee as security deposit

Public Comments/Suggestions:

The main points raised by the Silvassa Industries Association, Dadra & Nagar Haveli Industries Association, and Silvassa Industries & Manufacturers Association in brief are as under:

- 1. The Commission in a review petition no. 81 of 2012 filed by Silvassa Industries Association has directed that FDs should be taken in place of bank guarantee. While deciding the petition, the Commission has observed that 'How taking FDs would be against the public policy could not be justified by the association.'
- 2. It is submitted that FDs will make dent into the working capital of the industries of this UT. Looking to the sanctioned power load, a sum of Rs. 2500 crores would be blocked in the FDs. The Industries will have to borrow loans from the banks to make these FDs. There will be a difference in the interest on the loans borrowed for making the FDs and also interest given by the bank on these FDs. This difference would be an additional cost to the consumers. No purpose seems to be getting served by taking FDs and by disallowing bank guarantee. Data on bad debt for FY 2011-12 shows that the interests of department are well secured in UT. Hardly there has been any failure by any Industrial consumer in making the payment of the electricity bills. The additional cost on account of above, would be kind of punishment to the sincere and honest consumers who have been discharging their obligations without single fault.

Petitioner's response:

The petitioner has submitted that they have made a note of the request of the stakeholders for allowing security deposit in the form of bank guarantee instead of fixed deposit. It is further submitted by the petitioner that it is prerogative of the Commission to direct the department to collect the security deposit either in the form of bank guarantees or fixed deposit.

Views of the Commission:

The Commission has noted the concern of the stakeholders and the submission made by the petitioner. Commission likes to clarify that the amount blocked will not be Rs. 2500 Crores. Further the Commission has observed that the petitioner has not paid any interest to the consumers on the security deposit held during FY 2011-12. Though Commission appreciates the effort made by the petitioner for conversion of BGs into security deposits in the name of Executive Engineer, Electricity Department, Dadra & Nagar Haveli; but still this mode of consumer security deposit is different from those provided as per the provisions of regulation 6.10 of JERC (Electricity Supply Code) Regulations, 2010; Wherever existing mode of deposit i.e. bank guarantee, fixed deposit etc. is different from those provided in the Regulation, the same be replaced by those as specified therein, as per section 47(1) Electricity Act 2003 and pay interest as per section 47(4) Electricity Act, 2003.

4.3.5 New Power Connection to consumers more than 200 KVA

Public Comments/Suggestions:

The main points raised by the Silvassa Industries & Manufacturers Association and Bharatiya Janata Party, D&NH in brief are as under:

 It is further suggested that the adequate power should be procured to clear all the pending application which are pending since 2008. Not only that but for new units and expansion of the existing units; the power should be made available otherwise their assets in form of Plant and Machineries shall be underutilized which is not only a national loss but also such units will become nonviable and ultimately die.

Petitioner's response:

The petitioner submitted that it has taken initiatives to sign long term Power Purchase Agreements so that it is able to clear all the pending applications since 2008.

Views of the Commission:

The Commission feels that the petitioner has an universal supply obligation to supply electricity to its consumers and accordingly has to procure the electricity to service the obligation. The Commission directs the petitioner to release all connection in a timely manner and in line with the Supply Code

regulation. Further the Commission directs the Petitioner to submit the report on all pending connections along with action taken report within one month of this order.

4.3.6 Approval to power purchase agreement

Public Comments/Suggestions:

The main points raised by the Silvassa Industries Association, Dadra & Nagar Haveli Industries Association, Silvassa Industries & Manufacturers Association and Bharatiya Janata Party, D&NH in brief are as under:

- 1. The petitioner's agreement with TATA Power would end on 31.03.2013. Their application for approval for another power purchase agreement for 200 MW is pending before Commission.
- 2. The association, party, in the interests of consumers, pray for early approval, otherwise, industries will face severe power scarcity after March 31'2013.

Petitioner's response:

The petitioner submitted that it has taken initiatives to sign long term Power Purchase Agreements so that it is able to clear all the pending applications since 2008.

Views of the Commission:

Commission has noted the concerns of the stakeholders and submissions made by the petitioner in this regard. Commission vide order dated February 19'2013 had approved the PPA to be entered between Electricity Department of DNH and EMCO Energy Limited for procurement of 200 MW power on long term basis as per the case-I bidding guidelines of Ministry of Power. Commission has considered the power from EMCO Energy Limited under the merit order dispatch principles. As submitted by the petitioner, it helps ED-DNH to clear all the pending applications since 2008; therefore net effect of increase in energy consumption that shall arise after disposing of pending applications which shall be considered at the time of review/truing up of ARR of FY 2013-14.

4.3.7 Number of Members in Advisory Committee

Public Comments/Suggestions:

The main points raised by the Dadra & Nagar Haveli Industries Association and Silvassa Industries Association in brief are as under:

1. The stakeholder has submitted that the number of representatives from the industries in the advisory committee to JERC should be increased from 1 to 5 members.

Petitioner's response:

The petitioner has submitted that they have made a note of the request of the stakeholders for raising the members of industry from 1 to 5 in the advisory committee to JERC.

Views of the Commission:

Commission has noted the concerns of the stakeholders and will consider issuing necessary directions in this regard in a separate order as deemed fit and in accordance with the relevant regulations.

PART 2: ARR related

4.3.8 Power Purchase Cost

Public Comments/Suggestions:

The main points raised by the Silvassa Industries Association, Dadra & Nagar Haveli Industries Association, Silvassa Industries & Manufacturers Association and Bharatiya Janata Party, D&NH in brief are as under:

- 1. In true up data, the petitioner has not furnished the details of miscellaneous arrears of Rs. 14.67 crores, RP obligations of Rs. 17.44 crores and other Rs. 6.51 crores. Therefore, Association requests Hon'ble Commission not to approve these expenditures.
- 2. The quantum of power purchase has been correctly depicted by the Petitioner; since, the Industry is ever growing and largely power intensive, it is always better to plan and go for long-term power purchase agreements. Therefore associations do not have any objection on estimation of enhanced quantum of power for the FY 2013-14.
- 3. The Petitioner has shown enhancement in the rate of power from all most all the sources. The department has estimated 10% rise in the average per unit power cost. In the year 2012-13, where data for six months are realistic and six months are estimated, the power purchases cost estimated at Rs. 3.43 per unit; while for the year 2013-14, cost has been estimated at Rs. 3.79 per unit which is 9.5% more than previous year. Data of recent past suggest that estimating 9.5% hike is not reasonable. The petitioner has worked out net power purchase cost per unit at Rs. 3.67/- in the true-up petition of FY 2011-12 vis a vis the power purchase cost estimated for FY 2012-13 is Rs. 3.43/unit. In view of the facts stated above, the petitioner has estimated the power purchase cost per unit for FY 2013-14 Rs at Rs. 3.79/- per unit; which is not a realistic figure. It is highlighted by representatives of BJP that gross power purchase cost (table-25) per unit should be Rs. 3.60/- per unit and cost for purchase of 5736.91 million unit, it should be Rs. 2066.14 Crores instead of Rs. 2172.99 Crores. Thus the total power purchase cost should be Rs. 2211.86 Crores instead of Rs. 2320.68 Crores.

- 4. It is humbly submitted that Commission should not consider such unrealistic estimation of the department. The unrealistic estimations affects the industries in two ways
 - a. It escalates the immediate cost
 - b. The surplus of past years gets adjusted in the determination of power tariffs of future year; therefore the net benefit of reduced tariff to the past consumers might not get passed through to past consumers.

The benefits of reduction in tariff due to adjustment of past surplus get pass through to the consumers including new consumers and the industries lose their competitiveness with each other, as the burden shall get pass through to consumers because of immediate escalation in the cost.

Petitioner's response:

- 1. The petitioner submitted that the miscellaneous arrears of Rs. 14.67 crores and Rs. 6.51 crores are the arrears paid by the department to the various power stations during FY 2011-12. Further the RP obligation of Rs. 17.44 crores is the amount spent by the department in purchasing 58000 non solar certificates from the energy exchange to meet its renewable power purchase obligation as per the JERC guidelines. Therefore the ED-DNH requests the Commission to approve these expenditures in the truing up for FY 2011-12.
- 2. The petitioner submitted that it has taken initiatives to sign long term Power Purchase Agreements so that it is able to clear all the pending applications since 2008.
- 3. The petitioner on account of power purchase cost submitted that the increase of 10% in the average per unit power purchase cost for projecting the power purchase cost for FY 2013-14 is based on the actual increase of station wise power purchase cost during the first half of FY 2012-13. ED-DNH would like to highlight that power purchase is an un-controllable factor and therefore, ED-DNH has no control over the cost of power purchase. Besides, as ED-DNH does not have any own generation station, it has to depend on the allocation of the Central Generating Stations (CGSs) such as NTPC and NPCIL. ED-DNH has to bear the power purchase cost for these CGSs as approved by CERC.

Views of the Commission:

Commission has taken note of the concerns expressed by the stakeholders on quantum of power purchase and cost of such power purchase including price escalation.

The Commission has conducted a prudence check to ascertain the reasonableness of the expenditures claimed in the petition before considering the same for the true up and APR for FY 2011-12 and FY 2012-13 (H1). Further, the matter specific to the recovery of Power purchase cost variations has been dealt and discussed in Chapter 5, 6 and 7 of this Order.

4.3.9 Operation & Maintenance Expenses

Public Comments/Suggestions:

The main points raised by the Silvassa Industries Association, Dadra & Nagar Haveli Industries Association and Silvassa Industries & Manufacturers Association in brief are as under:

- 1. The Operation & Maintenance cost estimated by the petitioner seems to be reasonable, hence the associations has no objections.
- 2. It is highlighted by the members of the association that the department should ensure prompt redressal of service complaints especially replacement of CT/PT. The department usually takes long time in attending complaints, hence the industries has to bear the non-productivity hours of the labor. Further the delivery schedules also get affected. The department should ensure periodic repair & maintenance of all transformers, lines and other infrastructure, so that there shall be fewer breakdowns and the small LT consumers should not to force to bear the expenses for repairing.
- 3. It is further suggested that the provisions should be made for the training & development of officers and staff of the petitioner. There should be management development programmers for the officers to enhance their skills, and knowledge base while field staff should also be trained on soft skills, while been trained on technical skills; so that the consumers get better services and treatment.

Petitioner's response:

The petitioner submitted that it is taking all the necessary steps to start the repairing and maintenance of transformers and also their replacement, itself from the future.

Views of the Commission:

1. Commission appreciates the response of the petitioner that the necessary steps have taken up the work of repair and maintenance of transformers. However it should be noted that the meters & metering equipments including CT/PT and transformers are the nerves of any utility and should be maintained properly, so as to provide a seamless supply and to measure the energy consumed and lost in the system.

2. The Commission acknowledges the importance of the training and skill enhancement for the field staff to effectively deliver their duties. Continuous training to acquire or enhance skill sets is a requirement for all utilities and all the more for technical staff. Accordingly the Commission suggests that the utility may prepare a training schedule for its employees which would also improve efficiencies. The Commission has noted the concern of the stakeholders and submissions made by the petitioner. The Commission has taken a prudent view to assess the reasonableness of expenses on O&M projected for ARR of FY 2013-14 as per the tariff regulations and the same has been discussed in detail in Chapter 7 of this order.

4.3.10 Depreciation

Public Comments/Suggestions:

The main points raised by the Silvassa Industries Association, Dadra & Nagar Haveli Industries Association and Silvassa Industries & Manufacturers Association in brief are as under:

- 1. The petitioner has claimed a sum of Rs. 28.09 crores as depreciation for FY 2013-14. The associations has objected on the opening balance of GFA as Rs. 471.11 crores for FY 2011-12 and estimated Rs. 475 crores for FY 2012-13.
- 2. The Commission did not approve the GFA as Rs. 475.10 crores for FY 2012-13 in their previous tariff order. The Commission did not accept the GFA registers submitted by the petitioner, the petitioner was directed to get the asset physically verified by the chartered accountant of third party. In the absence of inspection of verified asset registers (as submitted by the petitioner to the Commission), the association is not in a position to find out whether the physical verification of assets has been carried by Chartered Accountant or not. It is further submitted that there are assets, which were purchased by consumers and handed over to the department. Therefore the department should not claim depreciation on those assets.
- 3. It is prayed by the members of the association, not to approve the opening and closing figures of GFA, unless the registers are made open to consumers with granting them a reasonable time to object entry of assets, if it was not purchased by the department but was purchased by the consumer. Association has no objection to the depreciation on the asset purchased and capitalized after the came into being of Commission.
- 4. In view of the above submissions, the member of associations further submitting that the opening GFA for FY 2013-14 will be Rs. 50.51 crores and considering additions of Rs. 61.60 crores during FY 2013-14. It should be Rs. 112.11 crores and after applying rates of depreciation, the depreciation amount of Rs. 5.42 crores should be allowed by the Commission.

Petitioner's response:

The petitioner submitted that the physical verification of the assets has been done by a chartered accountant firm and the certificate for the same will be submitted to the Commission shortly. Further ED-DNH is not claiming depreciation on those assets which were purchased by the consumers and handed over to the department.

Views of the Commission:

The Commission has noted the concern of the stakeholders and the submission made by the petitioner. Further it is to be noted that the Petitioner had submitted the audited accounts for FY 2011-12 and has seen the assets and depreciation registers submitted by the petitioner. Having considered the findings of the Commission in the review order dated January 24'2013 as mentioned below:

Quote

"2.1.9. In view of the above, even if the typographical errors are ignored, the auditor's report, notes to the accounts, comment on the fixed assets & depreciation registers, does not specify that the opening value of gross fixed assets & importantly, the assets and depreciation registers furnished by the department could not provide the crucial information to ascertain the assets that are effectively/actually deployed for the year for which tariff is being fixed or claimed. Therefore the Commission rejects the contention of the petitioner and directed to submit the verified & required information for consideration by the Hon'ble Commission as stated in the tariff order dated July 31'2012.

2.1.10. ED- DNH is directed to indicate the value list of Assets being used for rendering the services in the ARR of 2013-14 or alternatively indicate as to what % of Gross block be considered on ad hoc basis & the basis thereof which can be considered in the true up which is due in the ARR for FY 2013-14."

Unquote

In view of the directions gave by the Commission in Review order dated January 24'2013 to the petitioner to indicate the value list of assets being used for rendering the services in the ARR of 2013-14 or alternatively indicate as to what % of Gross block be considered on ad hoc basis & the basis thereof which can be considered in the true up which is due in the ARR for FY 2013-14. The Commission has taken a prudent view and is of the opinion that though it is to be allowed on the basis of audited accounts, but that do not clearly indicate for which tariff is being charged, though Commission as per the tariff regulation may not have considered this but to avoid accumulation of

depreciation or resulting in a tariff shock to a consumer; If being charged in any single year in future or creation of regulatory asset. The Commission considers it prudent to allow depreciation on 50% of opening value of gross fixed assets as on April 1'2010 being the first year (FY 2010-11) for which ARR and tariff petition was filed by the petitioner, subject to adjustment in true-up depending upon the certificate to be submitted by September 30'2013.

4.3.11 Interest & Finance Charges

Public Comments/Suggestions:

The main points raised by the Silvassa Industries Association, Dadra & Nagar Haveli Industries Association, Silvassa Industries & Manufacturers Association and Bharatiya Janata Party, D&NH in brief are as under:

- 1. The petitioner has claimed expenditures on account of interest on long term capital and working capital loans. However, the petitioner has not at all explained as from which loans and from where loans were borrowed.
- 2. The petitioner being a government department cannot borrow any loans and did not borrow any loans from any agency in the past. Since there is no loan, so no question of interest will arise?
- 3. It is further submitted that even normative consideration of loan in line with debt-equity ratio laid in the regulations 23 and 24 of tariff regulations, 2009 would not apply in this case, as there is no equity at all. All the assets have been procured out of allocation of fund from the consolidated fund of Govt. of India. Thereby considering grants of Govt. of India as equity and drawing a debt-equity ratio would be against the public policy on appropriation of those funds. It was highlight by the associations that the word 'equity' has not been defined in the said regulations, Electricity Act, 2003 and in General Clauses Act, 1897. Therefore the dictionary meaning of equity will apply. The Oxford dictionary provides its meaning 'value of the shares of the company'. Therefore it is requested that Commission should not approve Rs. 14.44 crores and Rs. 28.70 crores on account of interest cost.

Petitioner's response:

The petitioner submitted that since inception of ED-DNH, its entire capital expenditure has been funded by the Central Government through budgetary support. However the department is now migrating from a Government owned utility to a commercial utility and would be requiring debt facilities from FY 2012-13 onwards. Therefore ED-DNH has asked the Commission to approve interest on loan on a normative basis. Similarly the department has asked the Commission to approve the interest on working capital on a normative basis at a rate of 14.75% (@SBAR rate).

Views of the Commission:

The Commission appreciates the concern of the stakeholders and the submission of the petitioner. The Commission has taken a prudent view in view of the directions gave by the Commission in Review order dated January 24'2013, as per relevant provisions of the JERC tariff regulations, audited accounts and the reasonableness of the expenditure for True-up of FY 2011-12, Review of FY 2012-13 and estimation of Aggregate Revenue Requirement for FY 2013-14 and the same has been discussed in detail in Chapter 5, 6 and 7 of this order.

4.3.12 Return on Equity

Public Comments/Suggestions:

The main points raised by the Silvassa Industries Association, Dadra & Nagar Haveli Industries Association and Silvassa Industries & Manufacturers Association in brief are as under:

- 1. The petitioner has projected a sum of Rs. 3.90 crores as return on equity. The stakeholder's objected that the petitioner is a government department and is not an independent commercial entity, which came into existence by way of commercial investment. The petitioner is functioning solely on the assets created from the grant and allocation from the funds received from the consolidated fund of Govt. of India. Allowing equity would mean granting return on the funds deployed from the consolidated funds of Govt. of India.
- 2. It is further submitted that the unless there is a commercial investment and there is a commercial body and an equity, no return on equity should be allowed even on normative basis till the department is converted into a commercial entity and funds invested in the commercial entity are based on commercial principles of return. The regulations 23 and 24 of tariff regulations, 2009 provide the equity norm meant for companies. There is no provision as far as return on equity for government departments.

Petitioner's response:

The petitioner submitted that ED-DNH is an integrated utility in its present form as defined in Regulation 2(9) of the JERC (Terms and Conditions for Determination of Tariff) Regulations, 2009 and it is entitled to return on capital base under the provisions of Schedule VI of the repealed Electricity (Supply) Act, 1948 vide Regulation 23 of JERC (Terms and Conditions for Determination of Tariff) Regulations, 2009. Therefore ED-DNH has asked the Hon'ble Commission to approve Return on Equity on a normative basis at the rate of 16%.

Views of the Commission:

The Commission has taken a prudent view in view of the directions gave by the Commission in Review order dated January 24'2013, as per relevant provisions of the JERC tariff regulations, audited accounts and the reasonableness of the expenditure for True-up of FY 2011-12, Review of FY 2012-13 and estimation of Aggregate Revenue Requirement for FY 2013-14 and the same has been discussed in detail in Chapter 5, 6 and 7 of this order.

4.3.13 Provision for Bad Debts

Public Comments/Suggestions:

The main points raised by the Silvassa Industries Association, Dadra & Nagar Haveli Industries Association and Silvassa Industries & Manufacturers Association in brief are as under:

1. The petitioner has projected a sum of Rs. 21.52 Crores as expenditure on the bad debt for Fy 2013-14. On the other hand, the petitioner has shown the bad debts have come down to zero in its truing up petition for FY 2011-12. It is requested to the Hon'ble Commission not to approve Rs. 21.52 Crores as provision for bad debt, keeping in view the trend of payment of electricity bills by the consumers of electricity. Keeping a provision of 1% will result in unnecessary escalation in the tariff.

Petitioner's response:

The petitioner submitted that the proposal for 'provision for bad debts' is submitted on normative basis. It is further mentioned by the petitioner that the Commission has also approved the provision for bad debts in its tariff order dated July 31'2012.

Views of the Commission:

The regulation no. 28 of JERC Tariff regulations read with the format is given below.

"28. Bad and Doubtful Debts

The Commission may, after the generating company/licensee gets the receivables audited, allow a provision for bad debts <u>up to 1%</u> of receivables in the revenue requirement of the generating company/licensee. (Information to be furnished in format 18)"

Format -18

S.No.	Particulars	Amount (Rs. in Crores)
1.	2.	3.
1.	Amount of receivable bad and doubtful	

S.No.	Particulars	Amount (Rs. in Crores)
	debts (audited)	
2.	<u>Provision made for debts</u> in ARR	

Thus it, can be observed, that the regulation allows a provision for bad and doubtful debts up to 1% of receivables in the revenue requirement. It is seen that the licensee has not actually written off any bad and doubtful debts for FY 2011-12. The Commission therefore has not considered any expenditure on this account for true up of FY 2011-12. However for FY 2012-13 & FY 2013-14 provisions have been made as per the provisions of the regulations which will be trued-up considering actual write off limited to 1% of receivable on availability of audited accounts (subject to availability at the time of true up of audited accounts & auditor's certificate of write off sanction of written off bad & doubtful debts, which is a normal commercial accounting practice.)

4.3.14 Non-Tariff Income

Public Comments/Suggestions:

The main points raised by the Silvassa Industries Association, Dadra & Nagar Haveli Industries Association and Silvassa Industries & Manufacturers Association in brief are as under:

1. The petitioner has projected a sum of Rs. 11.28 crores as non-tariff income. The association does not have any objection on approval of this amount, in principle. It is further requested that the Commission should direct the department to ensure that the power is not sold outside the territory for the price lesser than the purchase price.

Petitioner's response:

No response has been received by the Petitioner

Views of the Commission:

The Commission has taken a prudent view as per the JERC tariff regulations, audited accounts and its reasonableness for True-up of FY 2011-12, Review of FY 2012-13 and estimation of Aggregate Revenue Requirement for FY 2013-14 and the same has been discussed in detail in Chapter 5,6 and 7 of this order. Further the Commission also agrees with the fact that the surplus power if any should be managed in an efficient and economic manner whereby avoiding losses. The utility is directed to explore means to engage in a banking arrangement whereby such risks of commercial losses can be mitigated and the power can be utilized during the peak hours.

4.3.15 Aggregate Revenue Requirement for FY 2013-14 and Coverage of Revenue Gap

Public Comments/Suggestions:

The main points raised by the Silvassa Industries Association, Dadra & Nagar Haveli Industries Association in brief are as under:

- 1. The stakeholders submitted that the ARR for FY 2013-14 should be Rs. 2220.04 crores and considering the total revenue at existing tariff (including recovery on account of PPC variations), and revenue from sale of power is estimated at Rs. 2239.28 crores. Thus there would not be any gap but there will be a surplus of Rs. 19.24 crores and adding Rs. 39.33 crores as surplus of previous years, there will be a total surplus of Rs. 58.57 crores at the end of FY 2013-14.
- Any profit earned by the Department should be reflected in its tariff petition and be passed on to the consumers. The petitioner has still not accounted for the surplus earned for the period from after 30th May, 2008 to 31st March, 2011, though it has recovered the deficit, whenever occurred.

Petitioner's response:

- 1. The petitioner submitted that the revenue gap/surplus is determined for any financial year after consideration of the annual revenue requirement and the revenue earned from sale of power. Based on the net revenue gap/surplus, the tariff proposal is designed by the utility.
- 2. The petitioner further submitted that any revenue surplus /deficit earned by the ED-DNH from May 30' 2008 to March 31' 2010, will be accounted for in the truing up for the relevant years. Further for the FY 2010-11 the revenue surplus has already been accounted for in the true up order issued by the Hon'ble Commission. Besides the revenues generated goes directly to CFI (Consolidated Fund of India) and which cannot be taken back. Hence till corporatization of distribution business of ED-DNH is done no surplus can be adjusted or accounted while determining the tariff.

Views of the Commission:

The Commission has taken a prudent view as per the JERC tariff regulations, audited accounts and its reasonableness for estimation of Aggregate Revenue Requirement, gap/surplus for FY 2013-14 and the same has been discussed in detail in Chapter 7 of this order. Commission appreciates the initiative of the petitioner with regard to corporatization of distribution business. The petitioner is hereby directed to submit the progress made by the utility in this regard and likely date of completion of this activity.

PART 3: Tariff related

4.3.16 Tariff Proposal of the Licensee

Public Comments/Suggestions:

The main points raised by the Silvassa Industries Association, Dadra & Nagar Haveli Industries Association, Silvassa Industries & Manufacturers Association and Bharatiya Janata Party, D&NH in brief are as under:

- 1. The stakeholders submitted that as estimated by association, since there is no gap, the Commission should not approve the tariff as proposed by the petitioner. The Commission should approve the tariff by adjusting the surplus as worked out by the associations.
- 2. The stakeholders submitted that there is wide gap between the existing consumer categories at HT level. There should be another category of 50000 to 250000 units, this will benefit to large number of consumers. In addition to above, Silvassa Industries & Manufacturers Association submitted that the Commission has fixed only two slab for HT consumers i.e. 0 to 50000 units, 50001 to 500000 units, whereas it is evident from the consumption pattern of previous years that department used to purchase power at higher rate only to fulfill the demand of high consumption consumers and therefore additional tariff slab between 50000 to 500000 units for HT consumers should be considered in the range of 50001 to 100000 units; 100001 to 200000 units and 200001 to 500000 units.
- 3. The representatives of BJP, D&NH has submitted that since there is no gap, the Commission should approve the tariff as proposed by the petitioner for the domestic and agriculture consumers and proposal of increase with tariff of Industrial consumers should be declined.

Petitioner's response:

The petitioner has submitted that they have made a note of the request of the stakeholders and have mentioned that it is a sole prerogative of the Commission to decide on number of slabs to be included in a particular consumer category.

Views of the Commission:

Commission has noted the concerns of stakeholders regarding introduction of additional tariff slab between 50,000 units to 5,00,000 units for HT consumers. In view of the above, the petitioner is directed to submit the details of consumption pattern of consumers in HT category and as to what %age of consumers are falling in between 2,50,000 units to 5,00,000 units. It would not be prudent to introduce an additional tariff slab between the existing slab of 50,000 units to 5,00,000 units without said data from the petitioner.

5. TRUE-UP OF AGGREGATE REVENUE REQUIREMENT FOR FY 2011-12

5.1 Preamble

The Petitioner, in their true-up petition for FY 2011-12 has submitted the details of expenditure and revenue for FY 2011-12 based on the audited accounts submitted by the petitioner for FY 2011-12. The petitioner provided the comparison of actual revenue and expenditure against each head with the revenue and expenditure approved by the Commission. The petitioner has not submitted reasons for deviations against each component of ARR along with the true-up petition for FY 2011-12.

It is to be noted that the Petitioner had submitted the True-up Petition for FY 2011-12 along with audited accounts for FY 2011-12, though not audited by CAG. The audit of accounts by CAG is an important requirement to ascertain the validated information for true-up. However, the Commission feels that the Tariff determination process should not be stalled in the absence of CAG audit in larger interest of the consumer and the utility. The Commission, therefore decided to carry out true-up for FY 2011-12 based on the accounts audited by Chartered Accountant, pending CAG audit which is a statutory requirement for ED-DNH, being Govt. Department. The petitioner is required to file an affidavit before the Commission on completion of CAG audit bringing out the outcome of the same and any change in true-up of ARR of FY 2011-12.

In this Chapter, the Commission has analyzed all the elements of actual revenue and expenses for FY 2011-12 based on the audited accounts submitted by the petitioner, and have carried out the true-up of expenses and revenue with reference to the final actual figures as per the audited accounts, after prudence check.

5.2 True-up and Analysis of performance for FY 2011-12

The True-up of FY 2011-12 is to be carried out as per the provisions of regulation 8 of JERC Tariff Regulations, 2009. As per the regulation 8 of JERC Tariff Regulations, 2009:

Quote

"The Commission shall undertake a review along with the next Tariff Order of the expenses and revenues approved by the Commission in the Tariff Order. While doing so, the Commission shall consider variations between approvals and revised estimates/pre-actuals of sale of electricity, income and expenditure for the relevant year and permit necessary adjustments/ changes in case such variations are for adequate and justifiable reasons. Such an exercise shall be called 'Review'.

After audited accounts of a year are made available, the Commission shall undertake similar exercise as above with reference to the final actual figures as per the audited accounts. This exercise with reference to audited accounts shall be called 'Truing Up'.

The Truing Up for any year will ordinarily not be considered after more than one year of 'Review'.

The revenue gap of the ensuing year shall be adjusted as a result of review and truing up exercises.

While approving such expenses/revenues to be adjusted in the future years as arising out of the Review and / or Truing up exercises, the Commission may allow the carrying costs as determined by the Commission of such expenses/revenues. Carrying costs shall be limited to the interest rate approved for working capital borrowings.

For any revision in approvals, the licensee would be required to satisfy the Commission that the revision is necessary due to conditions beyond its control.

In case additional supply is required to be made to any particular category, the licensee may, any time during the year make an application to the Commission for its approval. The application will demonstrate the need for such change of consumer mix and additional supply of power and also indicate the manner in which the licensee proposes to meet the cost for such change of consumer mix and additional supply of power.

The Commission may consider granting approval to such proposals provided the cost of additional supply is ordinarily met by the beneficiary category."

Unquote

The Commission has reviewed the variations between approvals and actuals of sale of electricity, power purchase expenses, other income and expenditure for FY 2011-12 with reference to the final actual figures as per the audited accounts submitted by the petitioner along with Asset and Depreciation Registers and has permitted necessary adjustments in cases where variations are for reasonable and justifiable reasons.

5.3 Energy Sales

Petitioner's submission

The petitioner has submitted the category-wise actual energy sales of 4237.14 million units for FY 2011-12 as per the audited accounts. The petitioner in its subsequent submissions dated January

07'2013 and January 30'2013 has submitted the energy sales of 4232.02 million units with reference to the final actual figures of revenue from sale of Power in the audited accounts of FY 2011-12.

Table 5.3.1: Energy Sales approved by the Commission and actuals submitted by the petitioner for FY 2011-12 (in Million Units)

				FY 2013	1-12		
S.No.	Category/Consumption Slab	Proposed in petition-FY	Approved in T.O. of FY 11-12 dated 13.09.2011	Revised Estimates	(Actuals)	Approved in T.O. 31.07.12 for FY 2012-13	Petitioner's submission for true-up
1	2	3	4	5	6	7	8
Α	Domestic	67	59	64.99	56.22	56.22	53.74
1	0-50 units			13.88	12.87	10.39	10.83
2	51-200 units			22.46	21.05	21.05	21.04
3	201 - 400 units			10.06	9.15	9.15	9.15
4	401 and above			18.59	13.16	13.16	12.72
5	Low Income Group (LIG)					2.47	
В	Commercial	26	24	24.92	27.81	27.81	27.81
1	1- 100 units			11.46	4.20	4.20	4.20
2	101 and above units			13.46	23.61	23.61	23.61
С	Industrial (LT)	159	154	153.98	152.19	152.19	152.19
1	Up to 20 HP						136.97
2	Above 20 HP						15.22
D	Agriculture & Poultry	4.0	2.0	2.4	3.0	3.0	3.0
1	Connected Load upto 10 HP			1.0	0.6	0.6	2.7
2	Connected Load above 10 HP to 99 HP			1.4	2.4	2.4	0.3
E	Public Lighting	4.0	3.0	4.1	5.1	5.12	5.12
F	High Tension Supply	4108.0	3982.0	3950.6	3676.8	3676.8	3990.2
НТА	Industrial & Motive power-11KV or 66KV having CMD above 100 KVA						
1	Up to 50000 units			924.4	365.5	365.5	267.9
2	50001-500000 units			1955.6	1083.9	1083.9	983.0
3	Above 500000 units			675.6	2227.5	2227.5	2426.0

				FY 2011	l-12		
S.No.	Category/Consumption Slab	Proposed in petition-FY	Approved in T.O. of FY 11-12 dated 13.09.2011	Revised Estimates	(Actuals)	Approved in T.O. 31.07.12 for FY 2012-13	Petitioner's submission for true-up
1	2	3	4	5	6	7	8
НТВ	Ferro Metallurgical/Steel Melting/ Steel Rolling/Power Intensive				313.4	313.4	
1	First - 300 units/KVA			260.2	215.6	215.6	215.3
2	301-500 units/KVA			109.1	80.7	80.7	17.0
3	Above 500 units/KVA			25.7	17.1	17.1	81.0
G	Temporary Supply	2.0	1.0	1.7	2.6	2.6	0.0
	Total	4370.0	4225.0	4202.7	4237.2	4237.16	4232.02

Commission's analysis

The petitioner had forecasted the energy sales of 4370 million units in its ARR and tariff petition for FY 2011-12, and the Commission had approved sales of 4225 million units in its ARR and tariff order dated September 13'2011. Commission had considered an overall increase of 8.42% based on the actual consumption in FY 2010-11 as per the petitioner's submission. Further, the Commission during the approval for the ARR of FY 2012-13 had recorded the actual sales for the period FY 2011-12 at 4237.16 MU at para 7.3 of Commission's order for FY 2012-13 dated July 31'2012. The petitioner has submitted the energy sales of 4237.16 million units to be considered for truing up of FY 2011-12. However in subsequent submissions as was asked during technical validation, the petitioner later on furnished the reconciled energy sales of 4232.02 million units based on the final actual revenue figures as per the audited accounts of FY 2011-12. In view of variance in the submissions made by the petitioner with regard to actual energy sales as part of review of FY 2011-12, ARR & tariff petition for FY 2013-14 and additional information as part of true-up of FY 2011-12; Commission has therefore considered the final submission of the petitioner with regard to energy sales of 4232.02 million units based on the final actual revenue figures as per the audited accounts of FY 2011-12. The variation in sales from the approved values (as per tariff order dated September 13'2011) is majorly on account of minor increase in energy sales in industrial HT & LT category, which comprises about 97.88% of the total energy consumption of UT of ED-DNH and energy sales to the commercial category. The Commission finds the energy sales to be an uncontrollable factor at the hands of the utility; therefore for the purpose of true-up, the Commission has considered and approved the actual sales of 4232.02 million units for FY 2011-12 as submitted by the petitioner with reference to the final actual revenue figures as per the audited accounts of FY 2011-12.

5.4 Surplus Energy Sale/UI sales

Petitioner's submission

The petitioner has submitted the actual under drawl of 233.36 million units under UI mechanism for FY 2011-12.

Commission's analysis

As discussed in para 2.2.10 of Review Order dated January 24'2013, Commission has verified the weekly summary sheets/bills of UI from the WRPC (submitted by the petitioner) for the complete year of FY 2011-12 and for the purpose of this order has considered the over drawl and under drawl of UI separately. The Commission has considered the UI over-drawl of 131.30 million units and UI underdrawl of 221.09 million units for FY 2011-12 as per the UI bills for FY 2011-12. The petitioner has submitted the 233.36 million units under UI over-drawl and 141.19 million units under UI under-drawl for true-up of FY 2011-12. For the purpose of the true-up of FY 2011-12, Commission has considered the surplus energy sale of 221.09 million units (as verified from the UI bills as submitted by the petitioner); under UI mechanism for FY 2011-12.

5.5 Inter-State Transmission losses

Petitioner's submission

The petitioner has submitted the energy balance for FY 2011-12, wherein the petitioner has considered the actual pool losses as 175.67 million units at 3.61%.

Commission's analysis

Commission in its ARR and tariff order for FY 2011-12 dated September 13'2011 had approved the loss level of 4.16%. The Commission in its Tariff order dated July 31'2012 considered the actual figures of regional pool losses of 3.61% for FY 2011-12 as inter-state loss of ED-DNH based on the pooled losses of the Western Region as per the data available on the WRLDC site. Now with the introduction of the new POC transmission charges and losses, the methodology for the apportionment of losses of the region to beneficiaries has undergone a change. Accordingly, the Commission has considered interstate transmission losses based on energy scheduled by the licensee and the energy scheduled at the generation end.

The gross energy purchase of 4856.41 million units including UI over-drawl of 131.30 million units as analyzed by the Commission and as discussed in 5.6 of this order. These results in the inter-state transmission losses of 134.32 million units, which is 2.77% of the gross energy purchased.

The Commission considers the inter-state transmission loss level of 2.77% as reasonable and approves the same for True up of FY 2011-12.

5.6 Energy Requirement

Petitioner's submission

The petitioner has submitted the energy requirement for FY 2011-12, based on the actual sales, power purchase quantum and actual losses for FY 2011-12.

Commission's analysis

The Commission has approved the T&D losses and the inter-state transmission losses as elaborated in the foregoing paragraphs. Commission has considered the actual drawl of 4501 million units at the exbus periphery of the licensee as per the weekly UI sheets of WRPC for FY 2011-12. The Energy requirement for the FY 2011-12 is drawn based on the approved inter-state and intra-state transmission & distribution losses and the approved energy sales. The gross energy requirement approved for FY 2011-12 is shown in the table below, along with the energy requirement submitted by the petitioner in its true-up petition for ARR of FY 2011-12.

Table 5.6.1: Energy Requirement approved by the Commission and actuals submitted by the petitioner for FY 2011-12 (in Million Units)

		2011-12						
Sr. No.	Particulars	Proposed in petition	Approved in T.O. of FY 11-12 dated 13.09.2011	petitioner's submission for true-up	Approved			
1	2	3	4	5	6			
A)	ENERGY REQUIREMENT (in Mus)							
1	Energy sales within the State/UT (in Mus)	4370.00	4225.00	4232.02	4232.02 ⁸			

In view of variance in the submissions made by the petitioner with regard to actual energy sales as part of review of FY 2011-12, ARR & tariff petition for FY 2013-14 and additional information as part of true-up of FY 2011-12; Commission has therefore considered the final submission of the petitioner with regard to energy sales of 4232.02 million units based on the final actual revenue figures as per the audited accounts of FY 2011-12

			2011-1	12	
Sr. No.	Particulars	Proposed in petition	Approved in T.O. of FY 11-12 dated 13.09.2011	petitioner's submission for true-up	Approved
1	2	3	4	5	6
2	Total sales within the State/UT	4370.00	4225.00	4232.02	4232.02
3	Distribution losses				
i)	%	7.26%	6.25%	4.94%	5.98%
ii)	MU	342.10	281.67	219.93	268.98
4	Energy required at State Periphery for Sale to Retail Consumers	4712.10	4506.67	4451.95	4501.00
5	Add: Sales to common pool consumers/ UI (in Mus)	0.00	0.00	233.36	221.09
Α	Sales outside state/UT : UI/(in Mus)	0.00	0.00		
				233.36	221.09
В	Sales (in Mus)				
	a) To electricity traders (in Mus)	0.00	0.00	0.00	0.00
	b) Through PX (in Mus)				
С	Sales to other distribution licensees				
	a) Bilateral Trade (in Mus)	0.00	0.00	0.00	0.00
	b) Banking Arrangement (in Mus)	0.00	0.00	0.00	0.00
6	Total Energy Requirement for State (5+6)	4712.10	4506.67	4685.31	4722.09
7	Transmission losses				
i)	%	5.99%	4.15%	3.61%	2.77%
i)	MU	300.00	195.00	175.67	134.32
В)	ENERGY REQUIRED TO BE PURCHASED	5012.10	4701.67	4860.98	4856.41

5.7 Intra-State Transmission and Distribution losses

Petitioner's submission

The petitioner has submitted that the actual loss level achieved in FY 2011-12 was 4.94% as against the loss level of 6.25% approved by the Commission in its ARR and tariff order dated September 13'2011.

Commission's analysis

In its ARR petition for FY 2011-12, the petitioner had projected the loss level for Intra-State Transmission and Distribution system at 7.26% for FY 2011-12 as compared to the loss level achieved

at 7.37% for FY 2009-10 and 6.86% for FY 2010-11. The Commission had allowed the T&D loss level to 6.25% for FY 2011-12 which was less than the actual loss levels achieved in the FY 2010-11, based on the expectation of growth during FY 2011-12; predominantly due to HT/EHT industry involving low losses especially when further growth was restricted on account of system capacity as mentioned in the ARR and Tariff Order dated September 13'2011. Therefore losses were expected to go further below 6.86%. The Commission also directed that an energy audit through an accredited agency be carried out in order to find out the actual losses (technical & commercial losses separately) and remedial measures required to be taken as a result thereof. The Commission directed the petitioner in its ARR and tariff order dated September 13'2011 to submit an action plan including scope of work for an energy audit and loss reduction trajectory for next three years for approval by the Commission by December 31' 2011.

The petitioner undertook the energy audit for calculation of actual AT&C loss level in five feeders on pilot basis in FY 2011-12. The energy audit firm recommended several measures for reduction of AT&C losses. The petitioner submitted the action taken report in their additional submission with ARR and tariff petition for FY 2012-13. Commission in its directive issued in ARR and tariff order for FY 2011-12 had mentioned the following

'7.26% losses as projected by the ED-DNH, despite 94% consumption being on HT/EHT, is on the higher side. Commission directs that an energy audit through an accredited agency be carried out in order to find out the actual losses (technical & commercial losses separately) and remedial measures required to be taken as a result thereof. An action plan including scope of work for the energy audit and loss reduction trajectory for next 3 years shall be submitted by 31.12.2011 for approval of the Commission.'

The Commission in Tariff order dated July 31'2012 had estimated the loss level of 5.69% based on the un-audited quantum of power purchase, energy sales submitted by the petitioner and actual regional pool loss level of FY 2011-12. The Commission has noted and appreciates the significant efforts made by the petitioner to achieve the T&D loss level even below the approved loss level of FY 2011-12 in spite of the difficulty faced with reduction below 10% level. The Commission has now analyzed the variation for sales, power purchase quantum and inter-state losses with actual. The T&D losses as a result of the variation has been therefore undergone a change.

Table 5.7.1 : Variation of Intra-State Transmission and Distribution Losses (in% age)

		2011-12									
Sr. No.	Particulars	Proposed in petition	Approved in T.O. of FY 11-12 dated 13.09.2011	Revised estimates in FY 12-13 petition	Actuals	Approved in T.O. 31.07.12 for FY 2012-13	petitioner's submission for true-up	Approved			
1	2	3	4	5	6	7	8	9			
A)	ENERGY REQUIREMENT (in Mus)										
1	Energy sales within the State/UT (in Mus)	4370.00	4225.00	4202.68	4237.16	4237.16	4232.02	4232.02			
2	Total sales within the State/UT	4370.00	4225.00	4202.68	4237.16	4237.16	4232.02	4232.02			
3	Distribution losses	1				,					
i)	<u>%</u>	<u>7.26%</u>	<u>6.25%</u>	<u>6.50%</u>	<u>5.69%</u>	<u>5.69%</u>	<u>4.94%</u>	<u>5.98%</u>			
ii)	MU	342.10	281.67	292.17	255.64	255.64	219.93	268.98			
4	Energy required at State Periphery for Sale to Retail Consumers	4712.10	4506.67	4494.85	4492.80	4492.80	4451.95	4501.00			
5	Add: Sales to common pool consumers/ UI (in Mus)	0.00	0.00	242.05	61.69	61.69	233.36	221.09			
А	Sales outside state/UT : UI/(in Mus)	0.00	0.00	242.05	61.69	61.69	233.36	221.09			
6	Total Energy Requirement for State (5+6)	4712.10	4506.67	4736.89	4554.49	4554.49	4685.31	4722.09			
7	Transmission losses										
i)	%	5.99%	4.15%	3.90%	3.61%	3.61%	3.61%	2.77%			
i)	MU	300.00	195.00	192.24	170.57	170.57	175.67	134.32			
В)	ENERGY REQUIRED AT GENERATOR END	5012.10	4701.67	4929.13	4725.07	4725.07	4860.98	4856.41			

As can be observed from the above table, the variation in Intra-State Transmission and Distribution Losses is on account of variation for sales, drawl under UI mechanism, power purchase quantum and

actual inter-state losses for FY 2011-12. In view of the audited accounts submitted for the truing up of FY 2011-12, Commission approves the intra-state transmission and distribution loss level of **5.98%** with reference to the audited figures as per the audited accounts, of quantum of power purchase, energy sales (including separate effect of UI over-drawl / under-drawl as per the bills) and actual energy drawl of FY 2011-12. Commission therefore in accordance with the regulation 9 of JERC tariff regulations, 2009 (reproduced below) finds it reasonable to allow 30% of the gain arising from over-achievement of the norms laid down by the Commission to be retained by the ED-DNH.

Quote

"

9. Excess or Under Recovery with Respect to Norms and Targets

- 1) The generating company or the licensee, as the case may be, shall pass on to the consumers, the 70 % of the gain arising from over achievement of the norms laid down by the Commission in these Regulations or targets set by the Commission from time to time and retaining balance 30% with themselves.
- 2) The generating company or the licensee, as the case may be, shall bear the entire loss on account of its failure to achieve the norms laid down by the Commission or targets set by the Commission from time to time."

Unquote

Thus the 30% of total estimated gain to be shared with ED-DNH and is allowed as an expense in the Aggregate Revenue Requirement of FY 2011-12.

Particulars	UoM	Actual	Targeted
Energy at Periphery	MUs	4722.09	4722.09
T&D losses	% age	5.98%	6.25%
Energy Sales	MUs	4439.90	4426.96
		Х	Υ
Overachievement (X-Y)	MUs	12.94	
Average billing rate	Rs./Unit	3.29	
Overachievement amount	Rs. Crores	4.26	
30% of total estimated gain to be shared with ED-DNH	Rs. Crores	1.28	

Table 5.7.2: Assessment of gain for FY 2011-12

The Commission considers the loss level of 5.98% as reasonable and approves the same for True up of FY 2011-12 and allows the gain of Rs. 1.28 Crores, which shall be considered as expenditure in the Aggregate Revenue Requirement of FY 2011-12, for the purpose of truing up of FY 2011-12.

5.8 Power Purchase Quantum & Cost for FY 2011-12

Petitioner's submission

The petitioner has submitted that the actual power purchase for FY 2011-12 is Rs. 1722.68 Crores to procure 4690.63 million units of energy for FY 2011-12 (including energy purchased through UI overdrawl), as against the power purchase cost of Rs. 1342.19 Crores to procure 4700 million units as approved by the Commission in its ARR and tariff order dated September 13'2011.

Commission's analysis

Commission had approved the Power purchase cost including transmission charges at Rs. 1342.19 Crores for purchase of 4700 million units in its ARR and tariff order dated September 13'2011. Further, the Commission during the approval for the ARR of FY 2012-13 in its ARR and tariff order dated July 31'2012 had also recorded the actual power purchase units for the period FY 2011-12 at 4725.09 million units (excluding UI over-drawl) at table 7.7.2 of the said order.

The petitioner in its true-up petition has submitted that the actual power purchase for FY 2011-12 is Rs. 1722.68 Crores including transmission costs during FY 2011-12 to procure 4690.63 million units for FY 2011-12 (including UI over-drawl). The petitioner has submitted that it has considered the sourcewise Power purchase cost including transmission charges as per the audited accounts of FY 2011-12. The total Power purchase cost as submitted by the Petitioner in true-up includes the arrears on account of revision in CERC regulations, revision in Income tax and increase in coal charges along with rebate on the prompt payment, received by the utility. Commission had approved the Power Purchase cost of Rs. 1645.18 Crores (excluding UI over-drawl charges) for FY 2011-12 based on the actuals unaudited data submitted by the petitioner for FY 2011-12 in its ARR and tariff order dated July 31'2012. The Commission as part of prudence check verified the station-wise bills of Power purchase Cost submitted by the petitioner for FY 2011-12 on sample selection basis and had considered the submissions made by the petitioner after sample verification of power purchase bills of Jan., Feb. and March 2012.

As mentioned in Para 5.4 of this order, Commission has considered the separate effect of UI over-drawl / under-drawl for FY 2011-12; therefore the UI over-drawl of 131.30 million units and UI under-drawl of 221.09 million units (verified from the UI bills as submitted by the petitioner) under UI mechanism for FY 2011-12 is considered for the purpose of true-up.

The Commission allowed the power purchase cost including the additional arrears attributed to revision of charges due to CERC regulations, Income Tax and coal prices applicable for the financial year 2011-12 after verification from the Power purchase bills and the audited accounts. In accordance

with the Power purchase cost as per the audited accounts, auditor's report, and JERC tariff regulations,2009; Commission has found it reasonable and therefore considers Rs. 1722.68 Crores (Rs. 1672.37⁹ Crores plus Rs. 50.31¹⁰ Crores) with reference to the final actual figures as per the audited accounts for the purpose of further analysis of true-up.

The summary of Power purchase quantum and costs, for FY 2011-12 as approved by the Commission after the true-up including UI overdrawl, is given in the following table:

Table 5.8.1 : Power Purchase Units approved by the Commission and actuals submitted by the petitioner for FY 2011-12 (in Million Units)

			2011-12							
Sr. No	Particulars	Proposed in petition	Approved in T.O. of FY 11-12 dated 13.09.2011	Petitioner's submission for true-up	Approved					
1	2	3	4	5	6					
1	Net Generation (Share from CGS) (in MUs)	3217.15	3065.00	2852.72	2852.72					
Α	NTPC	3217.15	3065.00	2852.72	2852.72					
2	Power Purchased from (Other Sources) (in Mus)	1794.84	1635.00	2013.58	2003.69					
Α	NSPCL	1055.00	1290.00	1113.78	1113.78					
В	NPCIL	175.00	320.00	371.67	371.67					
С	KHSTPP – II	9.84	25.00	16.26	16.26					
D	TATA Power (Haldia)	390.00		267.36	267.36					
Е	Renewable Energy Sources			0.00	0.00					
Н	Power Exchange (Buy)			103.32	103.32					
ı	Bilateral Trade (Buy)	85.00								
J	RPO (Buy)									
K	UI Overdrawl	80.00		141.19	131.30					
L	Banking Arrangements (Buy)									
5	Gross Purchase Quantum (in MUs)	5011.99	4700.00	4866.30	4856.41					

 $^{^{9}\,}$ Actual Power purchase cost for FY 2011-12 as per the audited accounts of FY 2011-12

¹⁰ Actual UI overdrawl charges/purchases for FY 2011-12 as per the audited accounts of FY 2011-12

Renewable Purchase Obligations

As per JERC (Procurement of Renewable Energy) Regulations 2010 regulation 1 sub clause (1):

Quote

"Each distribution licensee shall purchase electricity (in kWh) from renewable energy sources, at a defined minimum percentage of the total consumption of all the consumers in its area during a year."

Unquote

The petitioner had to purchase 2% of total power purchase from renewable sources for FY 2011-12 including 0.30% for Solar and 1.70% for Non-Solar. The petitioner in its submission has submitted that they have procured Renewable Energy Certificates for FY 2011-12 of 58 million units and total cost has been given at Rs. 17.44 Crores. Commission has observed that in order to comply with the RPO obligation, the petitioner has to procure 85 million units from the Renewable Energy Sources.

In accordance with the JERC (Procurement of Renewable Energy) Regulations 2010 regulation 4:

Quote

"4. Consequences of default

If the obligated entity does not fulfill the renewable purchase obligation as provided in these regulations during any year and also does not purchase the certificates, the Commission may direct the obligated entity to deposit into a separate fund, to be created and maintained by State Agency, such amount as the Commission may determine on the basis of the shortfall in units of RPO and the forbearance price. It shall also be liable for penalty as may be provided by the Commission under Section 142 of Electricity Act, 2003.

Provided

- 1. That the fund so created shall be utilized as may be directed by the Commission for purchase of the certificates.
- 2. Further that the Commission may empower an officer of the State Agency to operate the fund and procure from the Power Exchange the required number of certificates to the extent of the shortfall in the fulfillment of the obliqations, out of the amount in the fund.
- 3. That the obligated entities shall be in breach of its license condition if it fails to deposit the amount directed by the Commission within 15 days of the communication of such direction.
- **4.** That in case of genuine difficulty in complying with the renewable purchase obligation because of non-availability of certificates, the obligated entity can approach the Commission for carry forward of compliance requirement to the next year." **Unquote**

The petitioner in the hearing dated December 18'2012 on suo-moto petition no.61/2012 in the matter of Compliance of Joint Electricity Regulatory Commission for the State of Goa and UTs (Procurement of Renewable Energy) Regulation 2010 regarding Renewable Purchase Obligation (RPO) submitted that they meet the RPO obligations on solar power upto 31.03.2013. It is also submitted that they will also meet non solar RPO obligations in time. The Commission vide its order dated December 26'2012 has considered the submissions of the petitioner and directed the petitioner to submit detailed report on or before January 10'2013 to meet RPO obligations upto 31.03.2013 and action plan for FY 2013-14 on or before 10.01.2013 as per order dated 10.10.2012 positively. The petitioner is directed to submit the difficulty in meeting the RPO obligations and action plan within 3 weeks from the date of issuance of this order.

Table 5.8.2 : Actual Power Purchase expenses as approved by the Commission for FY 2011-12 (in Rs. Crores)

Sr.	Station	Purchase	VC	FC (Rs.	VC	Others	Total	Arrears	Net Payable	Power
No.		(MU)	(Ps/	Cr)	(Rs. Cr)	(Rs.	(Rs. Cr)	(Rs. Cr)	(Rs. Cr.)	Purchase
			Unit)			Cr)				Cost/Unit
					6 =					
1	2	3	4	5	(3*4)/10	7	8	9	10=5+6+7+9	11=(10/3)*10
ı	NTPC Stations									
1	KSTPP 1&2	449.98	89	18.71	39.96	1.39	60.06	(3.65)	56.41	1.25
2	KSTPS 3	149.51	78	23.38	11.70	(0.19)	34.88	(0.00)	34.88	2.33
3	VSTPP-I	358.28	156	18.87	56.07	1.54	76.48	16.07	92.55	2.58
4	VSTPP-II	291.33	149	19.25	43.47	5.02	67.74	4.48	72.22	2.48
5	VSTPP- III	334.28	149	32.59	49.96	6.02	88.57	2.81	91.38	2.73
6	KAWAS	429.40	275	46.01	118.26	6.59	170.86	5.67	176.53	4.11
7	JGPP	323.50	248	44.84	80.34	3.59	128.77	0.70	129.47	4.00
8	Sipat	249.72	90	29.19	22.46	3.35	55.00	(0.01)	54.99	2.20
9	Sipat-II	167.41	94	18.58	15.70	2.24	36.52	0.25	36.77	2.20
10	KHSTPP-II	16.26	259	1.95	4.21	0.06	6.21	0.49	6.70	4.12
	Other								48.40	
11	Arrears ¹¹								46.40	
12	Less: Rebate								15.40	
1	Subtotal – I	2,769.67	160	253.36	442.13	29.61	725.10	26.81	784.91	2.83
Ш	NPCIL									
1	KAPPS	98.98	205	0.00	20.33	2.18	22.51	0.00	22.51	2.27
1.1	Less: Rebate								0.45	
3	TAPP 3&4	272.69	265	0.00	72.32	0.17	72.49	0.00	72.49	2.66
2.1	Less: Rebate								1.07	
2	Subtotal - II	371.67	249	0.00	92.65	2.35	95.00	0.00	93.48	2.52
Ш	Others									
1	RGPPL	99.31	230	20.09	22.89	0.21	43.19	0.00	43.19	4.35
1.1	Less: Rebate								0.71	

¹¹ On account of CERC revision and additional income tax

Sr.	Station	Purchase	VC	FC (Rs.	VC	Others	Total	Arrears	Net Payable	Power
No.		(MU)	(Ps/	Cr)	(Rs. Cr)	(Rs.	(Rs. Cr)	(Rs. Cr)	(Rs. Cr.)	Purchase
			Unit)			Cr)				Cost/Unit
					6 =					
1	2	3	4	5	(3*4)/10	7	8	9	10=5+6+7+9	11=(10/3)* <i>10</i>
2	Tata Power	267.36	394	0.00	105.40	0.00	105.40	0.00	105.40	3.94
2.1	Less: Rebate								2.07	
3	NSPCL - Bhilai	1,113.78	227	193.89	253.28	13.32	460.49	6.53	467.02	4.19
3.1	Less: Rebate								8.11	
3	Subtotal - III	1480.45		213.98	381.57	13.53	609.08	6.53	604.72	4.08
	Power									
	purchase from									
IV	Other Sources									
	Power									
	purchase from	103.32	342	0.00	35.31	0.00	35.31	0.00	35.31	3.42
	Indian E.	103.32	342	0.00	33.31	0.00	33.31	0.00	33.31	3.42
1	Exchange									
2	UI ¹²	131.30		0.00	50.31	0.00	50.31	0.00	50.31	
3	RP Obligation	0.00		0.00	0.00	17.37	17.37	0.00	17.37	
4	Subtotal IV	234.62	365	0.00	85.62	17.37	102.99	0.00	102.99	4.39
	Power	4,856.41	206	467.34	1,001.96	62.86	1,532.17	33.34	1,586.10	
	Purchase Cost	4,830.41	200	407.34	1,001.90	02.80	1,332.17	33.34	1,380.10	3.27
٧	Other Charges									
1	PGCIL Charges					119.27	119.27	4.30	123.57	
	WRLDC	1	1 1	1	1	6.50	6.50	0.00	6.50	
2	charges		1 l		1	0.50	0.50	0.00	0.50	
3	Others					6.51	6.51	0.00	6.51	
	Grand Total of	4,856.41	206	467.34	1,001.96	195.14	1,664.45	37.64	1,722.68	
5	Charges	7,030.41	200	707.34	1,001.30	155.17	1,004.43	37.04	1,722.00	3.55

Power Purchased from UI and Power Exchanges

The Petitioner in its true-up petition has submitted that they had procured Power from short term sources like Power exchanges, and UI mechanism to meet the peak demand. As per the bills generated by WRLDC on UI, it has been found that the Petitioner has drawn energy below the specified frequency of 49.5 Hz from April 1'2011 to March 30'2012 and additional UI charges of Rs. 5.26 Crores paid by the petitioner. Therefore as per the CERC (Unscheduled Interchange charges and related matters) Principle Regulations and its amendments thereof applicable for FY 2011-12 and Press Notification issued by Ministry of Power on 23rd July 2009 and after verification of the data submitted by the Petitioner, Commission has disallowed the additional UI charges of Rs. 5.26 Crores against the UI drawl below

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¹² Commission has considered the units based on the UI bills and amount as submitted by the petition with reference to audited accounts for FY 2011-12.

the specified frequency during FY 2011-12, imposed on the utility as per the UI regulations of CERC (as amended from time to time) for drawl during the period when the frequency was below 49.2 (amended to 49.5 w.e.f. May 03'2010 and later on amended to 49.7 w.e.f. March 5' 2012) and it will not be a pass through in the true-up of aggregate revenue requirement of the Petitioner for FY 2011-12. 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 penal charges should not be shown as purchase of Power because it is on account of improper management of Load by ED-DNH.

After consideration of the disallowed amount towards penal charges paid for UI overdrawl/underdrawl as discussed above the approved drawl from UI (separate effect of underdrawl/overdrawl), the Power purchase cost of Rs. 1717.42 Crores for the purpose of True-up of ARR for FY 2011-12 for purchase of 4856.41 million units.

As per the sub-regulation 2 (i) of regulation 8 of JERC tariff regulations 2009, Commission has considered the final actual figures of Power purchase cost and has approved Rs. 1717.42 Crores (after deducting penal charges of Rs. 5.26 Crores from Rs. 1722.68 Crores) as per the audited accounts as reasonable and approves the same for true-up of FY 2011-12.

5.9 Operation and Maintenance Expenses

Petitioner's submission

The petitioner has submitted that the 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.

The petitioner has submitted the Operation and Maintenance expenses of Rs. 11.83 Crores in its trueup petition for FY 2011-12 as compared to the Operation and Maintenance expenses of Rs. 10.19 Crores approved by the Commission in its ARR and tariff order dated September 13'2011 and Rs. 11.28 Crores for FY 2011-12 in its ARR and tariff dated July 31'2012. The petitioner has submitted the detailed break-up of Operation and Maintenance expenses on each of the expenditure heads for consideration by Hon'ble Commission.

Commission's analysis

The petitioner submitted that the actual employee expenses in FY 2011-12 was Rs. 4.75 Crores as compared to the employee expenses of Rs. 3.25 Crores approved by the Commission in the ARR and tariff order dated September 13' 2011. Commission in its tariff order dated July 31'2012 approved Rs. 2.95 Crores for Review of ARR for FY 2011-12; in view of the expenditure recorded in the audited accounts of the FY 2010-11. The actual expenses for FY 2010-11 were escalated by the WPI¹³ factor of 8.76% to determine the expenses for FY 2011-12 for Review of ARR of FY 2011-12.

The Commission had acknowledged the fact in its tariff order dated July 31'2012 that the impact of 6th Pay Commission implementation would be uncontrollable at the hands of the petitioner and such expenses would be treated as a pass through during the true-up process based on the actual payout in this regard for the FY 2011-12.

Further, Commission noticed that there is no change in the number of employees from April 1'2011 to March 31'2012.

The employee expenses of the utility are at prudent levels and are less than 0.30% of the total ARR of the petitioner the Commission finds the variation in employee expenses against the approved to be acceptable. The Commission has therefore considered the final actual figures of employee expenses of Rs. 4.75 Crores as per the audited accounts as reasonable and approves the same for true-up of FY 2011-12.

<u>Administration and General Expenses</u>

The petitioner submitted that the actual Administration and General expenses in FY 2011-12 was Rs. 1.95 Crores as compared to the Administration and General expenses of Rs. 0.14 Crores approved by the Commission in the ARR and tariff order dated September 13' 2011.

¹³ WPI- Wholesale price index as available on the website of Economic Advisor, Ministry of Commerce and Industry

Commission in its tariff order dated July 31'2012 approved Rs. 1.75 Crores for Review of ARR for FY 2011-12 based on the audited data of FY 2010-11. The actual expenses for FY 2010-11 were escalated by the WPI factor of 8.76% to determine the expenses for FY 2011-12 for Review of ARR of FY 2011-12.

The petitioner has recorded Rs 1.95 Crores as the A&G expense in its audited account which is a variation of 0.20 Crores from the approval in the order for Review of FY 2011-12. The Commission has considered the final actual figures of administration and general expenses of Rs. 1.95 Crores as per audited accounts as reasonable and approves the same for the purpose of true-up of FY 2011-12.

Repair and Maintenance Expenses

The petitioner submitted that the actual Repair and Maintenance expenses in FY 2011-12 was Rs. 5.13 Crores as compared to the Repair and Maintenance expenses of Rs. 6.80 Crores approved by the Commission in the ARR and tariff order dated September 13' 2011.

The Commission in its ARR and tariff order for FY 2011-12 dated September 13'2011 had approved higher Repair and Maintenance expenses on account of major maintenance proposed to be carried out by the petitioner on EHV/LT substations as the capitalization proposed during FY 2011-12 was more than that during FY 2010-11.

Repair & Maintenance expenditure in general shall increase in proportion to increased capitalization. Commission in its ARR and tariff order dated July 31'2012 recognized the requirement of the maintenance activities and also observes that the R&M expenses proposed by the petitioner amounting to Rs 6.58 Crores were lower than that approved in the order dated September 13, 2011 and had approved Rs. 6.58 Crores for review of ARR of FY 2011-12. As can be observed from the above, the actual expenditure recorded in the books of accounts is less than the approved (vide order dated July 31'2012) expenditure on Repair and Maintenance activities. In view of the less expenditure incurred, it is directed that the petitioner should carry out the expenditure as a must exercise for maintenance of the sub-transmission and distribution system including meters & metering equipments. As it forms the backbone of the entire system. Any slippages in this direction shall be viewed seriously.

The actual R&M expenses as per the audited accounts are lower than approved therefore the Commission has considered the final actual figures of repair and maintenance expense of Rs. 5.13 Crores as per the audited accounts as reasonable and approves the same for true-up of FY 2011-12.

5.10 Capitalization, GFA & Depreciation

Petitioner's submission

The Petitioner in its ARR and tariff petition for FY 2011-12 had proposed a capital expenditure of Rs. 58.98 Crores, out of which Rs. 40.14 Crores was proposed to be capitalized during FY 2011-12.

The petitioner in its true-up petition for FY 2011-12 has submitted the actual capital expenditure incurred by the utility is Rs. 46.86 Crores and capitalization achieved during FY 2011-12 is Rs. 3.99 Crores which is very much less than the capitalization of Rs. 40.14 Crores approved by the Commission for FY 2011-12 in its tariff order dated September 13'2011.

The Petitioner has computed the depreciation at Rs. 19.92 Crores as against the depreciation of Rs. 2.11 Crores approved by the Commission in its ARR and tariff order dated September 13'2011 for FY 2011-12. The petitioner has submitted that the depreciation has been computed by applying the depreciation rates as given in the depreciation schedule of CERC (Terms and Conditions of Tariff) Regulations, 2009 on the opening Gross Fixed Assets and the subsequent additions to it in FY 2011-12 as shown in annual accounts of Electricity Department of Dadra and Nagar Haveli for FY 2011-12.

Commission's analysis

The Commission had approved the capitalization of Rs. 40.14 Crores for the purpose of Aggregate Revenue Requirement in its ARR and tariff order dated September 13'2011 and further approved the capitalization of Rs. 27.61 Crores for FY 2011-12 as part of Review in its tariff order dated July 31'2012. The Commission did not accepted the opening gross fixed assets of FY 2010-11 as projected by the department for the reasons while determining the tariff for FY 2010-11 and FY 2011-12 as mentioned in its previous tariff order for FY 2010-11 dated November 1'2010 and FY 2011-12 dated September 13'2011.

The petitioner furnished the verified asset register for the FY 2011-12 as part of ARR and Tariff Petition for FY 2013-14 where it is submitted that the assets have been audited by the statutory auditor, which confirms the value of the opening value of gross fixed assets for the FY 2010-11 and FY 2011-12 contained in the audited accounts of FY 2011-12.

In view of the findings of the Commission as discussed in para 2.1.2 to para 2.1.10 of Review Order dated January 24'2013. The relevant excerpts are mentioned below:

Quote

"2.1.9. In view of the above, even if the typographical errors are ignored, the auditor's report, notes to the accounts, comment on the fixed assets & depreciation registers, does not specify that the opening

value of gross fixed assets & importantly, the assets and depreciation registers furnished by the department could not provide the crucial information to ascertain the assets that are effectively/actually deployed for the year for which tariff is being fixed or claimed. Therefore the Commission rejects the contention of the petitioner and directed to submit the verified & required information for consideration by the Hon'ble Commission as stated in the tariff order dated July 31'2012.

2.1.10. ED- DNH is directed to indicate the value list of Assets being used for rendering the services in the ARR of 2013-14 or alternatively indicate as to what % of Gross block be considered on ad hoc basis & the basis thereof which can be considered in the true up which is due in the ARR for FY 2013-14."

Unquote

Commission gave directions in para 2.1.10 of review order dated January 24'2013 to the petitioner to indicate the value list of assets being used for rendering the services in the ARR of 2013-14 or alternatively indicate as to what %age of Gross block be considered on ad hoc basis & the basis thereof which can be considered in the true up which is due in the ARR for FY 2013-14.

The petitioner did not respond to the directions of the Commission and has not indicated even as to what %age of gross block be considered on ad hoc basis for the purpose of true-up of FY 2011-12 which is due in ARR for FY 2013-14.

Keeping in view of the non-submission of the required certificate/confirmation from the petitioner, it could not be inferred that the assets ascertained in the asset registers furnished by the petitioner are actually/effectively deployed for which the tariff is being claimed or fixed.

Considering the present facts, the fixed assets acquired by the UT of Dadra and Nagar Haveli since its inception as UT, had UT written off some of the assets and provided write off sanctions could have considered as the base but there is also no write off sanction mentioned in the fixed asset registers. It means the entire stock is in use which is not correct. As such entire stock could not be considered as 'assets in use'; For the same and the sole purpose of third party verification through a Chartered Accountant is also completely set aside by the utility and has once again re-produced the unverified information for consideration of the Commission under the seal of Chartered Accountant and has also not submitted the required certificate/confirmation as per the directions gave by the Commission in review order dated January 24'2013.

Having considered the findings of the Commission in the review order dated January 24'2013 and the non-submission of the required certificate/confirmation from the petitioner; the Commission has taken

a prudent view and is of the opinion that though it is to be allowed on the basis of audited accounts, but that do not clearly indicate, for which tariff is being charged. Though Commission as per the tariff regulation may not have considered this, but to avoid accumulation of depreciation or resulting in a tariff shock to a consumer; if being charged in any single year in future, or creation of regulatory asset; the Commission considers it prudent to allow depreciation on 50% of opening value of gross fixed assets as on April 1'2010 being the first year (FY 2010-11) for which ARR and tariff petition was filed by the petitioner, subject to adjustment in true-up depending upon the certificate to be submitted by September 30'2013.

Commission therefore considered the capitalization of Rs. 269.65 Crores for FY 2010-11 as the opening value of assets at the beginning of FY 2011-12 for the purpose of Depreciation and Return on Equity. Further the capitalization of Rs. 3.99 Crores was already been done during FY 2011-12, Commission considers it admissible as an addition of Rs. 3.99 Crores in the gross block for the purpose of true-up of FY 2011-12.

Sr. No.	Particulars	Value of assets at the beginning of FY 2011-12 (considered by the Commission)	Addition during FY 2011-12	Closing balance at the end of FY 2011-12	Rate of Depreciation	Depreciation for FY 2011-12
1	2	3	4	5	6	7
1	Plant & Machinery	256.39	3.96	260.35	5.28%	13.64
2	Buildings	3.54	-	3.54	3.34%	0.12
3	Vehicles	0.16	-	0.16	9.50%	0.02
4	Furniture and Fixtures	-	0.03	0.03	6.33%	0.00
5	Computers and Others	0.10	-	0.10	6.33%	0.01
6	Land	9.46	-	9.46	0.00%	-
7	Total	269.65	3.99	273.64		13.78

Table 5.10.1: Calculation of Depreciation for FY 2011-12 approved by the Commission (in Rs. Crores)

Keeping in view of the above, Commission considers the depreciation of Rs. 13.78 Crores for true up of ARR of FY 2011-12 on the gross block during FY 2011-12.

5.11 Interest and Finance Charges

Petitioner's submission

The petitioner has considered the Opening Balance of Loans for FY 11-12 as approved by the 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 Crores. The capitalization for FY 11-12 was Rs. 3.99 Crores as per the annual

accounts for FY 11-12. In line with the approach adopted by the 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 petitioner has claimed the interest and finance charges of Rs. 7.07 Crores to be considered for true-up of FY 2011-12.

Commission's analysis

The Commission in its ARR and tariff order dated September 13'2011 for FY 2011-12 had not considered the notional interest charges projected by the petitioner. As the petitioner had not borrowed any loans to meet the capital expenditure for FY 2011-12, therefore the interest charges computed by the petitioner were on the basis of notional loan without any external borrowings.

However as per Regulation 25 of JERC (Terms and Conditions for Determination of Tariff) Regulations, 2009

Quote"

- 1) For existing loan capital interest and finance charges on loan capital shall be computed on the outstanding loans, duly taking into account the rate of interest and schedule of repayment as per the terms and conditions of relevant agreements.
- 2) Interest and finance charges on loan capital for new investments shall be computed on the loans, duly taking into account the rate of interest and the schedule of repayment as per the terms and conditions of relevant agreements. The rate of interest shall, however, be restricted to the prevailing Prime Lending Rate of the State Bank of India. "Unquote

The ED DNH being an integrated utility in its present form as defined in Regulation 2(9) of the JERC (Terms and Conditions for Determination of Tariff) Regulations, 2009; as the ED DNH is not restructured and corporatized till date. Considering this an integrated utility and its entitlement to return on its capital base under the provisions of Schedule VI of the repealed Electricity (Supply) Act, 1948 vide provision under Regulation 23 of JERC (Terms and Conditions for Determination of Tariff) Regulations, 2009. The basic requirement for consideration of interest on loans is the value of fixed assets in service or actually/ effectively deployed (net fixed assets) by the utility at the beginning of such year and funding pattern as well as terms & conditions of funding of capital assets.

The Commission places reliance on the Section 23 of the JERC Tariff regulations which is reproduced below:

Quote

"23. Debt-Equity Ratio

For the purpose of determination of tariff, debt-equity ratio in case of existing, ongoing as well as new projects commencing after the date of notification of these Regulations shall be 70:30. Where equity employed is more than 30%, the amount of equity for the purpose of tariff shall be limited to 30% and the balance amount shall be considered as loan. Where actual equity employed is less than 30%, the actual debt and equity shall be considered for determination of tariff:

Provided that the Commission may, in appropriate cases, consider equity higher than 30% for the purpose of determination of tariff, where the generating company or the licensee is able to establish to the satisfaction of the Commission that deployment of equity more than 30% is in the interest of the general public: .

(2) The debt and equity amounts arrived at in accordance with sub-regulation (1) above shall be used for all purposes including for determining interest on loan, return on equity, Advance against Depreciation and Foreign Exchange Rate Variation.:

Provided that in the case of an Integrated Utility, till the time it remains Integrated Utility, it shall be entitled to return on its capital base as per Schedule VI to the repealed Electricity (Supply) Act, 1948."

UnQuote

The above stated regulations mandate the debt equity ratio for assets deployed, post the commencement of the JERC Tariff Regulations. It is pertinent to mention here that the first application filed by the petitioner before this Commission under the above stated regulation was for the FY 2010-11, wherein the Commission had determined Tariff as per the JERC Tariff Regulations,2009. The Commission has also perused the accounts certified by a chartered accountant submitted by the petitioner for FY 2010-11 and FY 2011-12. It has been observed that the petitioner does not have any opening loan portfolio and the entire capital base is funded through government budgetary support.

As discussed above, the normative interest under the JERC Tariff Regulations could therefore be considered on the assets created during the year FY 2010-11 onward excluding the opening capital base as projected by the petitioner in FY 2010-11 or considered by the Commission as discussed in para 5.10 of this order. Commission has considered an addition of Rs. 68.22 Crores in Gross Fixed Assets for FY 2010-11 which were considered funded through normative debt to the tune of 70% i.e. Rs. 47.75 Crores. The Commission has considered the actual capitalization of assets as proposed by the petitioner at Rs 3.99 Crores during the FY 2011-12. The Commission for the purpose of funding of the capitalization has considered the normative debt equity ratio of 70:30, whereby it has considered the normative loan at Rs. 2.79 Crores for the FY 2011-12 and the opening normative loan of Rs. 47.75 Crores. The calculation for the interest on the normative loan is given below:

Table 5.11.1: Normative Interest on Loan approved in the true-up for FY 2011-12 (in Rs. Crores)

		201	1-12
Sr. No.	Particulars	petitioner's submission for true-up	Approved
1	2	3	4
1	Opening Normative Loan	47.75	47.75
2	Add: Normative Loan during the year	2.79	2.79
3	Less: Normative Repayment limited to accumulated Depreciation	2.39	13.78
4	Closing Normative Loan	48.15	36.76
5	Average Normative Loan	47.95	42.26
6	Rate of Interest (@SBAR rate)	14.75%	13.00%
7	Interest on Normative Loan including bank charges	7.07	5.49

In view of the submissions made by the petitioner and the capitalization considered for FY 2011-12 in the para 5.10 of this order, the Commission has considered the Normative Interest on loans at Rs. 5.49 Crores as reasonable and approves the same for true-up of FY 2011-12.

5.12 Interest on Working Capital

Petitioner's submission

The petitioner has computed the interest on working capital for FY 2011-12 on the normative principles outlined by the 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 as Rs. 21.32 Crores as against Rs. 13.24 Crores approved by the Commission in its ARR and tariff order dated September 13'2011 for FY 2011-12 and Rs. 15.34 Crores in its ARR and Tariff order dated July 31'2012.

Commission's analysis

As per the regulation 29 of JERC tariff regulations

Quote

"

29. WORKING CAPITAL AND INTEREST RATE ON WORKING CAPITAL

- 1) For generation and transmission business, the working capital shall be as per CERC norms.
- 2) Subject to prudence check, the working capital for distribution business shall be the sum of one month requirement for meeting:
 - a. Power purchase cost.
 - b. Employees cost.
 - c. Administration & general expenses and
 - d. Repair & Maintenance expenses.
- 3) Subject to prudence check, the working capital for integrated utility shall be the sum of one month requirement for meeting:
 - a. Power purchase cost
 - b. Employees cost
 - c. Administration & general expenses
 - d. Repair & Maintenance expenses.
 - e. Sum of two month requirement for meeting Fuel cost.
- 4) The rate of interest on working capital shall be equal to the short term Prime Lending Rate of State Bank of India on the 1st April of the relevant financial year. The interest on working capital shall be payable on normative basis notwithstanding that the generating company / licensee has not taken working capital loan from any outside agency or has exceeded the working capital loan amount worked out on the normative figures." Unquote

The Commission has considered the calculation of the different components of the interest on working capital as per JERC Tariff Regulations

Further, as the consumer security deposit has not been kept in any separate account and is available to the petitioner to meet its working capital requirements, the Commission has therefore considered that the amount against the consumer security deposit available till March 31'2011 to meet the working capital required for FY 2011-12.

The Commission has considered the consumer security deposit as available from the audited accounts. Further the petitioner in its subsequent submissions submitted the list of those consumers who had converted their bank guarantees in the form of deposits in favor of Electricity Department along with the amount and date of conversion. Commission appreciates the efforts made by the stakeholders in this process of conversion and gradual improvement towards increasing efficiency and gains in the regulated entities through transparency. The consumer security deposit as shown in the audited accounts is considered to be available with the petitioner for reducing the working capital requirement. The Commission has therefore considered the security deposit available with the petitioner, as a source to meet its working capital requirement and has deducted this amount from the working capital requirement for FY 2011-12. The petitioner simultaneously has a liability to pay interest to the consumers on the security deposit held, which the Commission has allowed as pass through in the expenses approved.

The Commission has considered the SBI advance rate of 13%¹⁴ as on 1st April 2011 for true-up of ARR of FY 2011-12. The detailed calculation for the calculation of interest on working capital is mentioned below:

Table 5.12.1: Interest on Working Capital approved by the Commission for FY 2011-12 (in Rs. Crores)

				2011-12		
Sr. No.	Particulars	Proposed in petition of FY 2011- 12	Approved in T.O. of FY 11-12 dated 13.09.2011	Approved in T.O. 31.07.2012 FY 2012-13	petitioner's submission for true-up	Approved
1	2	3	4	5	6	7
1	Fuel Cost for 2 months	0.00	0.00	0.00	0.00	0.00
2	Power Purchase Cost for one month	125.21	111.85	134.12	143.56	137.36
3	Employee Cost for one month	0.29	0.27	0.25	0.40	0.40
4	A&G Expenses for one month	0.01	0.01	0.15	0.16	0.16
5	R&M Expenses for one month	0.57	0.57	0.55	0.43	0.43
6	Total Working Capital for one month	126.08	112.70	135.06	144.54	138.35

SBI advance rate notified on 14.02.2011; Thereafter four revisions in the SBI advance rate was notified in FY 2011-12 and are as under: 25.04.2011-13.25%; 12.05.2011-14%; 11.07.2011-14.25%; 13.09.2011 – 14.75%. No further revision has been notified

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			2011-12							
Sr. No.	Particulars			Approved in T.O. 31.07.2012 FY 2012-13	petitioner's submission for true-up	Approved				
1	2	3	4	5	6	7				
7	Total Working after deduction of Security Deposit from Working Capital Requirement	126.08	112.70	117.99	144.54	120.29				
8	SBAR Rate	12.25%	11.75%	13.00%	14.75%	13.00%				
9	Interest on Working Capital	15.44	13.24	15.34	21.32	15.64				

Accordingly, the Commission has considered the Interest on Working Capital at Rs. 15.64 Crores as reasonable and approves the same for true-up of FY 2011-12.

5.13 Interest on Security Deposit

Petitioner's submission

The petitioner has not claimed the interest on security deposit from consumers for FY 2011-12, where the FDRs were in the name of the consumers. The petitioner has submitted 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 petitioner has subsequently submitted the list of consumers who have converted their BGs into FDRs along with date of conversion and amount. The consolidated amount of FDRs is Rs. 57.47 Crores received by the utility as on January 30'2013. These FDRs have been drawn in the name of the Executive Engineer, Electricity Department, Dadra and Nagar Haveli. The petitioner stated that the Silvassa Industries Association has also filed a petition with the Commission to continue with the bank guarantees in the future.

Commission's analysis

In terms of the section 47 (4) of the Electricity Act, 2003 'the distribution licensee is required to pay interest on security deposit collected from consumers equivalent to bank rate or more as may be specified by the Commission.' 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. Further, the petitioner has to comply with the provisions of the above referred section of the Electricity Act 2003.

The Commission in its ARR and tariff order dated September 13'2011 had directed the petitioner should follow the provisions of Sub regulation no. 6.10 of JERC (Electricity Supply Code) Regulations, 2010. Wherever existing mode of consumer security deposit i.e. bank guarantee, fixed deposit etc. is different from those provided in the Regulation, the same be replaced by those as specified therein, as per section 47(1) Electricity Act 2003 and pay interest as per section 47(4) Electricity Act, 2003. Further the Commission reiterated its direction in its tariff order dated July 31'2012.

The Commission has observed that the petitioner has not paid any interest to the consumers on the security deposit held during FY 2011-12. Though Commission appreciates the effort made by the petitioner for conversion of BGs into Deposits but still this mode of consumer security deposit is different from those provided in the provisions of Sub regulation no. 6.10 of JERC (Electricity Supply Code) Regulations, 2010, the same be replaced by those as specified therein, as per section 47(1) Electricity Act 2003 and pay interest as per section 47(4) Electricity Act, 2003. The Commission would like to reiterate its direction that the distribution licensee should deliver its obligation under the Section 47(4) of the Electricity Act, 2003 and it must pay the interest on security deposit and was directed to pay interest of FY 2011-12 in the consumer bills during FY 2012-13. It is observed with reference to the final figures as per audited accounts of FY 2011-12, the petitioner has not paid any interest to the consumers on the security deposit held during FY 2011-12. Therefore Commission considers it appropriate to not to consider any interest on security deposits for the purpose of true-up of ARR of FY 2011-12.

5.14 Return on Capital Base/Return on Equity

Petitioner's submission

The petitioner has computed the return at 16% on the equity base as per the tariff regulations of the Commission on the 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 of Rs. 0.10 Crores has been claimed by the petitioner for true-up of FY 2011-12.

Commission's analysis

The Commission in its ARR and tariff order dated September 13'2011 for FY 2011-12 had noted the following:

Quote

"The ED-DNH it is an integrated utility in its present form as defined in Regulation 2 (9) of the JERC (Terms and Conditions for Determination of Tariff) Regulations, 2009. The basic requirement either for return on capital base or return on equity is the audited accounts and register of assets and

depreciation. The ED - DNH has not prepared the statement of accounts viz profit and loss account, balance sheet etc. ED-DNH has submitted in their letter dated 30/06/2010 that audited accounts are unavailable at the moment and the ED - DNH has initiated the process of appointing auditors and will be in a position to submit the details thereafter only.

In the absence of audited accounts, assets and depreciation registers the Commission is not in favour of any return on capital base till such time the asset register, depreciation registers and accounting statements are prepared and got duly audited for considering the return on capital base." **Unquote**

Having considered the submission of the petitioner with regard to audited accounts, the Commission is of the view that the petitioner as being an integrated utility in its present form is eligible for the return on capital base and it is entitled to return on capital base under the provisions of Schedule VI of the repealed Electricity (Supply) Act, 1948 vide provision under Regulation 23 of JERC (Terms and Conditions for Determination of Tariff) Regulations, 2009. The basic requirement for consideration of either return on capital base or return on equity is the value of assets actually/effectively deployed for which the tariff is being fixed or claimed. The petitioner has furnished the audited accounts and asset registers to the Commission. As discussed in foregoing para no. 5.10, the gross opening block in the asset registers and audited accounts is based on the assumptions and is not physically verified. Further the Commission in para 2.1.10 of its review order dated January 24'2013, directed the petitioner to indicate the value list of assets being used for rendering the services in the ARR of 2013-14 or alternatively indicate as to what % of Gross block be considered on ad hoc basis & the basis thereof which can be considered in the true up which is due in the ARR for FY 2013-14.

As can be observed from the assets and depreciation registers furnished by the department, the same could not provide the crucial information to ascertain the assets that are effectively/actually deployed for the year for which tariff is being fixed or claimed. Further in the absence of required certificate/confirmation to be furnished by the department, in compliance to the directions of the Commission in review order dated January 24'2013.

As discussed in para 5.10, Commission has therefore taken a pragmatic view in this regard and has considered the capital base equal to 50% of opening value of gross fixed assets as on April 1'2010 being the first year (FY 2010-11) for which ARR and tariff petition was filed by the petitioner for the purpose of allowing return on capital base, subject to adjustment in true-up depending upon the certificate to be submitted by September 30'2013. Commission has therefore considered Rs. 7.73 Crores as a 3% return on net block of approved assets/capitalization at the beginning of the FY 2011-12.

Commission considers the Return on Capital Base of Rs. 7.73 Crores as reasonable and approves the same for true-up of FY 2011-12.

5.15 Provision for bad and doubtful debts

Petitioner's submission

The petitioner has not claimed any amount against the bad and doubtful debts in its true-up petition for FY 2011-12 with reference to the final actual figures as per the audited accounts.

Commission's analysis

As specified in the regulation no. 28 of JERC Tariff regulations read with the format is explained below.

"28. Bad and Doubtful Debts

The Commission may, after the generating company/licensee gets the receivables audited, allow a provision for bad debts <u>up to 1%</u> of receivables in the revenue requirement of the generating company/licensee. (Information to be furnished in format 18)"

Format -18

S.No.	Particulars	Amount (Rs. in Crores)
1.	2.	3.
1.	Amount of receivable bad and doubtful	
	debts (audited)	
2.	<u>Provision made for debts</u> in ARR	

JERC tariff regulation allows a provision for bad and doubtful debts up to 1% of receivables in the revenue requirement. It is seen that the licensee has not actually written off any bad and doubtful debts for FY 2011-12 with reference to the final actual figures as per the audited accounts of FY 2011-12. The Commission therefore has not considered any bad and doubtful debts for true-up of FY 2011-12.

The Commission has, therefore, not considered any expenses on account of bad & doubtful debt for true-up of ARR for FY 2011-12.

5.16 Non-Tariff Income

Petitioner's submission

The Non-tariff income comprises of metering, late payment charges, interest on staff loans, reconnection fee, miscellaneous revenue etc. The petitioner claimed actual Non-Tariff Income of ED-DNH for FY 11-12 was Rs. 10.23 Crores as against Rs. 3.40 Crores approved by the Commission in its tariff order dated September 13'2011. The petitioner has further submitted that the actual Non-tariff income of the department is more than the figure approved by the Commission. This is due to higher realization on account of delayed payment of surcharge from the consumers.

Commission's analysis

As can be observed the submissions of the petitioner with regard to non-tariff income are at variance, the petitioner submitted the actual non-tariff income of Rs. 3.93 Crores as part of review of ARR of FY 2011-12 which were considered by the Commission in tariff order dated July 31'2012. Now as part of true-up of FY 2011-12, the petitioner submitted that the actual non-tariff income of the department is more than the figure approved by the Commission and this is due to higher realization on account of delayed payment surcharge from the consumers as per the audited accounts. It is noted by the Commission that the variance is not only in the figure of non-tariff income by Rs. 6.31 Crores but also in the sources of non-tariff income as was submitted by the petitioner during review of ARR for FY 2011-12. Further it can be inferred from the audited accounts that the petitioner has under-stated the non-tariff income and overstated the tariff income by Rs. 10.23 Crores, which later on clarified by the petitioner vide their letter dated January 30'2013 over the deficiencies pointed out during technical validation. In view of submissions made by the petitioner, the petitioner is directed to explain the reason for such difference in the versions of the petitioner's submission.

As per the sub-regulation 2 (i) of regulation 8 of JERC tariff regulations 2009, Commission has taken a pragmatic view and has considered the final actual figures of Non-tariff Income of Rs. 10.24 Crores as per audited accounts as reasonable and approves the same for true-up of ARR of FY 2011-12.

5.17 Revenue from Sale of Surplus Power

Petitioner's submission

The petitioner has submitted that revenue from sale of surplus energy of Rs. 69.08 Crore for FY 2011-12.

Commission's analysis

As discussed in para 5.4, Commission has verified the UI bills for the complete year of FY 2011-12 and the Commission for the purpose of approval has considered the over drawl and under drawl of UI separately as per weekly sheets/bills of energy transacted under UI mechanism for FY 2011-12. Commission has considered the UI under-drawl or actual sale under UI of 221.09 million units (verified from the UI bills as submitted by the petitioner) under UI mechanism for FY 2011-12 for the purpose of true-up;

As per the sub-regulation 2 (i) of regulation 8 of JERC tariff regulations 2009, the Commission considers the final actual figures of revenue from sale of surplus Power at Rs. 69.08 Crores as per the audited accounts as reasonable and approves the same for true-up of FY 2011-12.

5.18 Revenue at approved retail tariff of FY 2011-12

Petitioner's submission

The petitioner has submitted the actual revenue to Rs. 1812.02 Crores (including the amount received on account of PPCA charges) as against Rs. 1358.51 Crores and Rs. 1736.38 Crores as approved by the Commission vide its Tariff Order dated 13th September, 2011 and 31st July, 2012 respectively. The petitioner in its subsequent submissions has submitted the reconciled statement of revenue from sale of power at existing tariff ('re-determined' tariff for FY 2011-12 vide tariff order dated July 31'2012 is considered by the petitioner) with reference to the final actual figures of income & expenditure as per the audited accounts of FY 2011-12.

Commission's analysis

Commission likes to reiterate its directions given in its tariff order dated July 31'2012:

Quote

"Commission has accepted the actual revenue submitted by the Petitioner for FY 2011-12 on the basis of actual energy sales during that period. Commission has noticed that the actual revenue of FY 2011-12 includes the additional charge on account of PPCA from the consumers of DNH. The actual category wise PPCA charged from the consumers is not provided by the petitioner. The petitioner has provided the total amount of Rs 348.29 Crores as PPCA billed in the FY 2011-12.

In view of the Hon'ble APTEL order in the matter of Appeal no. 175 of 2011 & I.A. No. 263 of 2011 the Commission has analyzed the options for treatment of PPCA charged during FY 2011-12. The same has been discussed in the Chapter 5 of this order. Accordingly the Commission keeping in view interest of the utility and the consumer has considered the option c as a reasonable option and has accordingly

reviewed the ARR of FY 2011-12 and (surplus)/deficit thereof to be carry forward to FY 2012-13 in this order.

The Commission had approved the power purchase cost of Rs 1342.19 Crores for FY 2011-12 in the order dated September 13' 2011, however the approved power purchase cost in this order is considered at Rs 1609.38 Crores (Net of UI sale). The variation in the power purchase cost therefore comes to 267.19 Crores (i.e. Rs 1609.38 Crores minus Rs 1342.19 Crores) against which the utility has collected 348.80 Crores. The petitioner has thus collected an additional amount of Rs 81.11 Crores (Rs. 348.80 Crores – 267.19 Crores).

The Commission would refer to the section 64(6) of the Electricity Act, 2003 which is reproduced below: "If any licensee or a generating company recovers a price or charge exceeding the tariff determined under this section, the excess amount shall be recoverable by the person who has paid such price or charge along with interest equivalent to the bank rate without prejudice to any other liability incurred by the licensee".

The Commission finds the PPCA recovery to be in excess of the legitimate claim therefore the petitioner is directed to refund the additional amount of Rs 81.11 Crores in the ratio of 81.11/348.8 (i.e. for every Rs 100 recovered on account of PPCA from a consumer, a refund of Rs. 23.25 would be made to that consumer). The consumer shall also be paid interest on the refunded amount at the rate of 9.5% per annum for the number of months starting from April 2012 (i.e. if the PPCA refund is made in the month of August 2012 then interest for 4 months shall be paid). This interest expenditure shall not be a pass through in the ARR. The refund shall be through adjustment in the bills of the consumers.

The detail of revenue considered by the Commission for review of ARR of FY 2011-12 as per the submissions by the Petitioner for FY 2011-12 is given below.

The Commission has considered the Revenue from Sale of Power at existing tariff of FY 2011-12 at Rs. 1393.73 Crores for FY 2011-12 (excluding Rs. 348.30 Crores recovered as part of PPCA variations) as reasonable and approves the same for FY 2011-12. The differential amount of Rs. 7.87 Crores in the revenue on account of re-determined¹⁵ tariff for FY 2011-12 as discussed in Chapter 5 of this order, will be refunded through adjustment in the bill to the consumers during FY 2012-13 and shall be shown separately as a 'refund due to re-determination of tariff for FY 2011-12'. The actual total amount of refund will be considered at the time of true-up of FY 2011-12." **Unquote**

 $^{^{15}}$ As per the directions given by the APTEL vide its judgment dated February 28'2012 in the matter of appeal no. 159 of 2011

As per para 2.2.9, 2.2.10 of Review Order dated January 24'2013 in the matter of incorrect computation of refund of FPPCA charges to consumers

Quote

"2.2.9. Further it may also be clarified here that the Commission has not disallowed any UI transactions or power purchase cost. It may be perused from the table 7.7.1 of the Tariff order in contention where the petitioner's submission of the power purchase cost has been summarized. The petitioner had submitted the actual power purchase cost at 1712.79 Crores for the FY 2011-12 which includes the UI over drawl charges of Rs 67.68 Crores. The Commission for the purpose of approval has considered the over drawl and under drawl of UI together, considering which the petitioner's submission of power purchase cost other than UI over drawl comes to Rs 1645.11 Crores (Rs 1712.79 Crores Less Rs 67.68 Crores). The Commission against the said amount has considered Rs 1645.18 Crores towards UI transactions. Therefore it may be seen that there has not been any disapproval of Power purchase cost. Accordingly the Commission has considered the cost of UI over drawl and under drawl together which has resulted in a net over drawl as indicated in the Para 2.2.5 above.

2.2.10. The Commission, however, has noted the facts submitted by the petitioner based on the actual UI data along with the UI bills for complete year FY 2011-12 and is of the view that since the petitioner has already filed petition for true-up of ARR for FY 2011-12, Review of ARR for FY 2012-13 along with petition for Approval of ARR & determination of tariff for FY 2013-14, it will be appropriate to consider this issue during disposal of the petition for true-up of ARR for FY 2011-12."

Unquote

Further as per para 2.4.2, 2.4.3 and 2.5.2 of Review Order dated January 24'2013 in the matter of incorrect computation of refund of FPPCA charges to consumers:

Quote

"

Commission's findings

- 2.4.2. The petitioner has submitted that the Commission has wrongly considered the UI charges and the power purchase cost which has resulted in wrong computation of the refund of FPPCA.
- 2.4.3. Commission in this regard likes to reiterate that the appropriate clarification & approach followed by the Commission has already been explained in the previous paragraphs regarding the power purchase cost and UI charges. In view of the above, this issue does not survive."

Quote

"

Commission's findings

- 2.5.2.Commission likes to place reliance on the relevant provision of Electricity Act,2003 in this regard
- 62. Determination of tariff
- (4) No tariff or part of any tariff may ordinarily be amended more frequently than once in any financial year, except in respect of any changes expressly permitted under the terms of any fuel surcharge formula as may be specified.
- (5) The Commission may require a licensee or a generating company to comply with such procedures as may be specified for calculating the expected revenues from the tariff and charges which he or it is permitted to recover.
- (6) If any licensee or a generating company recovers a price or charge exceeding the tariff determined under this section, the excess amount shall be recoverable by the person who has paid such price or charge along with interest equivalent to the bank rate without prejudice to any other liability incurred by the licensee".

" Unquote [Emphasis supplied]

The sub-section (4) of section 62 of Electricity Act, 2003 specifies that amount recovered from the fuel surcharge formula is a part of tariff and sub-section (6) of section 62 of Electricity Act, 2003 says that in case of recovery of charge exceeding the tariff by the licensee, the excess amount shall be recovered by the licensee along with interest equivalent to the bank rate. The prevailing bank rate is 9.5% for FY 2012-13, therefore in view of sub-section (5) of section 62 of Electricity Act, 2003; Commission considers it reasonable to give the interest to the consumers due to excess recovery of charge due to fuel surcharge formula from April 2012" **Unquote**

Having considered the actual Power purchase cost of Rs. 1645.11 Crores of FY 2011-12 (excluding UI overdrawl charges of Rs. 67.68 Crores) submitted by the petitioner as part of additional information for the ARR and Tariff Petition for FY 2012-13, final actual figures of Power purchase cost of Rs.1672.37¹⁶ Crores (excluding UI overdrawl charges of Rs. 50.30 Crores) as per the audited accounts furnished by the petitioner for FY 2011-12, the actual UI bills along with revisions bills and the audited accounts for the FY 2011-12, furnished by the petitioner as part of ARR & Tariff Petition for FY 2013-14.

¹⁶ It includes the payment made against the arrears attributed to revision of charges due to CERC regulations, income tax and variation in coal prices for FY 2011-12.

As discussed in para 2.2.10 of Review Order dated January 24'2013, Commission has verified the weekly summary sheets/bills of UI from the WRPC (submitted by the petitioner) for the complete year of FY 2011-12 and for the purpose of this order has considered the over drawl and under drawl of UI separately.

The Commission had approved the power purchase cost of Rs 1342.19 Crores for FY 2011-12 in the order dated September 13' 2011, the approved power purchase cost for FY 2011-12 in this order is considered at Rs 1648.34 Crores (i.e. Rs. 1717.42¹⁷ Crores minus Rs. 69.08¹⁸ Crores). The variation in the power purchase cost therefore comes to Rs. 306.15 Crores (i.e. Rs 1648.34 Crores minus Rs 1342.19 Crores) against which the utility has collected 348.80 Crores. The petitioner has thus collected an additional amount of Rs 41.86 Crores (Rs. 348.80 Crores – Rs. 306.15 Crores).

In view of the above, Commission is of the opinion that the petitioner made an over-recovery of Rs.41.86 Crores on account of FPPCA during the FY 2011-12, which was a must pay as per the directions given by the Commission in the tariff order dated July 31'2012. Further it is noted that the petitioner has not paid any refund to the consumers in compliance to the directions gave by the Commission in tariff order dated July 31'2012.

Thus, the amount to be refunded is Rs. 41.86 Crores on account of excess recovery of FPPCA Charges during FY 2011-12. The petitioner is directed to refund the additional amount of Rs 41.86 Crores in the ratio of 41.86/348.8 (i.e. for every Rs 100 recovered on account of FPPCA from a consumer, a refund of Rs. 12.03 would be made to that consumer). The consumer shall also be paid interest on the refunded amount at the rate of 9.5% per annum for the number of months starting from April 2012 (i.e. if the FPPCA refund is made on April 30' 2013 then interest for 13 months shall be paid). This interest expenditure shall not be a pass through in the ARR. The refund shall be through adjustment in the bills of consumers and it should be explicitly mentioned as the 'refund on account of over-recovery of FPPCA charges in FY 2011-12'. Further, the sub-section (4) of section 62 of Electricity Act, 2003 clearly specifies that amount recovered from the fuel surcharge formula is a part of tariff and sub-section (6) of section 62 of Electricity Act, 2003 says that in case of recovery of charge exceeding the tariff by the licensee, the excess amount shall be recovered by the licensee along with interest equivalent to the bank rate. The prevailing bank rate is 9.5% for FY 2012-13, therefore in view of subsection (5) of section 62 of Electricity Act, 2003; Commission considers it reasonable to give the interest to the consumers due to excess recovery of charge due to fuel surcharge formula from April 2012".

¹⁷ Power Purchase Cost of FY 2011-12 (including UI purchases) approved by the Commission as part of truing up of FY 2011-12 in this order. Refer para 5.8 of this order.

¹⁸ Revenue from Sale of Surplus Power through UI underdrawl in FY 2011-12. Refer para 5.17 of this order.

It is further observed that the petitioner implemented the tariff of FY 2010-11 for FY 2011-12 (which is equivalent to 're-determined tariff for FY 2011-12 approved vide tariff order dated July 31'2012); did not implemented the tariff as determined for FY 2011-12 in its tariff order dated September 13'2011. Commission reiterates that the petitioner should refund the excess recovery of FPPCA along with interest. Non-compliance in this direction would be viewed seriously by the Commission.

The petitioner has submitted the final actual figures of revenue from sale of power at re-determined tariff of FY 2011-12; It is observed that the petitioner did not implement the retail tariff order of FY 2011-12 issued by the Commission dated September 13'2011 and therefore Commission has considered the final actual figures of revenue from sale of power as per the audited accounts of FY 2011-12 for true-up of FY 2011-12.

As per the sub-regulation 2 (i) of regulation 8 of JERC tariff regulations 2009, Commission has considered the final actual figures of Revenue from the sale of Power including the revenue from retail tariff and recovery on account of FPPCA variations only as per audited accounts and approved Rs. 1779.77 Crores (after deducting the refunds of Rs. 41.86 Crores from Rs. 1821.63 Crores, to be paid to consumers on account of excess recovery of FPPCA variations) for true-up of FY 2011-12.

5.19 Aggregate Revenue Requirement and Revenue Surplus/Deficit for true-up of FY 2011-12

Petitioner's submission

The petitioner has submitted the gross revenue requirement of Rs. 1782.92 Crores for FY 2011-12 and has estimated the surplus of Rs. 39.33 Crores for the purpose of true-up of FY 2011-12.

Commission's analysis

The Commission has considered and approved the true-up of ARR for FY 2011-12 based on the items of expenditure discussed in the preceding Chapters and the same has been summarized in the table below vis-à-vis petitioner's claim in the true-up petition for FY 2011-12.

As per the sub-regulation 2 (i) of regulation 8 of JERC tariff regulations 2009, **Commission has** considered the final actual figures as per audited accounts and regulations for the purpose of true-up of FY 2011-12.

Table 5.19.1: Aggregate Revenue Requirement approved for true-up of FY 2011-12 (in Rs. Crores)

					2011-12			
Sr. No.	Particulars	Proposed in petition of FY 2011-12	Approved in T.O. of FY 11-12 dated 13.09.2011	Revised estimates in FY 12- 13 petition	Actuals	Approved in T.O. 31.07.12 for FY 2012-13	petitioner's submission for true-up	Approved
1	2	3	4	5	6	7	8	9
1	Cost of fuel	-	-	-	-	-	-	-
2	Cost of power purchase for full year	1,502.47	1,342.19	1,658.29	1,645.18	1,645.18	1,722.68	1,717.42
3	Employee costs	3.50	3.25	3.50	3.28	2.95	4.75	4.75
4	Administration and General Expenses	0.14	0.14	2.24	4.36	1.75	1.95	1.95
5	Repair and Maintenance Expenses	6.80	6.80	6.58	7.00	6.58	5.13	5.13
6	Depreciation	20.13	2.11	21.04	4.24	4.24	19.92	13.78
7	Interest and Finance charges	85.59	-	-	-	7.13	7.07	5.49
8	Interest on working capital & Interest on Security Deposit	15.44	13.24	20.53	17.59	16.36	21.32	15.64
9	Return on NFA /Equity	62.46	-	-	1.99	1.99	0.10	7.73
10	Provision for Bad Debt	8.48	0.07	8.24	-	6.97	-	-
11	Advance against Depreciation	-	-	-	-	-	-	-
12	Incentive on achievement of norm of T&D loss	-	-	-	-	1	-	1.28
13	Total Revenue Requirement	1,705.01	1,367.80	1,720.42	1,683.65	1,693.16	1,782.92	1,773.17
14	Less: Non-Tariff Income	3.40	3.40	3.80	3.93	3.93	10.23	10.24
15	Less: Revenue from Surplus Power Sale/UI	-	-	38.73	30.59	35.80	69.08	69.08
16	Less: Revenue from Short term sale	-	-	-	-	-	-	-
17	Net Revenue Requirement (13-14-15- 16)	1,701.61	1,364.40	1,677.89	1,649.13	1,653.43	1,703.61	1,693.84

The estimated (surplus)/gap have been mentioned in the following table.

Table 5.19.2: Estimated (Surplus)/gap for true-up of FY 2011-12 (in Rs. Crores)

					2011-12			
Sr. No.	Particulars	in petition of FY	Approved in T.O. of FY 11-12 dated 13.09.2011	Revised estimates in FY 12-13 petition	Actuals	Approved in T.O. 31.07.12 for FY 2012-13	petitioner 's submissio n for true-up	Approved
1	2	3	4	5	6	7	8	9
17	Net Revenue Requirement (13-14-15- 16)	1,701.61	1,364.40	1,677.89	1,649.13	1,653.43	1,703.61	1,693.84
18	Revenue from Retail Sales at Existing Tariff	1,494.43	1,358.51	1,609.69	1,393.73	1,393.73	1,394.31	1,394.31
19	Net Gap (17-18)	207.18	5.89	68.20	255.40	259.70	309.30	299.54
20	Recovery on account of PPC variations	-	-	-	348.30	348.30	348.01	348.01
21	Gap after adjusting PPC variations	207.18	5.89	68.20	(92.90)	(88.60)	(38.71)	(48.47)
22	Refunds to consumers on account of excess recovery of PPCA variations	-	-	-	81.11	81.11	-	41.86
23	Refund due to revision in tariff of FY 12	-	-	-	-	7.87	-	-
24	Net Gap after refund to the Consumers	207.18	5.89	68.20	(11.79)	0.37	(38.71)	(6.61)
25	Gap for the previous year	-	-	-	-	(47.90)	-	(33.63) ¹⁹
26	Carrying Cost	-	-	-	-	(6.20)	-	(4.80)
27	Past Arrears/Refunds to Consumers	-	-	-	-	-	-	-
28	Total gap (24+25+26+27)	207.18	5.89	68.20	(11.79)	(53.73)	(38.71)	(45.05)
29	Additional revenue from proposed tariff	-	-	-	-	-	-	-
30	Revenue Gap/ (Surplus), if any, after proposed tariffs (28-29)	207.18	5.89	68.20	(11.79)	(53.73)	(38.71)	(45.05)

¹⁹ The effect of 50% of gross block considered by the Commission at the beginning of FY 2010-11 as discussed in para 5.10 and 5.20.

		2011-12							
Sr. No.	Particulars	Proposed in petition of FY 2011-12	Approved in T.O. of FY 11-12 dated 13.09.2011	Revised estimates in FY 12-13 petition	Actuals	Approved in T.O. 31.07.12 for FY 2012-13	petitioner 's submissio n for true-up	Approved	
1	2	3	4	5	6	7	8	9	
31	Budgetary Support from Government	-	-	-	-	-	-	-	
32	Net Final Revenue Gap/ (Surplus) (30-31)	207.18	5.89	68.20	(11.79)	(53.73)	(38.71)	(45.05)	

Commission considers the estimated surplus of Rs. 45.05 Crores as reasonable and approves the same for true-up of FY 2011-12. This estimated surplus is carried over to next year and has accordingly been considered in Review of ARR of FY 2012-13.

5.20 Truing up for FY 2010-11

Petitioner's submission

The petitioner has submitted the following:

Quote

'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'

Unquote

Commission's analysis

Having considered the findings of the Commission in the review order dated January 24'2013 as mentioned below and findings of the Commission as per para 5.10 of this order

Quote

"2.1.9. In view of the above, even if the typographical errors are ignored, the auditor's report, notes to the accounts, comment on the fixed assets & depreciation registers, does not specify that the opening value of gross fixed assets & importantly, the assets and depreciation registers furnished by the department could not provide the crucial information to ascertain the assets that are effectively/actually deployed for the year for which tariff is being fixed or claimed. Therefore the Commission rejects the contention of the petitioner and directed to submit the verified & required

information for consideration by the Hon'ble Commission as stated in the tariff order dated July 31'2012.

2.1.10. ED- DNH is directed to indicate the value list of Assets being used for rendering the services in the ARR of 2013-14 or alternatively indicate as to what % of Gross block be considered on ad hoc basis & the basis thereof which can be considered in the true up which is due in the ARR for FY 2013-14."

Unquote

In view of the directions gave by the Commission in Review order dated January 24'2013 to the petitioner to indicate the value list of assets being used for rendering the services in the ARR of 2013-14 or alternatively indicate as to what % of Gross block be considered on ad hoc basis & the basis thereof which can be considered in the true up which is due in the ARR for FY 2013-14. The Commission has taken a prudent view and is of the opinion that though it is to be allowed on the basis of audited accounts, but that do not clearly indicate for which tariff is being charged, though Commission as per the tariff regulation may not have considered this but to avoid accumulation of depreciation or resulting in a tariff shock to a consumer; If being charged in any single year in future or creation of regulatory asset. The Commission considers it prudent to allow depreciation on 50% of opening value of gross fixed assets as on April 1'2010 being the first year (FY 2010-11) for which ARR and tariff petition was filed by the petitioner, subject to adjustment in true-up depending upon the certificate to be submitted by September 30'2013.

Commission has therefore considered the capitalization of Rs. 201.44 Crores for FY 2010-11 as the opening value of assets at the beginning of FY 2010-11 for the purpose of Depreciation and Return on Equity. Further the capitalization of Rs. 68.22 Crores was already approved during True-up of FY 2010-11; Commission considers it admissible as an addition of Rs. 68.22 Crores in the gross block for the purpose of true-up of FY 2010-11.

Table 5.20.1: Calculation of Depreciation for FY 2010-11 approved by the Commission (in Rs. Crores)

Sr. No.	Particulars	Value of assets at the beginning of FY 2010-11 (considered by the Commission)	Addition during FY2010-11	Closing balance at the end of FY2010-11	Rate of Depreciation	Depreciation for FY 2010-11
1	2	3	4	5	6	7
1	Plant & Machinery	190.50	65.89	256.39	5.28%	11.80
2	Buildings	2.28	1.26	3.54	3.34%	0.10
3	Vehicles	0.16		0.16	9.50%	0.02
4	Furniture and Fixtures	-		-	6.33%	-
5	Computers and Others	0.03	0.07	0.10	6.33%	0.00
6	Land	8.46	1.00	9.46	0.00%	-

Sr. No.	Particulars	Value of assets at the beginning of FY 2010-11 (considered by the Commission)	Addition during FY2010-11	Closing balance at the end of FY2010-11	Rate of Depreciation	Depreciation for FY 2010-11
1	2	3	4	5	6	7
7	Total	201.44	68.22	269.65		11.91

Keeping in view of the above, Commission considers the depreciation of Rs. 11.91 Crores for true up of ARR of FY 2010-11 on the gross block considered during FY 2010-11 and Further the Commission has considered Rs. 3.39 Crores as a 3% return on net block of considered/approved assets/capitalization (of Rs. 113.13 Crores) at the beginning of the FY 2010-11.

Based on the consideration of 50% of opening value of gross fixed assets as on April 1'2010 being the first year (FY 2010-11) for which ARR and tariff petition was filed by the petitioner, subject to adjustment in true-up depending upon the certificate to be submitted by September 30'2013 and approved true-up of ARR for FY 2010-11 based on the items of expenditure discussed in the tariff order dated July 31'2012, the same has been summarized in the table below vis-à-vis petitioner's claim in the true-up petition for FY 2010-11.

Table 5.20.2 : Aggregate Revenue Requirement approved for True-up of FY 2011-12 and estimated surplus based on provisional consideration of gross fixed assets (in Rs. Crores)

				2010-11		
Sr. No.	Particulars	Proposed in petition	Approved in T.O. of FY 10-11 dated 01.11.2010	Petitioner's claim in True-up petition of FY 2010-11	Approved in T.O. 31.07.12 for FY 2012-13	Approved (on Provisional basis)
1	2	3	4	5	6	7
1	Cost of fuel	-	-	-	-	-
2	Cost of power purchase for full year	1,511.14	1,134.20	1,210.40	1,206.20	1,206.20
3	Employee costs	2.95	2.95	2.71	2.71	2.71
4	Administration and General Expenses	0.29	0.29	1.15	1.15	1.15
5	Repair and Maintenance Expenses	4.11	4.11	2.71	2.71	2.71
6	Depreciation	21.41	0.53	20.37	1.76	11.91
7	Interest and Finance charges	29.66	-	0.00	1.46	1.46
8	Interest on working capital & Interest on Security Deposit	15.50	11.18	11.92	10.85	10.85

		2010-11					
Sr. No.	Particulars	Proposed in petition	Approved in T.O. of FY 10-11 dated 01.11.2010	Petitioner's claim in True-up petition of FY 2010-11	Approved in T.O. 31.07.12 for FY 2012-13	Approved (on Provisional basis)	
1	2	3	4	5	6	7	
9	Return on NFA /Equity	11.18	-	20.98	-	3.39	
10	Provision for Bad Debt	8.20	0.03	1.07	-	-	
11	Advance against Depreciation	-	-	-	-	-	
12	Incentive on achievement of norm of T&D loss	-	-	-	2.12	2.12	
13	Total Revenue Requirement	1,604.44	1,153.28	1,271.30	1,228.95	1,242.50	
14	Less: Non Tariff Income	2.80	2.80	0.03	0.03	0.03	
15	Less: Revenue from Surplus Power Sale/UI	-	-	8.58	8.58	8.58	
16	Less: Revenue from Short term sale	-	-	-	-	-	
17	Net Revenue Requirement (13- 14-15-16)	1,601.64	1,150.48	1,262.70	1,220.34	1,233.89	
18	Revenue from Retail Sales at Existing Tariff	1,186.37	1,186.37	1,265.58	1,265.58	1,265.58	
19	Net Gap (17-18)	415.27	(35.89)	(2.88)	(45.24)	(31.69)	
20	Recovery on account of PPC variations	-	-	-	-	-	
21	Gap after adjusting PPC variations	415.27	(35.89)	(2.88)	(45.24)	(31.69)	
22	Refunds to consumers on account of excess recovery of PPCA variations	-	-	-	-	-	
23	Any other refunds	-	-	-	-	-	
24	Net Gap after refund to the Consumers	415.27	(35.89)	(2.88)	(45.24)	(31.69)	
25	Gap/(Surplus) for the previous year	-	-	-	-	-	
26	Carrying Cost	-	-	-	(2.66)	(1.94)	
27	Past Arrears/Refunds to Consumers	-	-	- [-	-	
28	Total gap (24+25+26+27)	415.27	(35.89)	(2.88)	(47.90)	(33.63)	
29	Additional revenue from proposed tariff	-	-	-	-	-	
30	Revenue Gap/ (Surplus), if any, after proposed tariffs (28-29)	415.27	(35.89)	(2.88)	(47.90)	(33.63)	

		2010-11						
Sr. No.	Particulars	Proposed in petition	Approved in T.O. of FY 10-11 dated 01.11.2010	Petitioner's claim in True-up petition of FY 2010-11	Approved in T.O. 31.07.12 for FY 2012-13	Approved (on Provisional basis)		
1	2	3	4	5	6	7		
31	Budgetary Support from Government	-	-	- [- [-		
32	Net Final Revenue Gap/ (Surplus) (30-31)	415.27	(35.89)	(2.88)	(47.90)	(33.63)		

Commission considers the revised estimates of surplus of Rs. 33.63 Crores as reasonable and approves the same for true-up of FY 2010-11 subject to adjustment in final true-up depending upon the certificate to be submitted by September 30'2013. This estimated surplus is carried over to next year and has accordingly been considered in True-up of ARR of FY 2011-12 in this order.

6. REVIEW OF ARR FOR FY 2012-13

6.1 Background

The Commission had approved the Aggregate Revenue Requirement for FY 2012-13 vide its ARR and tariff order dated July 31'2012 as per the provisions of the JERC tariff regulations 2009. The petitioner had submitted the revised estimates of sale of electricity, income and expenditure of FY 2012-13 for the review of ARR of FY 2012-13 which included the actuals of first half of FY 2012-13 and estimates of the balance year as per the Regulation 8 of JERC Tariff Regulations 2009, in ARR and tariff petition for FY 2013-14 on November 30'2012.

The Commission had considered the following for ARR of FY 2012-13 as per the JERC tariff regulations, prior to the submission of Petition for Performance Review:

- i. Actual Performance in FY 2011-12 (audited²⁰ figures);
- ii. Revised estimates of FY 2012-13 based on the data of first half of the year and projections for second half of the year.

Commission for this Review of FY 2012-13 has considered the following:

- a. Actual Performance in FY 2011-12 (audited figures);
- b. Actual Power Purchase Quantum and Cost for FY 2012-13 from April 2012 to September 2012;
- c. Category wise sales & Revenue, Consumers and Connected Load for FY 2012-13 from April 2012 to September 2012.
- d. Revised estimates of FY 2012-13 of O&M expenses, Capital Expenditure based on 6 month actuals of FY 2012-13;
- e. Non-Tariff Income
- f. Depreciation, Interest and Finance Charges, Interest on Working Capital, Interest on Security Deposit, and Return on Net Fixed Assets has been computed as per the JERC tariff regulations 2009.

²⁰Audited Accounts of FY 2011-12 provided by the Petitioner.

6.2 Review for FY 2012-13

The review of aggregate revenue requirement requires assessment of quantum of energy sales, energy loss as well as various cost elements like power purchase cost, O&M expenses, interest cost and depreciation etc. This has been done based on actual data for 6 months for power purchase cost, and sales, and revised estimates of FY 2012-13 based on six months actuals for O&M expenses, interest and depreciation submitted by the petitioner. As regards to various components of ARR, the Commission's analysis thereon and decision in respect of items given below is discussed in the following paras:

- Review of Energy Requirement
 - i. Sales Projections
 - ii. Loss Trajectory
 - iii. Energy Balance
 - iv. Power Purchase Sources
- Review of the Aggregate Revenue Requirement
 - i. Power Purchase Costs & Transmission Charges;
 - ii. Operation and Maintenance Expenses;
 - Employee Expenses
 - Administration & General expenses
 - Repairs & Maintenance Expenses
 - iii. Capital Expenditure and Asset Capitalisation
 - iv. Gross Fixed Assets;
 - v. Depreciation;
 - vi. Interest on Long Term Loans;
 - vii. Interest on Working Capital & Security Deposits;
- viii. Return on Capital Base/ Net Fixed Assets;
- ix. Provision for Bad and Doubtful Debts
- x. Other expenses.

xi. Non-Tariff Income

6.3 Consumers, Connected Load and Energy Sales

Petitioner's Submission

The petitioner has submitted that the Electricity Department has a diverse consumer mix constituting of domestic, commercial, HT Industry, LT Industry and agriculture consumers. The petitioner has submitted the total numbers of consumers are 59743 as on March 31'2012 and has further submitted the category wise actual energy sales from FY 07-08 to FY 11-12 for all the consumer segments.

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. 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.

The actual energy sales in the DNH periphery in the first six months of the FY 12-13 was 2,317.31 MU and revenue billed was Rs 967.27 Crores. The energy sales for FY 12-13 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.

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.

The petitioner submitted the revised estimates of 4614.74 million units for FY 2012-13.

Commission's Analysis

As per the sub-regulation (2) (ii) of regulation 13 of JERC tariff regulations 2009,

Quote

"(ii)Estimated figures for the current financial year should be based on actual figures for the first six months and the estimated figures for the second six-months of the year. The estimated figures for the second half year of the current financial year should be based on the actual audited figures for the second half of the previous year with adjustments that reflect known and measurable changes expected to occur between them. These adjustments must be specifically documented and justified."

Unquote

Commission has considered the actual audited figures for the first half of FY 2011-12 and FY 2012-13 and has accordingly estimated the second half of the current financial year based on the actual audited figures of second half of FY 2011-12 with overall adjustments of 10.05% which is reflective and measurable change expected to occur between them.

The approved Sales, Connected load and number of consumers for the FY 2012-13 have been shown in the table below:

Table 6.3.1: Category wise Sales approved by the Commission for FY 2012-13 (in million units)

				FY 20	12-13		
S.No.	Category/Consumption Slab	Petitioner's submission in tariff petition for FY 2012-13	Approved in T.O. 31.07.12 for FY 2012-13	petitioner's submission for review	Petitioner's submission (April- September)	Commission 's estimates (October – March)	Approved
1	2	3	4	5	6	7	8
Α	Domestic	71.30	59.79	57.06	37.91	44.78	80.22
1	0-50 units	15.23	9.07	11.03	7.09	8.30	12.92
2	51-200 units	24.64	23.41	22.35	14.36	17.05	31.41
3	201 - 400 units	11.04	10.18	9.71	6.24	7.39	13.63
4	401 and above	20.39	14.64	13.97	8.98	10.82	19.80
5	Low Income Group (LIG)		2.49		1.24	1.24	2.47
В	Commercial	26.72	33.47	30.19	15.01	11.31	26.32
1	1- 100 units	12.29	5.06	4.56	2.27	1.72	3.99
2	101 and above units	14.43	28.42	25.63	12.74	9.59	22.33
С	Industrial (LT)	164.76	152.19	161.01	80.42	80.46	160.88
1	Up to 20 HP			145	72	72.40	144.78
2	Above 20 HP			16	8	8.06	16.10

				FY 20	12-13		
S.No.	Category/Consumption Slab	Petitioner' s submission in tariff petition for FY 2012-13	Approved in T.O. 31.07.12 for FY 2012-13	petitioner's submission for review	Petitioner's submission (April- September)	Commission 's estimates (October – March)	Approved
1	2	3	4	5	6	7	8
D	Agriculture & Poultry	2.4	3.0	3.8	1.8	1.7	3.4
1	Connected Load upto 10 HP	1.0	0.63	3.44	1.58	1.47	3.05
2	Connected Load above 10 HP to 99 HP	1.4	2.37	0.38	0.18	0.19	0.37
E	Public Lighting	4.6	7.09	4.33	2.17	2.50	4.67
F	High Tension Supply	4358.4	4420.3	4358.2	2177.6	2311.4	4489.0
НТА	Industrial & Motive power-11KV or 66KV having CMD above 100 KVA						
1	Up to 50000 units	1019.9	404.85	401.11	145.94	151.22	297.16
2	50001-500000 units	2157.4	1200.68	1184.24	535.55	554.90	1090.45
3	Above 500000 units	745.3	2467.58	2432.00	1321.71	1369.44	2691.15
НТВ	Ferro Metallurgical/SteelMelti ng/ Steel Rolling/Power Intensive						
1	First - 300 units/KVA	7.2	238.78	234.88	119.81	9.73	129.54
2	301-500 units/KVA	64.8	89.40	87.40	9.46	46.39	55.85
3	Above 500 units/KVA	363.8	18.97	18.57	45.08	179.74	224.82
G	Temporary Supply	1.7	3.59	0.00	1.03	1.15	2.18
	Total	4629.81	4679.4	4614.6	2315.8	2453.3	4766.7

Table 6.3.2: Category wise connected load approved by the Commission for FY 2012-13 (in KVA)

		FY 2012-13				
S.No.	Category/Consumption Slab	(Petitioner's submission)	Approved T.O. 31.07.12 for FY 2012- 13	Petitioner's submission for review	Approved	
1	2	3	4	5	6	
Α	Domestic		64123	61795	61795	

			FY 2	012-13	
S.No.	Category/Consumption Slab	(Petitioner's submission)	Approved T.O. 31.07.12 for FY 2012- 13	Petitioner's submission for review	Approved
1	2	3	4	5	6
1	0-50 units				
2	51-200 units				
3	201 - 400 units				
4	401 and above				
5	Low Income Group (LIG)				
В	Commercial		20496	20074	20074
1	1- 100 units				
2	101 and above units				
С	Industrial (LT)		112859	74934	74934
1	Up to 20 HP			67441	67441
2	Above 20 HP			7493	7493
D	Agriculture & Poultry		3836	3680	3680
1	Connected Load upto 10 HP				
2	Connected Load above 10 HP to 99 HP				
E	Public Lighting		1668	1309	1309
F	High Tension Supply				
НТА	Industrial & Motive power-11KV or 66KV having CMD above 100 KVA		885108	923364	923364
1	Up to 50000 units		87976		67272
2	50001-500000 units		260914		246860
3	Above 500000 units		536219		609232
НТВ	Ferro Metallurgical/Steel Melting/ Steel Rolling/Power Intensive		68620	78705	78705
1	First - 300 units/KVA		47198		24854
2	301-500 units/KVA		17672		10717
3	Above 500 units/KVA		3750		43134
G	Temporary Supply		4846		
	Total (in KVA)	0	1161557	1163860	1163860
	Total (in MVA)	0	1162	1164	1164

Table 6.3.3: Category wise number of consumers approved by the Commission for FY 2012-13 (in numbers)

	-		FY 20	012-13	
S.No.	Category/Consumption Slab	(Petitioner's submission)	Approved T.O. 31.07.12 for FY 2012- 13	petitioner's submission for review	Approved
1	2	3	4	5	6
Α	Domestic	50033	35840	36230	36230
1	0-50 units				
2	51-200 units				
3	201 - 400 units				
4	401 and above				
5	Low Income Group (LIG)	-	14222	14110	14110
В	Commercial	7484	7484	7025	7025
1	1- 100 units				
2	101 and above units				
С	Industrial (LT)	2087	2306	2087	2087
1	Up to 20 HP				
2	Above 20 HP				
D	Agriculture & Poultry	921	971	1074	1074
1	Connected Load upto 10 HP				
2	Connected Load above 10 HP to 99 HP				
E	Public Lighting	316	316	227	227
F	High Tension Supply				
НТА	Industrial & Motive power-11KV or 66KV having CMD above 100 KVA	808	808	808	808
1	Up to 50000 units				
2	50001-500000 units				
3	Above 500000 units				
НТВ	Ferro Metallurgical/Steel Melting/ Steel Rolling/Power Intensive	42	41	41	41
1	First - 300 units/KVA				
2	301-500 units/KVA				
3	Above 500 units/KVA				
G	Temporary Supply	448	448	448	448
Total		62139	62436	62051	62051

6.4 Intra-State Transmission & Distribution Loss

Petitioner's Submission

The petitioner has submitted that ED-DNH has achieved a significant reduction in transmission & distribution losses. The ED-DNH further submitted 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.

The petitioner has considered the T&D loss of 4.80% for FY 2012-13, considering the proposed capital expenditure in transmission and distribution network during FY 12-13. The ED-DNH brought to the notice of the Commission that the T&D losses of the Dadra & Nagar Haveli are one of the lowest in the country and 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 for FY 2011-12. 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.

Commission's Analysis

The Commission in its ARR and tariff order for FY 2012-13 had approved the targeted T&D loss level of 6.00%. The petitioner did not furnish the actual T&D loss for first half of FY 2012-13. However based on the final actual figures of Sales, Power purchased units as per the audited accounts of FY 2011-12 and the inter-state transmission loss the Commission has estimated from the available data the actual loss level for FY 2011-12 at 5.98%. Further, the Petitioner has submitted that the energy audit is completed for five feeders on pilot basis and ED-DNH has initiated on the recommendations given by the energy auditing firm.

In view of the fact that the loss levels in DNH are at optimal levels and the petitioner's estimates for FY 2012-13 the Commission considered the loss levels of 5.98% achieved by the petitioner in FY 2011-12 (as against the submission of 4.94% achieved by the petitioner for FY 2011-12) and based on the petitioner's submission of reduction of loss level from 4.94% in FY 2011-12 to 4.80% in FY 2012-13. Commission has considered the reduced loss level of 4.80% as submitted by the petitioner for FY 2012-13 for the purpose of Review of FY 2012-13. However, the sharing of gain on account of overachievement of target specified by the Commission will be dealt in the true-up of FY 2012-13 on the basis of actual T&D loss level and audited figures of Quantum of Power purchase and Sales for FY 2012-13. Accordingly, the Commission has considered the loss level of 4.80% as the T&D loss level for the purpose of Review of ARR of FY 2012-13.

6.5 Inter-State Transmission Loss

Petitioner's Submission

The petitioner has considered the recent 52 week moving average of regional losses available at the level of 3.56% for estimating the power availability at the periphery.

Commission's Analysis

The Commission in its ARR & tariff order for FY 2012-13 had considered the recent 52 week moving average of regional losses and approved 3.56% as the inter-state transmission loss for FY 2012-13.

The Commission considers the figures of regional pool losses of 3.56% during FY 2012-13 as the interstate loss and approves the same for review of ARR of FY 2012-13 which would be revised based on actual during the truing up exercise.

6.6 Energy Balance

Petitioner's Submission

The petitioner has considered the increase of 9% in the energy sales during FY 2012-13. Thus, the overall energy requirement at the state periphery for FY 2012-13 is 5189.66 million units.

Commission's Analysis

As discussed in foregoing para no. 6.3, 6.4. 6.5 and 6.7 of this order, the Energy balance approved for FY 2012-13 is as under

2012-13 **Approved** Sr. in T.O. petitioner's No **Particulars** Petitioner 31.07.12 submission Approved Submission for FY for review 2012-13 4 1 2 3 5 6 **ENERGY REQUIREMENT (in Mus)** A) Energy sales within the State/UT (in 4629.81 4679.41 4614.61 4766.68 Mus) 2 Energy sales to Agriculture consumers (included in (included in (included in (included in (included in total sales) (in Mus) total sales) total sales) total sales) total sales) 2 Total sales within the State/UT 4629.81 4679.41 4614.61 4766.68 **Distribution losses**

Table 6.6.1: Energy Balance approved for FY 2012-13

			20	12-13	
Sr. No	Particulars	Petitioner Submission	Approved in T.O. 31.07.12 for FY 2012-13	petitioner's submission for review	Approved
1	2	3	4	5	6
i)	%	6.30%	6.00%	4.80%	4.80%
ii)	MU	311.29	298.69	232.67	240.34
4	Energy required at State Periphery for Sale to Retail Consumers	4941.10	4978.10	4847.28	5007.02
5	Add: Sales to common pool consumers/ UI (in Mus)	63.21	0.00	342.24	99.97
А	Sales outside state/UT : UI/(in Mus) – NET	63.21	0.00	342.24	99.97
В	Sales (in Mus)				
	a) To electricity traders (in Mus)	0.00	0.00	0.00	-
	b) Through PX (in Mus)	0.00	0.00	0.00	-
С	Sales to other distribution licensees				
	a) Bilateral Trade (in Mus)	0.00	0.00	0.00	-
	b) Banking Arrangement (in Mus)	0.00	0.00	0.00	-
6	Total Energy Requirement for State (5+6)	5004.31	4978.10	5189.53	5106.98
7	Transmission losses				
i)	%	3.90%	3.56%	3.61% ²¹	3.56%
i)	MU	203.09	183.76	194.36	188.52
В)	ENERGY REQUIRED AT GENERATOR END	5207.40	5161.86	5383.89	5295.50
1	Net Generation (Share from CGS) (in MUs)	3077.26	3631.40	3167.00	3346.86
а	NTPC	3077.26	3631.40	3167.00	3346.86
2	Power Purchased from (Other Sources) (in Mus)	2130.14	1530.47	2217.01	1948.65
а	NSPCL	1135.74	785.92	1211.08	1234.73
b	NPCIL	416.35	345.31	407.92	393.18
С	KHSTPP – II	18.97	16.44	17.97	16.64
d	TATA Power (Haldia)/GMR(EMCO)	408.24	242.42	573.33	303.25
е	Renewable Energy Sources	150.84	140.38	0.00	0.00

Though the petitioner has considered the interstate transmission loss level of 3.56% as part of revised estimates for FY 2012-13 but after consideration of 194.36 million units lost in transmission system as submitted by the petitioner, the loss level derived at 3.61% for FY 2012-13.

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		2012-13					
Sr. No	Particulars	Petitioner Submission	Approved in T.O. 31.07.12 for FY 2012-13	petitioner's submission for review	Approved		
1	2	3	4	5	6		
h	Power Exchange (Buy)	-	1	0.00	0.00		
i	Bilateral Trade (Buy)	-	1	-	-		
j	RPO (Buy)	-	-	-	-		
k	UI Overdrawl	-	-	6.71	0.84		
I	Banking Arrangements (Buy)	-	-	-	-		
5	Gross power purchase Quantum (in MUs)	5207.40	5161.86	5384.01	5295.50		

Table 6.6.2: Variation Analysis of Power Purchase Quantum of FY 2012-13

		2012-13				
Sr. No.	Particulars	Approved in T.O. 31.07.12 for FY 2012-13	Approved	Variation		
1	2	3	4	5		
A)	ENERGY REQUIREMENT (in Mus)					
1	Energy sales within the State/UT (in Mus)	4679.41	4766.68	87.27		
2	Energy sales to Agriculture consumers	(included in	(included in	(included in		
	(included in total sales) (in Mus)	total sales)	total sales)	total sales)		
2	Total sales within the State/UT	4679.41	4766.68	87.27		
3	Distribution losses					
i)	%	6.00%	4.80%	-1.20%		
ii)	MU	298.69	240.34	-58.35		
4	Energy required at State Periphery for Sale to Retail Consumers	4978.10	5007.02	28.92		
5	Add: Sales to common pool consumers/ UI (in Mus)	0.00	99.97	99.97		
Α	Sales outside state/UT : UI/(in Mus) - NET	0.00	99.97	99.97		
В	Sales (in Mus)			0.00		
	a) To electricity traders (in Mus)	-		0.00		
	b) Through PX (in Mus)	-		0.00		

			2012-13	
Sr. No.	Particulars	Approved in T.O. 31.07.12 for FY 2012-13	Approved	Variation
1	2	3	4	5
С	Sales to other distribution licensees			0.00
	a) Bilateral Trade (in Mus)	-		0.00
	b) Banking Arrangement (in Mus)	-		0.00
6	Total Energy Requirement for State (5+6)	4978.10	5106.98	128.88
7	Transmission losses			
i)	%	3.56%	3.56%	0.00
i)	MU	183.76	188.52	4.76
В)	ENERGY REQUIRED AT GENERATOR END	5161.86	5295.50	133.64
1	Net Generation (Share from CGS) (in MUs)	3631.40	3346.86	-284.54
а	NTPC	3631.40	3346.86	-284.54
2	Power Purchased from (Other Sources) (in Mus)	1530.47	1948.65	418.18
а	NSPCL	785.92	1234.73	448.81
b	NPCIL	345.31	393.18	47.88
С	KHSTPP – II	16.44	16.64	0.20
d	TATA Power (Haldia)	242.42	303.25	60.84
е	Renewable Energy Sources	140.38	0.00	-140.38
h	Power Exchange (Buy)	-	0.00	0.00
i	Bilateral Trade (Buy)	-		0.00
j	RPO (Buy)	-		0.00
k	UI Overdrawl	-	0.84	0.84
	Banking Arrangements (Buy)	-		0.00
5	Gross power purchase Quantum (in MUs)	5161.86	5295.50	133.64

As such the difference between the total power purchase quanta approved in the tariff order for FY 2012-13 vis-à-vis review in this order is 133.64 MU which is due to following factors:

- 1. Increase in the estimated sales to retail consumers of UT of DNH.
- 2. Decrease in the Intra-state transmission and distribution loss level to 4.80% as submitted by the petitioner.

3. Sale of 99.97 million units by way of underdrawl of energy.

Since the expense projections are based on six months actuals; therefore increase in the power quanta is admissible in Review subject to the final review at the true-up stage based on the final actual figures as per audited accounts of FY 2012-13.

6.7 Power Purchase Quantum and Cost

Petitioner's Submission

The petitioner has furnished the revised estimates of FY 2012-13 based on six months actuals. The petitioner has submitted the actual power purchased data for the first six months of FY 12-13 during technical validation, power purchase from various sources was 2655.81 MU and Rs. 964.40 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 petitioner has also considered the following for estimation of Power availability of remaining six months of FY 2012-13:

- 1. 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.
- 2. Moreover, power allocation of 40.13 MW from Sipat II has been considered for FY 12-13.
- 3. 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.
- 4. 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.
- 5. Power purchase quantum from the NTPC stations for the second half of the current year 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 plantwise 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.
- 6. 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.

7. Auxiliary consumption of 9% and 3% has been considered for coal and gas based generating stations, respectively.

Table 6.7.1 : Summary Sheet: Revised Estimates of Power Purchase Quantum and Cost submitted by the petitioner for FY 2012-13

1 	Source 2 NTPC Stations	Capacity (MW)	Licensee share (%)	Purchase	VC (Ps/	FC (Rs.	VC	Others	
1 	2	(MW)	10/1		7 C (1. 3)	FC (NS.	٧C	(Rs.	Total
1 1			(70)	(MU)	Unit)	Cr)	(Rs. Cr)	Cr)	(Rs. Cr)
	NTPC Stations	3	4	5	6	7	8	9	10
1 1									
	KSTPP 1&2	2,100	3%	490.05	95	27.94	46.56	5.67	80.18
2 1	KSTPS 3	500	5%	184.81	94	26.91	17.33	2.28	46.53
3 \	VSTPP-I	1,260	4%	329.90	151	20.52	49.70	17.26	87.48
4	VSTPP-II	1,000	4%	271.34	141	20.54	38.15	9.91	68.60
5 \	VSTPP- III	1,000	4%	305.48	141	34.14	43.16	7.81	85.11
6 I	KAWAS	656	12%	362.25	252	59.53	91.43	(1.21)	149.75
7 .	JGPP	657	9%	306.78	234	49.97	71.84	0.85	122.66
8 9	Sipat-I	1,320	5%	423.67	132	52.92	55.87	5.53	114.33
9 9	Sipat-II	1,000	4%	280.42	117	35.16	32.88	(1.54)	66.50
9 1	NSPCL - Bhilai	500	33%	1,211.08	239	199.10	289.38	34.56	523.05
10	Subtotal	9,993.59		4,165.79	177	526.73	736.31	81.13	1,344.17
II I	Eastern Region								
1 I	KHSTPP-II	1,000	0.35%	17.97	209	2.24	3.75	0.26	6.26
2 !	Subtotal	1,000		17.97	209	2.24	3.75	0.26	6.26
III I	NPCIL								
1 I	KAPPS	440	3%	88.22	229	0.00	20.16	0.00	20.16
	TAPP 3&4	1,080	4%	319.69	277	0.00	88.46	0.08	88.54
3 9	Subtotal	1,520		407.92	266	0.00	108.63	0.08	108.71
	Others								
1 1	RGPPL	1,967	2%	212.30	229	35.61	48.68	0.00	84.29
2 -	Tata Power - Haldia	120	58%	573.33	387	0.00	221.95	0.00	221.95
	Subtotal	2,087		785.64	344	36	271	0	306
	Power purchase from Other								
	Sources								
	Power purchase from Indian			0.00	0.00	0.00	0.00	0.00	0.00
-	E. Exchange UI			6.71	0.00	0.00	1.09	0.00	1.09
	RPO			0.00	0.00	0.00	14.50	0.00	14.50
	Subtotal			6.71	0.00	0.00	15.59	0.00	15.59
	Misc. Arrears			0.71	0.00	0.00	13.33	0.00	6.97
	External Losses								0.57
	Power Purchase Cost	14,601		5,384.02		564.58	1,134.92	81.48	1,787.95
	PGCIL CHARGES	,001		J,55710E		20 1.00	_,	021-10	120.22
	WRLDC charges								6.99
	Reactive charges								6.49
	MSTCL								3.50

Sr. No.	Source 2	Capacity (MW)	Licensee share (%)	Purchase (MU) 5	VC (Ps/ Unit) 6	FC (Rs. Cr)	VC (Rs. Cr)	Others (Rs. Cr)	Total (Rs. Cr)
	Others								0.83
	Grand Total of Charges								1,925.97

Commission's Analysis

As brought out in the section on energy balance, the power purchase quantum approved by the Commission in its last Tariff Order dated July 31'2012 for FY 2012-13 was 5161.86 MU at an approved power purchase cost of Rs. 1764.93 Crores including transmission charges.

The Commission as part of prudence check verified the station-wise Power purchase bills shown by the petitioner for FY 2012-13 for first six months. Commission considered the submissions made by the petitioner after verification of power purchase bills of first six months of FY 2012-13. Commission noticed errors at some of the places and therefore has also verified the actual quantum of Power purchase from the REA reports on random basis. Commission has not considered the rebate mentioned on power purchase bills of first six months as part of review of FY 2012-13 and the installment of arrears of FY 2011-12 due to revision in CERC norms and Income tax, as the same has been considered in the Power purchase cost of FY 2011-12; the same shall be considered at the time of true-up. The verified quanta of Power Purchase units and cost including transmission charges are mentioned in the table below as per the Power purchase bills submitted by the petitioner for first six months of FY 2012-13:

Table 6.7.2 : Summary Sheet: Power Purchase Quantum and Cost for FY 2012-13 (April to September) as verified from power purchase bills

		Procured till September 2012-Actuals (units and amount verified from bills excluding rebate and past arrears)							
Sr. No.	Source	Energy Units(MU)	Fixed Charges (Rs. Crores)	Variable Cost (Rs. Crores)	Other Charges (Rs. Crores)	Total (Rs. Crores)			
1	2	3	4	5	6	7			
Α	Central Sector Power Stations								
ı	NTPC	1,507.14	183.97	229.26	27.45	440.69			
	KSTPS-I	241.39	14.08	23.03	3.08	40.19			
	VSTPS – I	164.78	10.23	24.63	8.86	43.73			
	VSTPS – II	134.67	10.36	18.99	3.91	33.26			
	VSTPS –III	153.81	17.18	21.63	7.13	45.95			
	KGPP	153.96	29.50	36.27	(0.27)	65.50			

			•		units and amound past arrears	
Sr. No.	Source		Fixed Charges (Rs. Crores)	Variable Cost (Rs. Crores)	Other Charges (Rs. Crores)	Total (Rs. Crores)
1	2	3	4	5	6	7
	GGPP	141.20	25.46	32.96	0.45	58.87
	SIPAT Stage 2	144.03	17.69	16.99	0.02	34.70
	KORBA - III (KSTPS - VII)	94.88	13.62	8.92	1.46	23.99
	SIPAT - Stage I	203.18	28.05	28.59	2.81	59.44
	RGPPL	75.25	17.81	17.25	0.00	35.06
II	NPCIL	204	-	56	0	56
	KAPS	43.58	0.00	10.21	0.00	10.21
	TAPS	160.32	0.00	45.44	0.18	45.63
В	Other Generating Stations	942	101	285	0	386
ı	NSPCL					
	Bhilai	643.22	100.12	167.63	0.12	267.88
II	Eastern Region					
	KHSTPP - II	8.48	1.15	2.05	0.11	3.31
С	Tata Power					
	Haldia	290.80	0.00	115.16	0.00	115.16
D	Power purchase from other sources	_	_		-	-
	(2.60% for - Non Solar)	0.00	0.00	0.00	0.00	0.00
	(0.40% for Solar)		0.00			
	Power purchase from Indian E. Exchange	0.00	0.00	0.00	0.00	0.00
E	Power Purchase Cost	2,649.10	285.25	569.76	27.87	889.84
G	OTHER CHARGES					
	PGCIL Transmission Charges					60.11
	WRLDC charges					3.50
	Reactive charges, MSTCL and others					5.41
Н	Total	2,649.10	285.25	569.76	27.87	951.88

Power Purchase Quantum and Cost for remaining six months of FY 2012-13

➤ Central Generating Stations –NTPC Ltd., NPCIL, NSPCL

The petitioner has firm allocation in the Central Sector Generating Stations of NTPC, NPCIL, NSPCL from the following stations

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- Korba Super Thermal Power Station I, II and III.
- Vindhyachal Super Thermal Power Station I, II & III
- Kawas Gas Power Station
- Gandhar Gas Power Station
- Sipat Super Thermal Power Station- I &II
- Ratnagiri Gas and Power
- Kahalgaon Super Thermal Power Station II (Eastern Region)
- Kakrapara Atomic Power Station (KAPS)
- Tarapur Atomic Power Station (TAPS)
- NSPCL-Bhilai
- Other Power Stations including Tata Power Haldia
 - Tata Power Haldia

The Commission while estimating the energy availability from the above stations has considered the following assumption:

- Allocation of Share: The Commission has considered the firm allocation and allocation from the unallocated quota from the above stations except Kahalgaon STPS-II as per the notification of the Western Region Power Committee vide WRPC/Comml-I/6/Alloc/2012/7576 dated July 30, 2012. The allocation for Kahalgaon STPS-II is considered as per the notification of the Eastern Region power Committee w.e.f. March 1'2012.
- Gross Energy Availability: The Commission has estimated the gross energy availability from the existing stations based on the installed capacity and the average Plant Load Factor for the past two years (FY 2011-12 and FY 2012-13 till January). The availability from each station has been considered based on merit order dispatch. However the fixed charges are approved for full allocation. The energy availability from TATA Power Haldia station has been considered till the expiry of PPA agreement i.e. till March 2013 (as per the petitioner's submission). The Net energy sent out has been considered after considering the applicable

auxiliary consumption as per the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009.

• Energy Available to the Petitioner: The effective share from the stations is applied on the energy sent out to arrive at the energy available for the petitioner from respective stations.

The Commission has considered the following assumptions to arrive at the Power purchase cost for the remaining six months of FY 2012-13 from the NTPC stations:

- Fixed Charges: The fixed charges are considered based on the formula specified for the stations in the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009. The Annual Fixed Charges for each station has been taken as per the latest Tariff orders for the respective stations as applicable. For NSPCL, the fixed charges have been considered as per the tariff order dated July 31'2012.
 - Variable Charges: The Commission has considered the average variable cost for the period July 2012 to September 2012 verified by the Commission from the power purchase bills submitted by the petitioner for consideration of the per unit variable charges for remaining six months of FY 2012-13.

Renewable Energy Obligation

As per JERC (Procurement of Renewable Energy) Regulations 2010 clause 1 sub clause (1)

Each distribution licensee shall purchase electricity (in kWh) from renewable energy sources, at a defined minimum percentage of the total consumption of all the consumers in its area during a year.

The Petitioner has to purchase 3% of total energy purchase from renewable sources for FY 2012-13 including 0.40% for Solar and 2.60% for Non-Solar. The petitioner in its petition has submitted that ED-DNH has purchased 90,000 non solar renewable certificates at a cost of Rs. 15.98 Crores in the till December of FY 2012-13 to meet its renewable purchase obligation. The petitioner in its subsequent submissions did not submit its plan to purchase renewable energy certificates to meet its renewable purchase obligation for FY 2012-13 in the remaining part of FY 2012-13. In absence of any plan from the petitioner, the Commission has therefore considered the submission of the petitioner and accordingly allowed the procurement of renewable energy as proposed by the petitioner along with additional REC certificates to be purchased as per regulations.

Accordingly, the Commission approves the following availability from above mentioned stations based on the merit order dispatch principles for remaining six months of FY 2012-13

Table 6.7.3: Approved Power purchase quantum from above mentioned stations under merit order dispatch

Sr.	Source	Capacity	Average		ghted erage	Gross Generation	Auxiliar Y Consum	Purchase	PGCIL Losses	Energy Available at
No.		(MW)	PLF (%)	%	mw	(MUs)	ption (%)	(MUs)	(MUs)	Periphery (MUs)
1	2	3	4	5	6	7	8	9	10	11 = 9-10
A	Central Sector Power Stations									
ı	NTPC	11,461			539			1,839.71	65.36	1,774.35
	KSTPS-I	2,100	83.73	3.30%	69.27	7,680.39	6.50%	236.89	8.42	228.47
	VSTPS – I	1,260	89.52	3.91%	49.29	4,926.62	8.50%	176.35	6.27	170.09
	VSTPS – II	1,000	89.52	3.97%	39.73	3,910.02	6.50%	145.23	5.16	140.07
	VSTPS –III	1,000	89.52	4.22%	42.17	3,910.02	6.50%	154.15	5.48	148.67
	KGPP	656	70.68	12.34%	80.99	2,025.88	3%	242.54	8.62	233.92
	GGPP	657	70.53	8.89%	58.46	2,025.36	3%	174.71	6.21	168.50
	SIPAT Stage 2	1,000	86.20	4.02%	40.17	3,765.22	6.50%	141.40	5.02	136.38
	KORBA - III	500							2.92	
	(KSTPS - VII)		83.73	4.80%	24.02	1,828.66	6.50%	82.14		79.23
	SIPAT - Stage I	1,320	85.00	7.23%	95.40	4,900.90	6.50%	331.17	11.77	319.41
	RGPPL	1,967	93.07	2.00%	39.34	7,996.44	3%	155.13	5.51	149.62
II	NPCIL	1,520			59.25			193.72	6.88	186.84
	KAPS	440	92.55	2.91%	12.80	1,778.74	10%	46.55	1.65	44.90
	TAPS	1,080	80.60	4.30%	46.45	3,802.02	10%	147.17	5.23	141.94
В	Other Generating Stations	2,120								
ı	NSPCL							612.13	21.79	590.33
	Bhilai	500	90.74	32.80%	164.00	1,981.76	9.00%	591.52	21.06	570.46
II	Eastern Region					,		-		
	KHSTPP – II	1,500	66.58	0.20%	3.00	4,362.32	6.50%	8.16	0.29	7.87
С	Tata Power									
	Haldia	120	95.00	58.33%	70.00	497.95	8.50%	12.45	0.44	12.01
D	Power purchase from other sources							-	-	143.00

Sr.	Source	Capacity (MW)	Average PLF (%)	Weighted Average		Gross Generation	Auxiliar y Consum	Purchase	PGCIL Losses	Energy Available at
No.				%	MW	(MUs)	ption (%)	(MUs)	(MUs)	Periphery (MUs)
1	2	3	4	5	6	7	8	9	10	11 = 9-10
	(2.60% for - Non Solar)	-								123.93
	(0.40% for Solar)	-								19.07
	Power purchase from Indian E. Exchange	-	-	-	-	-	-	-	-	-
E	Power Purchase Cost							2,646.40	94.18	2,551.38

Table 6.7.4: Approved Power purchase Cost for above mentioned Stations for remaining six months of FY 2012-13

Sr. No.	Source	Purchase (MUs)	Fixed Charges (Rs. Crores)	Variable Charges (Ps/kWH) - Average of July, August and Sep	Variable Charges (Rs. Crores)	Total Cost (Rs. Crores)
1	2	3	4	5	6	7
Α	Central Sector Power Stations					
ı	NTPC	1,839.71	213.79		320.17	533.96
	KSTPS-I	236.89	13.12	106	25.23	38.35
	VSTPS - I	176.35	11.67	154	27.10	38.77
	VSTPS - II	145.23	11.38	145	21.07	32.46
	VSTPS -III	154.15	17.92	145	22.37	40.29
	KGPP	242.54	28.90	245	59.43	88.33
	GGPP	174.71	25.45	243	42.52	67.96
	SIPAT Stage 2	141.40	18.78	140	19.74	38.52
	KORBA - III (KSTPS - VII)	82.14	12.42	106	8.71	21.14
	SIPAT - Stage I	331.17	54.61	155	51.50	106.11
	RGPPL	155.13	19.53	274	42.50	62.03
II	NPCIL	193.72			45.70	45.70
	KAPS	46.55		236	10.98	10.98

Sr. No.	Source	Purchase (MUs)	Fixed Charges (Rs. Crores)	Variable Charges (Ps/kWH) - Average of July, August and Sep	Variable Charges (Rs. Crores)	Total Cost (Rs. Crores)
1	2	3	4	5	6	7
	TAPS	147.17		283	34.72	34.72
В	Other Generating Stations					
ı	NSPCL	612.13	94.29		150.70	244.99
	Bhilai	591.52	90.69	243	143.90	234.59
Ш	Eastern Region					
	KHSTPP - II	8.16	1.11	235	1.92	3.02
С	Tata Power					
	Haldia	12.45	2.49	392	4.89	7.38
	Misc. arrears					
D	Power purchase from other sources	-			40.55	40.55
	(2.60% for - Non Solar)			178	22.06	22.06
	(0.40% for Solar)			970	18.49	18.49
	Power purchase from Indian E. Exchange	-	-	-	-	-
E	Power Purchase Cost	2,646.40	308.08	-	557.13	865.21

Power Purchase Cost Approved

For determining the power purchase cost, merit order dispatch principles have been applied. The must-run stations have been assumed at the top of the merit order and variable cost incurred for meeting the energy requirement within the state has been calculated from the plants at the top of the merit order. The transmission charges for FY 2012-13 for remaining six months have been considered as per the POC charges applicable for FY 2012-13 and first six months as per the submissions made by the petitioner based on half yearly actuals.

The Commission has considered the actual transmission charges paid by the licensee from April 2012 to September 2012 and has estimated the transmission charges from October 2012 to March 2013 on the basis of applicable POC rates.

In accordance with the foregoing paragraphs the Commission has approved the following Power Purchase Cost.

Based on the above, the total Power purchase quantum and cost from various sources (including over-drawl of Power under UI mechanism and transmission charges) as approved for review of FY 2012-13 is mentioned below:

Table 6.7.5: Power Purchase Quantum and Cost including UI overdrawl for FY 2012-13

			Total	Power Purcha	se Cost	
Sr. No.	Source	Energy Units(MU)	Fixed Charges (Rs. Crores)	Variable Cost (Rs. Crores)	Other Charges (Rs. Crores)	Total (Rs. Crores)
1	2	3	4	5	6	7
Α	Central Sector Power Stations					
ı	NTPC	3,346.86	397.76	549.44	27.45	974.65
	KSTPS-I	478	27.21	48.26	3.08	78.54
	VSTPS – I	341	21.90	51.73	8.86	82.50
	VSTPS – II	280	21.74	40.06	3.91	65.72
	VSTPS –III	308	35.10	44.00	7.13	86.23
	KGPP	396	58.39	95.71	(0.27)	153.83
	GGPP	316	50.91	75.47	0.45	126.83
	SIPAT Stage 2	285	36.47	36.73	0.02	73.22
	KORBA - III (KSTPS - VII)	177	26.04	17.63	1.46	45.13
	SIPAT - Stage I	534	82.66	80.09	2.81	165.55
	RGPPL	230	37.34	59.76	0.00	97.09
Ш	NPCIL	393	-	101	0	102
	KAPS	90	0.00	21.20	0.00	21.20
	TAPS	303	0.00	80.16	0.18	80.35
В	Other Generating Stations	1,555	196	436	0	631
ı	NSPCL					
	Bhilai	1,235	190.82	311.53	0.12	502.47
Ш	Eastern Region					
	KHSTPP – II	17	2.26	3.96	0.11	6.33
С	Tata Power					
	Haldia	303	2.49	120.04	0.00	122.53
D	Power purchase from other sources	0.84	-	40.76	-	40.76
	(2.60% for - Non Solar)	0	0.00	22.06	0.00	22.06
	(0.40% for Solar)	0	0.00	18.49	0.00	18.49
	Power purchase from Indian E. Exchange	0	0.00	0.00	0.00	0.00
	UI overdrawl	0.84	0.00	0.20	0.00	0.20
E	Power Purchase Cost	5,296	593.33	1,127.09	27.87	1,748.28

		Total Power Purchase Cost						
Sr. No.	Source	Energy Units(MU)	Fixed Charges (Rs. Crores)	Variable Cost (Rs. Crores)	Other Charges (Rs. Crores)	Total (Rs. Crores)		
1	2	3	4	5	6	7		
G	OTHER CHARGES							
	PGCIL Transmission Charges (POC Charges WR + SR) and actuals					144		
	WRLDC charges					10		
	Reactive Energy Charges, MSTCL and others					16		
Н	Total	5,295.50	593.33	1,127.09	27.87	1,918.72		

Commission considers the Power purchase cost for FY 2012-13 of Rs. 1918.72 Crores for procurement of 5295.50 million units of energy and Renewable Energy Certificates to meet the RPO compliance as reasonable and approves the same for Review of FY 2012-13.

6.8 Operation and Maintenance Expenses

Petitioner's Submission

The petitioner has submitted that the 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.

The Petitioner has submitted the summary of the past three year operation and maintenance expense is summarized in table below:

Table 6.8.1: Operation & Maintenance Expense of previous years (Rs. Crore)

Year	O&M Expenses
	Actual
FY 09-10	6.34

Year	O&M Expenses
	Actual
FY 10-11	6.56
FY 11-12	11.83

The total Operation & Maintenance expense for FY 2011-12 was Rs. 11.83 Crores as compared to the total O&M expense of Rs. 6.56 Crores in FY 2010-11, an increase of over 45% from FY 2010-11 to FY 2011-12. The increase in operation and maintenance cost in FY 11-12 was primarily due to increase in Employee and R&M expenses.

6.8.1 Employee Expenses

Petitioner's Submission

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. However the Petitioner does not maintain cost related to leave salary contribution and pension of the employee in the employee cost. Therefore, the Petitioner will claim these expenses relating to the employee cost at an appropriate time when the respective cost items become payable.

Based on the various expenses 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 Crores.

ED-DNH prayed to the Hon'ble Commission that salaries/employee cost increase should be considered as an 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.

Commission's Analysis

As per the regulation 27 of JERC tariff regulations 2009

Quote

"

27. Operation and Maintenance Expenses

1) 'Operation & Maintenance expenses' or 'O&M expenses' shall mean & include repair and maintenance (R&M) expenses, employee expenses and administrative & general (A&G) expenses including insurance.

While determining the O&M expenses for generation functions within the State, the Commission shall be guided, as far as feasible, by the principles and methodologies of CERC on the manner, as amended from time to time.

2) While determining the O&M expenses for transmission functions within the State, the Commission shall be guided, as far as feasible by the principles and methodologies specified by CERC on the matter, as amended from time to time:

Provided further that the Commission may, if it considers it just, practical and proper considering the size of the total transmission system of, and the quantum of electricity handled by, an integrated utility, treat its transmission system as an integral part of its distribution system itself.

- 3) O&M expenses for distribution functions shall be determined by the Commission as follows:
 - a) O&M expenses as approved by the Commission for the first time for a year shall be considered as base O&M expenses for determination of O&M expenses for subsequent years;
 - b) Base O&M expenses as above shall be adjusted according to variation in the rate of WPI per annum to determine the O&M expenses for subsequent year, where WPI is the Wholesale Price Index on April 1 of the relevant year;
 - c) In case of unbundling of the Electricity Department and formation of separate distribution companies, the Commission will make suitable assessment of base O&M expenses of individual distribution companies separately and allow O&M expenses for subsequent years for individual companies on the basis of such estimation and above principle.
- 4) O&M expenses of assets taken on lease/hire-purchase and those created out of the consumers' contribution shall be considered in case the generating company or the licensee has the responsibility for its operation and maintenance and bear O&M expenses.
- 5) O&M expenses for gross fixed assets added during the year shall be considered from the date of commissioning on pro-rata basis.
- 6) O&M expenses for integrated utility shall be determined by the Commission on the norms and principles indicated above."

Unquote

Commission observes the employee expenses approved for FY 2012-13 as Rs. 3.22 Crores and the actuals figures of employee cost for FY 2011-12 as per the audited accounts is Rs. 4.75 Crores. Commission has analyzed the past trends, the employee expenses approved in the tariff order dated July 31'2012 for FY 2012-13 and is of the view that the actual audited data of FY 2011-12 shows true depiction of expenses incurred by the utility. Commission has therefore considered the actuals of FY 2011-12 as a revised base for calculating the employee cost for FY 2012-13. The escalation factor used by the Commission is $8.94\%^{22}$ per annum. The WPI index upto August 2012 has been used (as available on the website of Economic Advisor, Ministry of Commerce and Industry) for estimation of the increase in the average of WPI index from FY 2010-11 to FY 2011-12. The employee expenses approved for FY 2010-11 have been escalated by the WPI factor of $8.94\%^{23}$ % to determine the employee expenses for FY 2012-13.

Commission considers the employee cost of Rs. 5.17 Crores as reasonable and approves the same for Review of ARR for FY 2012-13.

6.8.2 Repair and Maintenance Expenses

Petitioner's Submission

The petitioner has submitted that the 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.

The actual R&M expense for FY 11-12 for ED-DNH was Rs. 5.13 Crores. The revised estimate of R&M expense for FY 12-13 is Rs. 5.59 Crores. The increase in R&M cost for FY 11-12 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.

ED-DNH requested the Hon'ble Commission to approve the Repair & Maintenance 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.

²² As per the WPI index upto March 2012 as available on the website of Economic Advisor, Ministry of Commerce and Industry

²³ As per the WPI index upto March 2012 as available on the website of Economic Advisor, Ministry of Commerce and Industry

Commission's Analysis

Commission observes the Repair and Maintenance expenses approved for FY 2012-13 as Rs. 7.17 Crores and the actuals figures of Repair and Maintenance expenses of FY 2011-12 as per the audited accounts is Rs. 5.13 Crores. Commission has analyzed the past trends, the Repair and Maintenance expenses of Rs. 7.17 Crores approved in the tariff order dated July 31' 2012 for FY 2012-13, actuals of past years and revised estimates based on 6 months actuals as submitted by the petitioner.

The revised estimates of Repair & Maintenance expenses based on the six months actuals are considered reasonable for FY 2012-13. The Commission recognizes the requirement of the maintenance activities and also observes that the R&M expenses proposed by the petitioner amounting to Rs 5.59 Crores are lower than that approved in the order dated July 31'2012.

Therefore the Commission considers the Repair and Maintenance expenses of Rs. 5.58 Crores as reasonable and approves the same for Review of ARR for FY 2012-13.

6.8.3 Administration and General Expenses

Petitioner's Submission

The 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

The actual A&G expense for FY 11-12 was Rs. 1.95 Crores. ED-DNH submits 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.

ED-DNH has considered the revised estimates of A&G expense as Rs. 2.12 Crores for FY 12-13. The Commission has approved Rs. 1.35 Crores 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. 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.

ED-DNH highlighted 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 Commission and will be engaging a specialized consultation for the same.

Commission's Analysis

The Commission is of the view that the actual audited data of FY 2011-12 is a true depiction of expenses incurred by the utility. The Commission has therefore considered the actuals of FY 2011-12 as a revised base for calculating the A&G expenses for FY 2012-13 in line with the JERC Tariff Regulations.

The Commission has considered the WPI index upto August 2012 (as available on the website of Economic Advisor, Ministry of Commerce and Industry) for estimation of the increase in the average of WPI index from FY 2010-11 to FY 2011-12. The actual expenses for FY 2011-12 have been escalated by the WPI factor of 8.94²⁴% to determine the expenses for FY 2012-13.

Commission considers the Administration and General Expenses of Rs. 2.13 Crores as reasonable and approves the same for Review of ARR for FY 2012-13.

6.8.4 Summary of Operation and Maintenance Expenses

The overall summary of O&M expenditure estimated by the petitioner vis-à-vis approved by the Commission in its previous tariff order for FY 2012-13 and revised estimates submitted by the Petitioner for review for FY 2012-13 is given below:

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²⁴ As per the WPI index upto March 2012 as available on the website of Economic Advisor, Ministry of Commerce and Industry

5.59

12.88

2012-13 **Approved** Sr. petitioner's **Particulars** Petitioner in T.O. No. submission Approved Submission 31.07.2012 for review FY 2012-13 1 3 4 5 3.74 3.22 5.17 5.17 **Employee Expenses** 2 1.36 2.38 2.13 2.13 A&G Expenses

7.17

11.74

8.10

14.22

Table 6.8.4.1: Summary of Operation & Maintenance Expenses (in Rs. Crores)

6.9 Capital Expenditure and Capitalization

R&M Expenses

Total O&M Expenses

Petitioner's submission

3

The petitioner submitted, "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."

The petitioner further submits that each year they draft 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. 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. The petitioner has submitted the revised estimates of the capital expenditure of Rs. 52 Crores, out of which the petitioner has projected the addition of Rs. 46.42 Crores in the Gross Fixed Assets during FY 2012-13.

5.58

12.88

Commission's analysis

Commission observes that the capital expenditure and the capitalization submitted by the petitioner for FY 2012-13 is required to maintain the reliable supply for the consumers of UT of Dadra and Nagar Haveli.

As per the Regulation 21, of JERC for the states of Goa and UTs (Terms and conditions for determination of Tariff), Regulation 2009 specifies that the licensee shall propose in their filings, a detailed capital investment plan, showing separately ongoing projects that will spill into the Ensuing Year and new projects (along with their justification) that will commence in the ensuing year. Commission has noticed that the petitioner had not submitted the capital investment plan as per the regulations and did not give the present status of the capital expenditure incurred/capitalized. However, for the purpose of this ARR computation, **Commission provisionally approves the capital expenditure of Rs. 52 Crores proposed by the petitioner for Review of ARR for FY 2012-13.** A detailed statement of the capital expenditure incurred quarterly, the asset capitalized and added in the gross fixed assets upto 31.03.2013 on different dates during the year be provided for true-up.

This expenditure is being permitted as a special case to ensure the creation of infrastructure for adherence to Standard of Performance and Supply Code Regulations.

6.10 GFA and Depreciation

Petitioner's submission

The petitioner in ARR and tariff petition for FY 2013-14 had submitted that the Opening Gross Fixed Assets (GFA) is Rs. 475.10 Crores 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.

Further, the Petitioner has submitted the audited accounts for FY 2011-12 containing the audited value of opening gross fixed assets as on April 1'2011 along with the true-up petition for FY 2011-12 and has also submitted the verified Asset Registers showing the details of assets as on March 31'2012.

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

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original cost of the Gross Fixed Assets. Based on the CERC norms, ED-DNH has applied the following depreciation rates as specified by CERC in the Tariff Regulations for FY 2009-14.

Table 6.10.1: Depreciation rate specified by CERC

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

Depreciation for the FY 11-12 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.

Commission's analysis

As discussed in para 5.10, 5.11 and 5.14 of this order, review order dated January 24'2013 and as per Regulation 26 of JERC for the states of Goa and UTs (Terms and conditions for determination of Tariff), Regulation 2009 depreciation is computed at the approved capitalization of FY 2010-11 including approved capitalization during FY 2011-12 and FY 2012-13.

The Regulation 26 of JERC (Terms and Conditions for Determination of Tariff) Regulations, 2009 specifies that depreciation for the assets shall be calculated annually at the rates specified by CERC from time to time. The depreciation rates for distribution assets as specified by CERC vide Appendix-III (Depreciation schedule of CERC (Terms and Conditions of Tariff) Regulations, 2009 has been used to calculate the depreciation. The depreciation for the FY 2012-13 has been worked out at Rs. 15.12 Crores.

Table 6.10.2 : GFA & Depreciation submitted by the petitioner and approved in the review for FY 2012-13(in Rs. Crores)

		2012-13					
Sr. No.	Particulars	Petitioner Submission	Approved				
1	2	3	4	5	6		

			2012-13					
Sr. No.	Particulars	Petitioner Submission	Approved in T.O. 31.07.2012 FY 2012-13	petitioner's submission for review	Approved			
1	2	3	4	5	6			
1	Opening Value of Assets at the beginning of the year	479.45	95.38	475.10	273.64			
2	Additions during the year	43.72	43.72	46.52	46.52			
3	Gross Fixed Assets at the end of year	523.17	139.10	521.62	320.17			
4	Average Assets	501.31	117.24	498.36	296.91			
5	Average Rate of Depreciation	4.38%	-	-				
6	Depreciation for the year	22.91	6.11	25.24	15.12			

Table 6.10.3: Calculation for working out the Depreciation for FY 2012-13(in Rs. Crores)

Sr. No.	Particulars	Value of assets at the beginning of FY 2012-13	Addition during FY 2012-13	Closing balance at the end of FY2012-13	Rate of Depreciation	Depreciation for FY 2012- 13
1	2	3	4	5	6	7
1	Plant & Machinery	260.35	46.52	306.87	5.28%	14.97
2	Buildings	3.54	-	3.54	3.34%	0.12
3	Vehicles	0.16	-	0.16	9.50%	0.02
4	Furniture and Fixtures	0.03	-	0.03	6.33%	0.00
5	Computers and Others	0.10	-	0.10	6.33%	0.01
6	Land	9.46	-	9.46	0.00%	-
7	Total	273.64	46.52	320.17		15.12

Commission considers the depreciation of Rs. 15.12 Crores as reasonable and approves the same for Review of ARR of FY 2012-13.

6.11 Interest on Loan

Petitioner's submission

The petitioner in ARR and tariff petition for FY 2013-14 has submitted that 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.

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. 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. 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.

Further, the petitioner has claimed the Interest charges of Rs. 9.33 Crores on long term loans in the revised estimates of FY 2012-13.

Commission's analysis

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

- (1) For existing loan capital interest and finance charges on loan capital shall be computed on the outstanding loans, duly taking into account the rate of interest and schedule of repayment as per the terms and conditions of relevant agreements.
- (2) Interest and finance charges on loan capital for new investments shall be computed on the loans, duly taking into account the rate of interest and the schedule of repayment as per the terms and conditions of relevant agreements. The rate of interest shall, however, be restricted to the prevailing Prime Lending Rate of the State Bank of India". **Unquote**

The ED DNH being an integrated utility in its present form as defined in Regulation 2(9) of the JERC (Terms and Conditions for Determination of Tariff) Regulations, 2009; as the ED DNH is not restructured and corporatized till date. Considering this an integrated utility and its entitlement to return on its capital base under the provisions of Schedule VI of the repealed Electricity (Supply) Act, 1948 vide provision under Regulation 23 of JERC (Terms and Conditions for Determination of Tariff) Regulations, 2009. The basic requirement for consideration of interest on loans is the adequate information of the value of fixed assets of the utility in service (net fixed assets) at the beginning of such year and funding pattern as well as terms & conditions of funding of capital assets.

The Commission places reliance on the Section 23 of the JERC Tariff regulations which is reproduced below:

"23. Debt-Equity Ratio

For the purpose of determination of tariff, debt-equity ratio in case of existing, ongoing as well as new projects commencing after the date of notification of these Regulations shall be 70:30. Where equity employed is more than 30%, the amount of equity for the purpose of tariff shall be limited to 30% and the balance amount shall be considered as loan. Where actual equity employed is less than 30%, the actual debt and equity shall be considered for determination of tariff:

Provided that the Commission may, in appropriate cases, consider equity higher than 30% for the purpose of determination of tariff, where the generating company or the licensee is able to establish to the satisfaction of the Commission that deployment of equity more than 30% is in the interest of the general public: .

(2) The debt and equity amounts arrived at in accordance with sub-regulation (1) above shall be used for all purposes including for determining interest on loan, return on equity, Advance against Depreciation and Foreign Exchange Rate Variation.:

Provided that in the case of an Integrated Utility, till the time it remains Integrated Utility, it shall be entitled to return on its capital base as per Schedule VI to the repealed Electricity (Supply) Act, 1948."

The above stated regulations mandate the debt equity ratio for assets deployed, post the commencement of the JERC Tariff Regulations. It is pertinent to mention here that the first application filed by the petitioner before this Commission under the above stated regulation was for the FY 2010-11, wherein the Commission had determined Tariff as per the JERC Tariff Regulations,2009. The Commission has also perused the accounts certified by a chartered accountant submitted by the petitioner for FY 2011-12. It has been observed that the petitioner does not have any opening loan portfolio and the entire capital base is funded through government budgetary support.

As discussed in para 5.11 of this order, the normative interest under the JERC Tariff Regulations could therefore be considered on the assets created during the year FY 2010-11 onward excluding the opening capital base as projected by the petitioner in FY 2010-11 or approved by the Commission in this order on provisional basis. Commission has considered an addition of Rs. 68.22 Crores in Gross Fixed Assets for FY 2010-11 and addition of Rs. 3.99 Crores for FY 2011-12 which are considered funded through normative debt to the tune of 70%. The Commission for the purpose of funding of the capitalization has considered the normative debt equity ratio of 70:30, whereby it has considered the additional normative loan of Rs. 36.76 Crores for the FY 2012-13. The calculation for the interest on the normative loan is given below:

Table 6.11.1: Normative Interest on Loan approved in the review for FY 2012-13(in Rs. Crores)

			2012-13				
Sr. No.	Particulars	Petitioner Submission (FY 2012-13)	Approved in T.O. 31.07.2012 FY 2012-13 (FY 2012-13)	petitioner's submission for review	Approved		
1	2	3	4	5	6		
1	Opening Normative Loan	-	61.99	48.15	36.76		
2	Add: Normative Loan during the year	30.60	30.60	32.57	32.57		
3	Less: Normative Repayment pegged at Depreciation	1.53	6.68	2.41	15.12		
4	Closing Normative Loan	29.07	85.92	78.31	54.21		
5	Average Normative Loan	14.54	73.95	63.23	45.49		
6	Rate of Interest (@SBAR rate)	14.75%	14.75%	14.75%	14.61%		
7	Interest on Normative Loan including bank charges	2.14	10.91	9.33	6.65		

Accordingly, the Commission has considered the Normative Interest on loans as Rs. 6.65 Crores as reasonable and approves the same for review of FY 2012-13.

6.12 Interest on Working Capital

Petitioner's submission

The petitioner has computed the Interest on Working Capital for FY 12-13 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 has been computed considering the following parameters:

- i. One month Power purchase cost
- ii. One month Employees cost
- iii. One month Administration & general expenses
- iv. One month Repair & Maintenance expenses.
- v. Sum of two month requirement for meeting Fuel cost.

A rate of interest of 14.75% has been considered for FY 12-13 on the working capital requirement, being the SBI Prime Lending Rate as on April 1st 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."

The normative interest on working capital for FY 12-13 as per the revised estimates amounts to Rs. 23.83 Crores.

Commission's analysis

Commission has considered the approved estimates of Power Purchase expenses of FY 2012-13 and approved O&M expenses to work out the normative working capital required for FY 2012-13.

As per the regulation 29 of JERC tariff regulations

Quote"

29. WORKING CAPITAL AND INTEREST RATE ON WORKING CAPITAL

For generation and transmission business, the working capital shall be as per CERC norms. Subject to prudence check, the working capital for distribution business shall be the sum of one month requirement for meeting:

- a. Power purchase cost.
- b. Employees cost.
- c. Administration & general expenses and
- d. Repair & Maintenance expenses.
- 1) Subject to prudence check, the working capital for integrated utility shall be the sum of one month requirement for meeting :
 - a. Power purchase cost
 - b. Employees cost
 - c. Administration & general expenses
 - d. Repair & Maintenance expenses.
 - e. Sum of two month requirement for meeting Fuel cost.
- 2) The rate of interest on working capital shall be equal to the short term Prime Lending Rate of State Bank of India on the 1st April of the relevant financial year. The interest on working capital

shall be payable on normative basis notwithstanding that the generating company / licensee has not taken working capital loan from any outside agency or has exceeded the working capital loan amount worked out on the normative figures." **Unquote**

In accordance with Section 47(4) of the Electricity Act 2003, the distribution licensee is required to pay interest on security deposit collected from the consumers. If this security deposit is invested in the form of interest earning fixed deposits or other similar instruments. The interest earned from such investment could be utilized to pay the interest to the consumers under section 47(4) of the Electricity Act 2003. However it is noted that the petitioner has not invested any of the security deposit held and the said amount is available to the petitioner. Accordingly, the Commission has allowed the interest payable to the consumer as expense in this order. Commission has considered the security deposit available with the Petitioner as a source to meet working capital requirements and has deducted this amount from the working capital requirement considered for interest for review of FY 2011-12. Further, Commission clarifies that SBI PLR rate has now been substituted as SBI Advance Rate. The Commission has considered the SBI advance rate of 13%²⁵ as on 1st April 2011 for Review of ARR of FY 2011-12. The detailed calculation for the calculation of interest on working capital is mentioned below:

Table 6.12.1: Interest on working capital submitted by the petitioner and approved in Review for FY 2012-13 (in Rs. Crores)

		FY 2012-13				
Sr. No.	Particulars	Petitioner Submission (FY 2012- 13)	Approved in T.O. 31.07.2012 FY 2012-13 (FY 2012-13)	petitioner's submission for review	Approved	
1	2	3	4	5	6	
1	Fuel Cost for 2 months	0.00	0.00	0.00	0.00	
2	Power Purchase Cost for one month	160.31	147.08	160.50	159.91	
3	Employee Cost for one month	0.31	0.27	0.43	0.43	
4	A&G Expenses for one month	0.20	0.11	0.18	0.18	
5	R&M Expenses for one month	0.68	0.60	0.47	0.47	
6	Total Working Capital for one month	161.50	148.06	161.57	160.98	
7	Security Deposit	0	0	0	18.06	

SBI advance rate notified on 14.02.2011; Thereafter four revisions in the SBI advance rate was notified in FY 2011-12 and are as under: 25.04.2011-13.25%; 12.05.2011-14%; 11.07.2011-14.25%; 13.09.2011 – 14.75%. No further revision has been notified

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		FY 2012-13				
Sr. No.	Particulars	Petitioner Submission (FY 2012- 13)	Approved in T.O. 31.07.2012 FY 2012-13 (FY 2012-13)	petitioner's submission for review	Approved	
1	2	3	4	5	6	
8	Total Working after deduction of Security Deposit from Working Capital Requirement	161.50	130.33	161.57	142.92	
9	SBAR Rate	14.75%	14.75%	14.75%	14.61%	
10	Interest on Working Capital	23.82	19.22	23.83	20.89	

The Commission considers Rs. 20.89 Crores as Interest on Working Capital as reasonable and approves the same for Review of ARR for FY 2012-13.

6.13 Interest on Security Deposit

Petitioner's submission

The petitioner has not claimed interest on security deposit and has not shown the security deposit available with them during FY 2011-12 and FY 2012-13.

Commission's analysis

In terms of the section 47 (4) of the Electricity Act, 2003 'the distribution licensee is required to pay interest on security deposit collected from consumers equivalent to bank rate or more as may be specified by the Commission.'

The petitioner in their audited accounts had submitted the details of security deposit available with the petitioner during FY 2011-12; Further, the petitioner had submitted that they collect security deposits from consumers and contractors (as earnest money deposit or security). While security deposit from consumers is taken at the time of providing the connection and has to be repaid to the consumers at the time of surrender of the connection, security deposit from contractors is adjusted, subsequent to satisfactory completion of the contracted work. These deposits are in the form of fixed deposit receipts (FDR) / Bank Guarantee and in case of FDR the interest is directly paid to the consumer.

The Commission in its ARR and tariff order dated September 13'2011 and July 31'2012 had directed the petitioner should follow the provisions of Sub regulation no. 6.10 of JERC (Electricity Supply Code) Regulations, 2010. Wherever existing mode of consumer security deposit i.e. bank guarantee, fixed

deposit etc. is different from those provided in the Regulation, the same be replaced by those as specified therein, as per section 47(1) Electricity Act 2003 and pay interest as per section 47(4) Electricity Act, 2003.

The Commission has observed that the petitioner has not paid any interest to the consumers on the security deposit held during FY 2011-12 and FY 2012-13. The petitioner in its additional information submitted the list of consumers who has converted their bank guarantees into deposits. Commission appreciates the effort made by the petitioner for conversion of BGs into Deposit but still this mode of consumer security deposit is different from those provided as per the provisions of Sub regulation no. 6.10 of JERC (Electricity Supply Code) Regulations, 2010, the same be replaced by those as specified therein, as per section 47(1) Electricity Act 2003 and pay interest as per section 47(4) Electricity Act, 2003. The Commission would like to reiterate its direction that the distribution licensee should deliver its obligation under the Section 47(4) of the Electricity Act, 2003 and it must pay the interest on security deposit w.e.f. April 1'2012 at the rate of 9.5% per annum (Being the Bank Rate as on 1st April 2012) and should explicitly mention the same as the 'Interest on security deposit for FY 2012-13 on the bills of the consumers. Commission has considered the security deposit from consumers available with the petitioner as on March 31'2012 as per the audited accounts of FY 2011-12 and has considered the bank rate of 9.50% for FY 2012-13 as on 1st April 2012. **Any non-compliance in this regard shall be viewed seriously by the Commission.**

In view of the above, the Commission allowed Rs. 1.72 Crores as the interest on security deposits as expenditure in ARR in Review for FY 2012-13.

6.14 Return on Equity/Capital Base

Petitioner's submission

The petitioner has submitted that 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.

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.

The petitioner further submitted that 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. The 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. The Return on equity for ED-DNH has been computed as Rs 1.31 Crores for FY 2012-13.

Commission's analysis

ED DNH is an integrated utility in its present form as defined in Regulation 2(9) of the JERC (Terms and Conditions for Determination of Tariff) Regulations, 2009 and it is entitlement to return on capital base under the provisions of Schedule VI of the repealed Electricity (Supply) Act, 1948 vide Regulation 23 of JERC (Terms and Conditions for Determination of Tariff) Regulations, 2009. The basic requirement for consideration of either return on capital base or return on equity for historical assets is the basic information in the form of the assets and depreciation registers besides other data. ED DNH has provided the required verified asset registers as on March 31'2012 along with audited accounts of FY 2011-12.

As discussed in para 5.10 and para 5.14 of this order, Commission has therefore considered return on capital base as per the Regulation 23 of JERC (Terms and Conditions for Determination of Tariff) Regulations, 2009 and has considered Rs. 8.98 Crores as a 3% return on net block of approved assets/capitalization at the beginning of the FY 2012-13.

Commission considers the Return on Capital Base of Rs. 8.98 Crores as reasonable and approves the same for FY 2012-13.

6.15 Provision for Bad and Doubtful debts

Petitioner's submission

The petitioner had considered the provision of 1% of the receivables in the revenue requirement for FY 2012-13.

Table 6.15.1: Provision for Bad & Doubtful debts for FY 2012-13

	FY 12-13
Provision for Bad & Doubtful Debts (in Rs. Crores)	Revised
	Estimates

	FY 12-13
Provision for Bad & Doubtful Debts (in Rs. Crores)	Revised Estimates
Receivables	1,921.62
Provision for Bad &Doubtful Debts as 0.50% of Receivables	1%
Provision for Bad & Doubtful Debts	19.22

Commission's analysis

As can be observed from the audited accounts, there was no bad & doubtful debt written off in FY 2011-12. Further, as specified in the regulation no. 28 of JERC Tariff regulations read with the format is explained below.

Quote:

28. Bad and Doubtful Debts

The Commission may, after the generating company/licensee gets the receivables audited, allow a provision for bad debts up to 1% of receivables in the revenue requirement of the generating company/licensee. (Information to be furnished in format 18)

Format -18

S.No.	Particulars	Amount (Rs. in Crores)
1.	2.	3.
1.	Amount of receivable bad and doubtful	
	debts (audited)	
2.	<u>Provision made for debts</u> in ARR	

Unquote

The petitioner has claimed 1% provisioning of bad and doubtful debt. As there was no write offs as per audited accounts of FY 2011-12; the Commission has therefore considered the provision of 0.5% of the receivables towards bad and doubtful debts as per the provisions of the regulations subject to availability (at the time of true up) of audited accounts.

Commission has considered the provision of 0.5% of the receivables from the retail sales for FY 2012-13 as bad and doubtful debt at Rs. 9.06 Crores as reasonable and approves the same as per the regulations for Review of ARR for FY 2012-13.

6.16 Non-Tariff Income

Petitioner's submission

The petitioner has submitted that the 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.

The revised estimates of non-tariff income is Rs. 10.74 Crores for FY 12-13 as submitted by the petitioner in ARR and tariff petition for FY 2013-14 after considering an escalation of 5% per annum on the actuals of FY 2011-12.

Commission's analysis

The Commission considers the actual Non-Tariff Income of Rs. 10.76 Crores submitted by the petitioner as reasonable and approves the same for Review of ARR for FY 2012-13.

6.17 Revenue from Sale of Surplus Power

Petitioner's submission

The petitioner has projected a surplus energy of 342.24 million units for FY 2012-13 at Rs. 102.67 Crores.

Further, the petitioner submitted the UI bills for six months of FY 2012-13 to be considered as only source for sale of surplus power.

Commission's analysis

As can be observed from the approved Energy Balance for FY 2012-13 in para 6.6 of this order, the energy availability are more than the required amount. The petitioner in its additional submission has submitted the transaction under UI mechanism. Commission has considered the submissions made by the petitioner and after a prudence check of UI transaction from the weekly summary sheets/bills of WRPC, Commission noticed the under-drawl of 99.97 million units during first half of FY 2012-13 at a total price of Rs. 31.61 Crores. The Commission has projected the power purchase in the second half of FY 2012-13 based on the availability and merit order dispatch whereby the Commission has restricted the power to be scheduled so as to equate the requirement with the approved energy sales of FY 2012-13. Therefore the Commission has not considered any UI under drawl for the period October 2012 to March 2013.

Thus, the Commission considers the impact of UI transaction as under-drawl for FY 2012-13 at Rs. 31.61 Crores for Sale of 99.97 million units as reasonable and approves for Review of ARR for FY 2012-13 based on the six months figures. The final actual figures as per the audited accounts shall be considered at the time of true-up.

6.18 Revenue at approved retail tariff of FY 2012-13

Petitioner's submission

The petitioner has submitted the projection of revenue of Rs. 1921.62 Crores (including recovery as part of PPCA variations) for FY 2012-13. However as part of additional submissions for six months of FY 2012-13, the petitioner has submitted the revenue of Rs. 976.13 Crores for retail energy sales of 2316 million units during first half of FY 2012-13. The revenue of Rs. 976.13 Crores include Rs. 144.17 Crores on account of FPPCA variations during FY 2012-13.

Commission's analysis

Commission has accepted the revenue based on six months actuals submitted by the Petitioner for FY 2012-13. Commission has noticed that the actual revenue of six months of FY 2012-13 includes the additional charge on account of FPPCA from the consumers of DNH. The actual category wise FPPCA charged from the consumers is also provided by the petitioner. The revenue figures submitted by the petition for six months of FY 2012-13 and remaining six months estimated by the Commission on the basis of sales for FY 2012-13 is mentioned in the table below:

			FY 20	012-13	
S.No.	Category/Consumption Slab	petitioner's submission for review	H1 - Petitioner's submission	H2 - Commission's analysis	Approved
1	2	3	4	5	6
Α	Domestic	0.00	8.49	0.00	8.49
1	0-50 units	1.21		0.91	0.91
2	51-200 units	3.80		2.90	2.90
3	201 - 400 units	2.14		1.63	1.63
4	401 and above	3.49		2.70	2.70
5	Low Income Group (LIG)	0.00		0.04	0.04
В	Commercial	0.00	4.67	0.00	4.67
1 1	1- 100 units	1.03		0.39	0.39
2	101 and above units	7.69		2.88	2.88

		FY 2012-13			
S.No.	Category/Consumption Slab	petitioner's submission for review	H1 - Petitioner's submission	H2 - Commission's analysis	Approved
1	2	3	4	5	6
c	Industrial (LT)	0.00	22.98	0.00	22.98
1 1	Up to 20 HP	43.47		21.72	21.72
2	Above 20 HP	5.01		2.54	2.54
D	Agriculture & Poultry	0.00	0.26	0.00	0.26
1	Connected Load upto 10 HP	0.22		0.10	0.10
2	Connected Load above 10 HP to 99 HP	0.04		0.02	0.02
E	Public Lighting	0.69	0.67	0.40	1.07
F	High Tension Supply	0.00	794.89	0.00	794.89
HTA	Industrial & Motive power-11KV or 66KV having CMD above 100 KVA	83.10		0.00	0.00
1	Up to 50000 units	148.41		58.98	58.98
2	50001-500000 units	450.01		221.97	221.97
3	Above 500000 units	936.32		554.65	554.65
HTB	Ferro Metallurgical/Steel Melting/ Steel Rolling/Power Intensive	47.22		0.00	0.00
1 1	First - 300 units/KVA	63.42		10.08	10.08
2	301-500 units/KVA	29.71		18.99	18.99
3	Above 500 units/KVA	6.87		79.44	79.44
G	Temporary Supply	0.00		0.50	0.50
	Total	1833.87	831.96	980.84	1812.80

The Commission has estimated the Revenue from Sale of Power at existing tariff of FY 2012-13 at Rs. 1812.80 Crores and recovery of Rs. 144.17 Crores on account of FPPCA variations till the month of September 2012. It is noted by the Commission that the petitioner has made an estimate of Rs. 87.87 Crores on account of recovery of FPPCA variations during FY 2012-13 for the entire year and has recovered Rs. 144.17 Crores in first six months of FY 2012-13. The input figures in the FPPCA formula

should be loaded on the website after certification from the designated officer for this purpose. Further the designated officer is directed to explain as on what basis they have recovered Rs. 144.17 Crores in first six months as against their estimates of Rs. 87.87 Crores for the entire FY 2012-13 and further the total recovery on account of FPPCA variations for the entire year FY 2012-13 by May 30'2013.

The revenue from sale of Power is estimated at Rs. 1956.97 Crores for review of FY 2012-13 as reasonable and approves the same for Review of FY 2012-13. Further the recovery, if any on account of FPPCA variations from the month of October 2012 to March 2012 shall be considered at the time of true-up in accordance with the final figures as per the audited accounts of FY 2012-13.

6.19 Review of Aggregate Revenue Requirement for FY 2012-13

The Commission has considered and approved the review of ARR for FY 2012-13 based on the items of expenditure discussed in the preceding Chapters and the actuals submitted by the petitioner of Power purchase costs, revenue and sales and the same has been summarized in the table below:

Table 6.19.1 : Aggregate Revenue Requirement approved for review of FY 2012-13 (in Rs. Crores)

	Particulars	2012-13					
Sr. No.		Petitioner Submission	Approved in T.O. dated 31.07.2012	Approved in T.O. dated 31.07.2012 with tariff app. from 1st july	petitioner's submission for review	Approved	
1	2	3	4	5	6	7	
1	Cost of fuel	-	-	-	-		
2	Cost of power purchase for full year	1,923.73	1,764.93	1,764.93	1,925.97	1,918.92 ²⁶	
3	Employee costs	3.74	3.22	3.22	5.17	5.17	
4	Administration and General Expenses	2.38	1.36	1.36	2.13	2.13	
5	Repair and Maintenance Expenses	8.10	7.17	7.17	5.59	5.58	
6	Depreciation	22.91	6.11	6.11	25.24	15.12	
7	Interest and Finance charges	2.14	10.91	10.91	9.33	6.65	

The Power Purchase cost of Rs. 1918.92 Crores includes Rs. 0.20 Crores on account on UI overdrawl charges during first six months of FY 2012-13.

		2012-13					
Sr. No.	Particulars	Petitioner Submission	Approved in T.O. dated 31.07.2012	Approved in T.O. dated 31.07.2012 with tariff app. from 1st july	petitioner's submission for review	Approved	
1	2	3	4	5	6	7	
8	Interest on working capital & Interest on Security Deposit	23.82	20.91	20.91	23.83	22.60	
9	Return on NFA /Equity	1.05	2.68	2.68	1.31	8.98	
10	Provision for Bad Debt	7.65	7.57	7.57	19.22	9.06	
11	Advance against Depreciation	-	-	-	-	-	
12	Incentive on achievement of norm of T&D loss	-	1	-	-		
13	Total Revenue Requirement	1,995.52	1,824.85	1,824.85	2,017.78	1,994.21	
14	Less: Non-Tariff Income	3.99	3.99	3.99	10.74	10.76	
15	Less: Revenue from Surplus Power Sale/UI	18.96	-	-	102.67	31.61	
16	Less: Revenue from Short term sale	-	-	-	-	-	
17	Net Revenue Requirement (13-14-15-16)	1,972.57	1,820.86	1,820.86	1,904.36	1,951.85	

The estimated (surplus)/gap has been mentioned including the carrying cost in the following table:

Table 6.19.2: Estimation of Deficit/(surplus) considered for review of FY 12-13 (in Rs. Crores)

		2012-13					
Sr. No.	Particulars	Petitioner Submission	Approved in T.O. dated 31.07.2012	Approved in T.O. dated 31.07.2012 with tariff app. from 1st july	petitioner's submission for review	Approved	
1	2	3	4	5	6	7	
17	Net Revenue Requirement (13-14-15-16)	1,972.57	1,820.86	1,820.86	1,904.36	1,951.85	
18	Revenue from Retail Sales at Existing Tariff	1,511.10	1,513.35	1,513.35	1,833.87	1,812.80	
19	Net Gap (17-18)	461.47	307.51	307.51	70.50	139.05	

	Particulars	2012-13					
Sr. No.		Petitioner Submission	Approved in T.O. dated 31.07.2012	Approved in T.O. dated 31.07.2012 with tariff app. from 1st july	petitioner's submission for review	Approved	
1	2	3	4	5	6	7	
20	Recovery on account of PPC variations				144.17	144.17	
21	Gap after adjusting PPC variations	461.47	307.51	307.51	(73.67)	(5.12)	
22	Refunds to consumers on account of excess recovery of PPCA variations	-	-	-	-		
23	Any other refunds	-	-	-	-		
24	Net Gap after refund to the Consumers	461.47	307.51	307.51	(73.67)	(5.12)	
25	Gap for the previous year	-	(53.73)	(53.73)	(38.71)	(45.05)	
26	Carrying Cost	1	-	-	1	(6.96)	
27	Past Arrears/Refunds to Consumers	1	•	-	1		
28	Total gap (24+25+26+27)	461.47	253.78	253.78	(112.38)	(57.13)	
29	Additional revenue from proposed tariff	502.97	338.33	253.74	-		
30	Revenue Gap/ (Surplus), if any, after proposed tariffs (28-29)	(41.50)	(84.55)	0.03	(112.38)	(57.13)	
31	Budgetary Support from Government	-	-	-	-		
32	Net Final Revenue Gap/ (Surplus) (30-31)	(41.50)	(84.55)	0.03	(112.38)	(57.13)	

Commission considers the estimated surplus of Rs. 57.13 Crores as reasonable and approves the same for review of FY 2012-13. This estimated surplus is carried over to next year and has accordingly been considered in Aggregate Revenue Requirement of FY 2013-14.

7. AGGREGATE REVENUE REQUIREMENT OF FY 2013-14

7.1 Background

The ARR & Tariff Petition filed by the ED-DNH for FY 2013-14 as per the relevant provisions mentioned in the tariff regulations 2009. The petitioner has submitted its Aggregate Revenue Requirement and Tariff application as per the Regulation no. 12 & 13 of JERC Tariff regulations 2009 to estimate the revenue requirement for FY 2013-14 on the basis of trued-up figures of FY 2011-12, reviewed estimates for the FY 2012-13 and forecasted figures for FY 2013-14.

The Petitioner in its petition has submitted its Aggregate Revenue Requirement for FY 2013-14 and has considered the past trends and taken cognizance of other internal and external developments to estimate the likely performance for FY 2013-14. In this chapter, the Commission has analyzed the petition of ED-DNH based on the provisions mentioned in the regulations, trued-up figures for FY 2011-12, revised estimates of FY 2012-13 submitted by the petitioner. The Commission has taken into consideration the following:

- 1. Performance in FY 2011-12 (Trued-up figures as per the audited accounts²⁷);
- 2. Reviewed estimates of FY 2012-13 including the category wise sales, revenue and expenditure

7.2 Analysis of Aggregate Revenue Requirement of FY 2013-14

The determination of Aggregate Revenue Requirement requires assessment of quantum of energy sales, loss as well as various cost elements like power purchase cost, O&M expenses, interest cost and depreciation etc. Revised estimates/actuals submitted by the petitioner as regards to various components of ARR of previous year, the Commission's analysis thereon and decision in respect of items given below as discussed in the following paras:

Assessment of Energy Requirement

- i. Sales Projections
- ii. Loss Trajectory
- iii. Energy Balance

²⁷Audited Accounts of FY 2011-12 provided by the Petitioner.

- iv. Power Purchase Sources
- Assessment of the Aggregate Revenue Requirement
 - i. Power Purchase Costs & Transmission Charges;
 - Operation and Maintenance Expenses;
 - Employee Expenses
 - Administration & General expenses
 - Repairs & Maintenance Expenses
 - iii. Capital Expenditure and Asset Capitalization
 - iv. Gross Fixed Assets;
 - v. Depreciation;
 - vi. Interest on Long Term Loans;
 - vii. Interest on Working Capital & Security Deposits;
- viii. Return on Capital Base/ Net Fixed Assets;
- ix. Provision for Bad and Doubtful Debts
- x. Other expenses.
- xi. Non-Tariff Income

As per the regulation no. 13 of JERC Tariff regulations 2009,

Quote"

- 1) The Aggregate Revenue Requirement of the generating company or the licensee shall comprise of the following:
 - i. Fuel Cost for own generation, if applicable.
 - ii. Cost of Power Purchase, if any
- iii. Operation and Maintenance Expenses,
- iv. Depreciation, including Advance Against Depreciation,

- v. Interest and Cost of Finance,
- vi. Return on Equity,
- vii. Income Tax
- viii. Provision for Bad & Doubtful Debts
- ix. Other Expenses.
- 2) The data should be provided for three years
 - i. Audited figures for the previous year; Information for the previous year shall be based on the audited accounts; in the absence thereof, the audited accounts for the immediately preceding year shall be filed along with the un-audited accounts for the previous year.
 - ii. Estimated figures for the current financial year should be based on actual figures for the first six months and the estimated figures for the second six-months of the year. The estimated figures for the second half year of the current financial year should be based on the actual audited figures for the second half of the previous year with adjustments that reflect known and measurable changes expected to occur between them. These adjustments must be specifically documented and justified.
 - iii. Forecasted figures for the ensuing year should be based on the current year figures with adjustments that reflect known and measurable changes expected to occur between them. These adjustments must be specifically documented and justified."

"

- 4) The Aggregate Revenue Requirement of the generating company or the licensee shall be worked out by adjusting the following in the revenue requirement computed under Clause (1) above:
 - i. Necessary adjustments under Regulation 9 'Review and Truing Up'.
 - ii. Income from surcharge and additional surcharge from Open Access Consumers, if any;
 - iii. Transmission and/or Wheeling Charges recovered from the Open Access Customers, if any;
 - iv. Authorized portion of Income/revenue from Other Business engaged in by the licensee for optimum utilization of assets, if any, in accordance. "Unquote

7.3 Consumers, Connected Load and Energy Sales

Petitioner's Submission

The petitioner has considered historical trend for estimating the energy consumption. The petitioner has submitted that the 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.

The petitioner 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. the petitioner, therefore for projecting the category-wise consumption for the 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.

Further, as submitted by the petitioner, the actual energy sales in the DNH periphery in the first six months of the FY 12-13 was 2317.31 million units and energy billed was Rs. 967.27 Crores. 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.

A five-year CAGR has been considered for estimation of sales in domestic, commercial, HT/EHT industry and public lighting categories. For FY 2012-13, the actual six month energy sales have also been analyzed and the trend in the growth of half yearly FY 2012-13 sales is observed to be similar to the annual growth considered.

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.

The petitioner has considered the cumulative average growth rate (%) for Energy Sales (MUs) as mentioned in the following table:

Table 7.3.1: CAGR(%) for estimation of Sales for FY 13-14 considered by petitioner

Growth Rates	Adjusted CAGR (%)
Domestic	7.00%
Commercial	15.60%
Agriculture	0.00%
LT Industry	9.79%
HT/EHT Industry	12.60%
Public Lighting	26.49%
Temp. Supply	1.68%

Source: Table 17 of Petition for FY 2013-14 submitted by ED-DNH

Table 7.3.2: Category wise Energy Sales projected for FY 2012-13 (in MUs)

	0.1	FY 2012-13
S.No.	Category/Consumption Slab	(Petitioner's submission)
Α	Domestic	63.86
В	Commercial	34.91
С	Agriculture	3.82
D	LT Industry	176.78
E	HT/EHT Industry	4902.31
F	Public Lighting	5.48
G	Temp. Supply	2.35
	Total	5189.51

Source: Table 17 of Petition for FY 2013-14 submitted by ED-DNH.

Commission's analysis of Consumer growth, connected load and Energy Sales

The Commission has considered the final actual figures of FY 2010-11 and FY 2011-12 as per the audited accounts for projecting the category wise connected load, number of consumers and Energy sales for FY 2013-14.

The modified CAGR (%) of five years (from FY 2011-2012 over FY 2006-2007) for different consumer categories and the growth rate, accordingly adopted by the Commission on the actuals of FY 2011-12 (as approved by the Commission) to assess the Energy Sales for FY 2013-14 except for the estimation of Energy Sales for category 'Temporary Supply', where modified CAGR of three years (FY 2011-2012 over FY 2008-2009) has been used. Year on Year increase from FY 2011-12 to FY 2012-13 has been used to assess the connected load for FY 2013-14 and to assess the number of consumers for FY 2013-14

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except for the estimation for category 'Temporary Supply', where no increase has been estimated. The details are given in the tables below:

Table 7.3.3 : Modified CAGR(%) considered by the Commission for estimation of Sales, Consumer Base and Connected load for FY 13-14

S. No.	Category	Sales	Consumer Base	Connected Load
1	Domestic		6.03%	
	Domestic – LIG	10.25%	0.00%	1.95%
2	Commercial	20.38%	2.53%	0.00%
3	Agriculture & Poultry	0.00%	2.44%	1.21%
4	LT Industry	0.00%	0.00%	0.00%
5	HT/EHT Industry – HTA	9.93%	2.29%	5.00%
	HT/EHT Industry – HTB	9.93%	3.31%	5.00%
6	Public Lighting	38.63%	0.00%	0.00%
7	Temp. Supply	0.00%	0.00%	0.00%

Table 7.3.4 : No. of Consumers considered by the Commission for FY 2013-14 (in numbers)

		FY 2	013-14
S.No.	Category/Consumption Slab	Petitioner's submission	Approved
1	2	3	4
Α	Domestic	38402	38414
1	0-50 units		
2	51-200 units		
3	201 - 400 units		
4	401 and above		
5	Low Income Group (LIG)	14110	14110
В	Commercial	7203	7203
1	1- 100 units		
2	101 and above units		
С	Industrial (LT)	2010	2087
1	Up to 20 HP		
2	Above 20 HP		
D	Agriculture & Poultry	1100	1100
1	Connected Load upto 10 HP		
2	Connected Load above 10 HP to 99 HP		

		FY 2013-14	
S.No.	Category/Consumption Slab	Petitioner's submission	Approved
1	2	3	4
E	Public Lighting	230	227
F	High Tension Supply		
HTA	Industrial & Motive power-11KV or 66KV having CMD above 100 KVA	828	827
1	Up to 50000 units		
2	50001-500000 units		
3	Above 500000 units		
НТВ	Ferro Metallurgical/Steel Melting/ Steel Rolling/Power Intensive	41	43
1 1	First - 300 units/KVA		
2	301-500 units/KVA		
3	Above 500 units/KVA		
G	Temporary Supply	448	448
Total		64373	64459

Table 7.3.5: Connected Load considered by the Commission for FY 2013-14 (in KVA)

		FY 201	3-14
S.No.	S.No. Category/Consumption Slab	Petitioner's submission	Approved
1	2	3	4
A	Domestic	64885	63002
1	0-50 units		
2	51-200 units		
3	201 - 400 units		
4	401 and above		
5	Low Income Group (LIG)		
В	Commercial	21077	20074
1 1	1- 100 units		
2	101 and above units		
С	Industrial (LT)	78681	74934
1	Up to 20 HP	70813	67441
2	Above 20 HP	7868	7493
D	Agriculture & Poultry	3864	3725

			FY 201	13-14
S.No.	Category/Consumption Slab		Petitioner's submission	Approved
1	2		3	4
1	Connected Load upto 10 HP			
2	Connected Load above 10 HP to 99 HP			
E	Public Lighting		1374	1309
F	High Tension Supply			
HTA	Industrial & Motive power-11KV or 66KV having CMD above 100 KVA		969532	969532
1 1	Up to 50000 units			70636
2	50001-500000 units			259203
3	Above 500000 units			639693
НТВ	Ferro Metallurgical/Steel Melting/ Steel Rolling/Power Intensive	ĺ	82640	82640
1 1	First - 300 units/KVA			26097
2	301-500 units/KVA			11252
3	Above 500 units/KVA			45291
G	Temporary Supply			
	Total (in KVA)		1222053	1215215
	Total (in MVA)		1222	1215

Table 7.3.6: Energy Sales considered by the Commission for FY 2013-14 (in Million Units)

		FY 2013-14	
S.No.	S.No. Category/Consumption Slab	(Petitioner's submission)	Approved
1	2	3	4
Α	Domestic	62.01	85.71
1	0-50 units	11.99	11.77
2	51-200 units	24.28	34.62
3	201 - 400 units	10.56	15.02
4	401 and above	15.18	21.82
5	Low Income Group (LIG)		2.47
В	Commercial	34.91	31.68
1	1- 100 units	5.27	4.80

		FY 2013-14		
S.No.	Category/Consumption Slab	(Petitioner's submission)	Approved	
1	2	3	4	
2	101 and above units	29.63	26.88	
С	Industrial (LT)	177.78	160.88	
1	Up to 20 HP	160	144.78	
2	Above 20 HP	18	16.10	
D	Agriculture & Poultry	3.8	3.4	
1	Connected Load upto 10 HP	3.4	3.05	
2	Connected Load above 10 HP to 99 HP	0.4	0.37	
E	Public Lighting	5.5	6.48	
F	High Tension Supply	4906.4	4934.9	
НТА	Industrial & Motive power-11KV or 66KV having CMD above 100 KVA			
1	Up to 50000 units	451.3	326.68	
2	50001-500000 units	1333.1	1198.77	
3	Above 500000 units	2738.2	2958.46	
НТВ	Ferro Metallurgical/SteelMelting/ Steel Rolling/Power Intensive			
1	First - 300 units/KVA	264.5	142.41	
2	301-500 units/KVA	98.4	61.40	
3	Above 500 units/KVA	20.9	247.15	
G	Temporary Supply	0.0	2.18	
	Total	5190.4	5225.2	

Commission has approved the energy sales of 5225.2 million units as reasonable and approves the same for FY 2013-14.

7.4 Intra-State Transmission & Distribution Loss

Petitioner's submission

The petitioner has submitted that significant reduction in transmission & distribution losses is achieved. The petitioner further submitted 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.

The petitioner has further submitted that during FY 11-12, the ED-DNH had been able to achieve T&D loss level of 4.94%. 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.

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.

The ED-DNH brought in the notice of the Commission that the T&D losses of the Dadra & Nagar Haveli are one of the lowest in the country. Therefore it's quite difficult to reduce losses by more than 0.1% per annum 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.

Commission's analysis

The Commission in its order for the FY 2012-13 had approved a target for the T&D loss at 6.25%; however the petitioner owing to the overachievement in FY 2011-12 has projected an aggressive T&D targets for FY 2012-13 and FY 2013-14. As discussed in pars 6.4 and 5.4 of this order; Commission feels that the loss levels targeted by the petitioner are very aggressive but not un-achievable in view of the typical consumer mix of UT of Dadra and Nagar Haveli; therefore keeping in view the loss level trajectory proposed by the petitioner with a reduction of 0.1% from 4.80% to 4.70% for FY 2013-14.

Commission has therefore considered the reduction of 0.10% in the T&D loss level considered under Review of ARR of FY 2012-13 and considers the T&D loss level at 4.70% as reasonable and approves the same for FY 2013-14.

7.5 Inter-State Transmission Loss

Petitioner's submission

The petitioner has submitted that the 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

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transmission losses have been applied on the gross power purchase for FY 12-13 and FY 13-14 respectively.

Commission's view

The Commission has considered the recent 52-week moving average of regional losses available and found the inter-state transmission losses to be 3.55% for FY 2013-14.

The Commission considers inter-state transmission losses of 3.55% for FY 2013-14 as reasonable and approves the same for FY 2013-14 and same will be subject to further consideration at the time of true-up when actual data becomes available.

7.6 Energy Requirement

Petitioner's submission

The petitioner has submitted the energy requirement for FY 2013-14, based on the projected sales power purchase quantum and estimated losses for FY 2013-14. The petitioner has submitted that the overall energy sales to various categories are estimated to grow at approximately 10.00% each year during FY 13-14. Thus, the overall energy requirement is projected to be 5,612.82 MU in FY 13-14 respectively, an increase of around 9.50% each year.

The petitioner has estimated energy requirement of the Dadra & Nagar Haveli for FY 13-14 increased by approximately 8.15%.

Commission's analysis

The Commission has approved the T&D losses and the inter-state transmission losses as elaborated in the foregoing paragraphs. The Energy requirement for the FY 2013-14 is drawn based on the approved inter-state and intra-state transmission & distribution losses and the approved energy sales. The gross energy requirement approved for FY 2013-14 is shown in the table below.

Table 7.6.1: Energy Requirement approved by the Commission and actuals submitted by the petitioner for FY 13-14 (in Million Units)

		2013-14		
Sr. No.	Particulars	Petitioner's submission	Approved	
1	2	3	4	
A)	ENERGY REQUIREMENT (in Mus)			

		201	3-14
Sr. No.	Particulars	Petitioner's submission	Approved
1	2	3	4
1	Energy sales within the State/UT (in Mus)	5190.39	5225.22
2	Energy sales to Agriculture consumers	(included in	(included in total
	(included in total sales) (in Mus)	total sales)	sales)
2	Total sales within the State/UT	5190.39	5225.22
3	Distribution losses		
i)	%	4.70%	4.70%
ii)	MU	255.98	257.70
4	Energy required at State Periphery for Sale to Retail Consumers	5446.37	5482.92
5	Add: Sales to common pool consumers/ UI (in Mus)	291.47	0.00
Α	Sales outside state/UT : UI/(in Mus) - NET	291.47	
В	Sales (in Mus)		
	a) To electricity traders (in Mus)	-	-
	b) Through PX (in Mus)	-	-
С	Sales to other distribution licensees		
	a) Bilateral Trade (in Mus)	-	-
	b) Banking Arrangement (in Mus)	-	1
6	Total Energy Requirement for State (5+6)	5737.84	5482.92
7	Transmission losses		
i)	%	3.61% ²⁸	3.55%
i)	MU	214.86	201.97
В)	ENERGY REQUIRED AT GENERATOR END	5952.70	5684.90

7.7 Energy Balance

Petitioner's submission

Based on the data on estimated & projected sales and purchase obtained, an Energy Balance has been prepared for FY 2013-14 as shown below

Though the petitioner has considered the interstate transmission loss level of 3.56% as part of projections for FY 2013-14 but after consideration of 214.86 million units proposed to be lost in transmission system as submitted by the petitioner, the loss level derived at 3.61% for FY 2013-14.

Commission's analysis

Based on the Energy requirement, Energy availability and Transmission & Distribution Losses for FY 2013-14 as discussed in earlier paras and the following para 7.8. The Energy balance for FY 2013-14 is presented below.

Table 7.7.1: Energy Balance for FY 2013-14 as approved by the Commission

		2013-14		
Sr. No.	Particulars	Petitioner's submission	Approved	
1	2	3	4	
A)	ENERGY REQUIREMENT (in Mus)			
1	Energy sales within the State/UT (in Mus)	5190.39	5225.22	
2	Energy sales to Agriculture consumers (included in total sales) (in Mus)	(included in total sales)	(included in total sales)	
2	Total sales within the State/UT	5190.39	5225.22	
3	Distribution losses			
i)	%	4.70%	4.70%	
ii)	MU	255.98	257.70	
4	Energy required at State Periphery for Sale to Retail Consumers	5446.37	5482.92	
5	Add: Sales to common pool consumers/ UI (in Mus)	291.47	0.00	
Α	Sales outside state/UT : UI/(in Mus) – NET	291.47		
В	Sales (in Mus)			
	a) To electricity traders (in Mus)	-	-	
	b) Through PX (in Mus)	-	-	
С	Sales to other distribution licensees			
	a) Bilateral Trade (in Mus)	-	-	
	b) Banking Arrangement (in Mus)	-	-	
6	Total Energy Requirement for State (5+6)	5737.84	5482.92	
7	Transmission losses			
i)	%	3.61% ²⁹	3.55%	
i)	MU	214.86	201.97	

Though the petitioner has considered the interstate transmission loss level of 3.56% as part of projections for FY 2013-14 but after consideration of 214.86 million units proposed to be lost in transmission system as submitted by the petitioner, the loss level works out to 3.61% for FY 2013-14.

		201	3-14	
Sr. No.	Particulars	Petitioner's submission	Approved	
1	2	3	4	
В)	ENERGY REQUIRED AT GENERATOR END	5952.70	5684.90	
1	Net Availability (Share from CGS) (in MUs)	3815.08	4187.45	
а	NTPC	3815.08	4187.45 ³⁰	
2	Power Available from other sources (in MUs)	2136.69	1497.44	
а	NSPCL	1135.74	935.48	
b	NPCIL	416.91	388.50	
С	KHSTPP – II	18.97	16.70	
d	TATA Power (Haldia)	565.06	0.00	
е	Renewable Energy Sources	0.00	156.76	
h	Power Exchange (Buy)	0.00	0.00	
i	Bilateral Trade (Buy)	-	-	
j	RPO (Buy)	-	-	
k	UI Overdrawl	-	-	
I	Banking Arrangements (Buy)	-	-	
6	Gross Power Purchase Quantum (in MUs)	5951.77	5747.37	

7.8 Power Purchase Quantum and Cost

Petitioner's submission

Power Purchase Quantum

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

³⁰ Commission has considered the firm allocation and allocation from the unallocated quota from the above stations except Kahalgaon STPS-II as per the notification of the Western Region Power Committee vide WRPC/Comml-I/6/Alloc/2012/7576 dated July 30' 2012. The allocation for Kahalgaon STPS-II is considered as per the notification of the Eastern Region power Committee w.e.f. March 1'2012; while petitioner has considered the notification no. WRPC/Comml-I/6/Alloc/2012/684 dated 24thMay 2012 of WRPC

The petitioner for the purpose of estimation of the power availability during 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

The Petitioner has allocation from Western as well as Eastern region from coal, gas and nuclear power stations. However, for meeting the demand-supply gap during the peak hours, the Petitioner has relied on energy exchange and over-drawal from the Grid (UI). In FY 11-12, energy drawn from UI and energy exchange formed 5% of the total availability. 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; The UT of Dadra & Nagar Haveli has allocated share in Central Sector Generating Stations (CSGS) of NTPC, Nuclear Power Corporation of India Ltd (NPCIL), and NTPC Sail Power Company Ltd (NSPCL). The energy allocation from various generating stations is summarized in table below:

Table 7.8.1: Energy Allocation from Central Generating Stations as submitted by the petitioner

Name of the plant	Weighted average total allocation (MW)
KSTPP	69.21
KSTPS-III	24.00
VSTPP-I	49.25
VSTPP-II	39.69
VSTPP- III	42.14
KAWAS	80.99

Name of the plant	Weighted average total allocation (MW)
JGPP	58.46
Sipat – II	40.13
Sipat – I	63.56
KHSTPP – II	3.00
NPCIL – KAPS	12.80
NPCIL - TAPP 3&4	46.45
Total	530.19

Further, Additional power allocation of 37.5 MW from Sipat – II has been considered for FY 12-13.

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.

Moreover, power allocation of 40.13 MW from Sipat – II has been considered for FY 12-13. 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.

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.

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/CommI-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.

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. 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 JERC.

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. 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. Auxiliary consumption of 9% and 3% has been considered for coal and gas based generating stations, respectively.

The petitioner has submitted that ED-DNH has purchased 80,000 non solar renewable certificates at a cost of Rs. 14.50 Crores 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.

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 7.8.2: Power Purchase for FY 13-14 as submitted by the petitioner (in million units)

Source (MUs)	FY 13 -14 Projected
KSTPP I & II	497.32
KSTPS III	179.85
VSTPP-I	330.25
VSTPP-II	273.36

Source (MUs)	FY 13 -14 Projected
VSTPP- III	303.33
VSTPP- IV	179.36
KAWAS	416.59
JGPP	331.16
Sipat- I	440.98
Sipat – II	272.78
NTPC-SAIL Bhilai	1135.74
Mauda-I	135.42
Mauda-II	180.57
Subtotal	4676.71
Others	
RGPPL	274.11
Tata Power – Haldia	565.06
Subtotal	839.17
Eastern Region	
KHSTPP-2	18.97
Subtotal	18.97
NPCIL	
KAPS	89.72
TAPS	327.19
Subtotal	416.91
Power purchase from Other Sources	
Bilateral	0.00
Power purchase from Indian E. Exchange	0.00
Banking	0.00
UI	0.00
Subtotal	150.84
External Losses	214.86
Total Power Purchase	5736.91

Power Purchase Cost

The cost of purchase from the central generating stations for FY 13-14 is estimated based on the following assumptions:

- 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 Hon'ble CERC for computation of tariff for Central Generating Stations and recent increase in fix charges of the NTPC power plants by Hon'ble 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.

Transmission and Other Charges

- 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.
- 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.
- 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. The Total Power Purchase cost from various sources for FY 13-14 including transmission cost is summarized in Table below:

Table 7.8.3: Power Purchase Cost for FY 13-14 submitted by petitioner (in Rs. Crores)

			License		VC				
Sr.		Capacity	e share	Purchase	(Ps/	FC (Rs.	VC	Others	Total
No.	Source	(MW)	(%)	(MU)	Unit)	Cr)	(Rs. Cr)	(Rs. Cr)	(Rs. Cr)
1	2	3	4	5	6	7	8	9	10
ı	NTPC Stations								
1	KSTPP 1&2	2,100	3%	497.32	102	30.73	50.56	6.24	87.53
2	KSTPS 3	500	5%	179.85	112	29.61	20.21	2.51	52.33
3	VSTPP-I	1,260	4%	330.25	151	22.57	49.76	18.99	91.32
4	VSTPP-II	1,000	4%	273.36	141	22.60	38.43	10.90	71.93
5	VSTPP- III	1,000	4%	303.33	141	37.55	42.86	8.59	89.00
6	VSTPP- IV	500	10%	179.36	115	60.00	20.71	0.00	80.71
7	KAWAS	656	12%	416.59	252	65.48	105.14	0.00	170.62
8	JGPP	657	9%	331.16	234	54.96	77.55	0.94	133.45
9	Sipat-I	1,320	5%	440.98	193	58.21	85.27	6.09	149.57
10	Sipat-II	1,000	4%	272.78	147	38.68	39.98	0.00	78.66
11	NSPCL - Bhilai	500	33%	1,135.74	260	219.01	295.52	38.02	552.55
12	Mauda-I	500	5%	135.42	228	30.00	30.94	0.00	60.94
13	Mauda-II	500	5%	180.57	278	31.00	50.25	0.00	81.25
14	Subtotal	11,493.5		4,676.71	194	700.40	907.20	92.26	1,699.86

			License		VC				
Sr.		Capacity	e share	Purchase	(Ps/	FC (Rs.	VC	Others	Total
No.	Source	(MW)	(%)	(MU)	Unit)	Cr)	(Rs. Cr)	(Rs. Cr)	(Rs. Cr)
1	2	3	4	5	6	7	8	9	10
		9							
II	Eastern Region								
1	KHSTPP-II	1,000	0.35%	18.97	209	2.47	3.96	0.26	6.70
2	Subtotal	1,000		18.97	209	2.47	3.96	0.26	6.70
Ш	NPCIL								
1	KAPPS	440	3%	89.72	254	0.00	22.82	0.00	22.82
2	TAPP 3&4	1,080	4%	327.19	287	0.00	93.93	0.08	94.01
3	Subtotal	1,520		416.91	280	0.00	116.75	0.08	116.83
IV	Others								
1	RGPPL	1,967	2%	274.11	241	39.17	66.07	0.00	105.25
2	Tata Power - Haldia	120	58%	565.06	388	0.00	219.11	0.00	219.11
4	Subtotal	2,087		839.17	340	39	285	0	324
	Power purchase								
IV	from Other Sources								
	Power purchase								
	from Indian E.			0.00	0.00	0.00	0.00	0.00	0.00
1	Exchange								
2	UI			0.00	0.00	0.00	0.00	0.00	0.00
3	RPO			0.00	0.00	0.00	25.24	0.00	25.24
4	Subtotal			0.00	0.00	0.00	25.24	0.00	25.24
	Misc. Arrears								0.00
	Gross Power	16,101		5,951.77		742.04	1,338.34	92.61	2,172.99
	Purchase Cost	10,101				7 1210 1	_,555.5	52.62	_,_,_,
	External Losses			214.86					
	Net Power Purchase								
	Cost			5736.91					
	PGCIL CHARGES								128.63
	WRLDC charges								7.48
	Reactive charges								6.94
	MSTCL								3.75
	Others								0.89
	Grand Total of								2,320.68
	Charges								_,0_0.00

Commission's Analysis of Power Purchase Quantum and Cost

Power Purchase Quantum and Cost for FY 2013-14

Central Generating Stations – NTPC Ltd.

The petitioner has firm allocation in the Central Sector Generating Stations of NTPC from the following stations

- Korba Super Thermal Power Station I, II and III.
- Vindhyachal Super Thermal Power Station I, II, III & IV.
- Kawas Gas Power Station
- Gandhar Gas Power Station
- Sipat Super Thermal Power Station- I &II
- Ratnagiri Gas and Power
- Kahalgaon Super Thermal Power Station II (Eastern Region)
- Mauda Thermal Power Station

The Commission while estimating the energy availability from the above stations has considered the following assumption:

- Allocation of Share: The Commission has considered the firm allocation and allocation from the unallocated quota from the above stations except Kahalgaon STPS-II as per the notification of the Western Region Power Committee vide WRPC/Comml-I/6/Alloc/2012/7576 dated July 30' 2012. The allocation for Kahalgaon STPS-II is considered as per the notification of the Eastern Region power Committee w.e.f. March 1'2012.
- Gross Energy Availability: The Commission has estimated the gross energy availability from
 the existing NTPC stations based on the installed capacity and the average Plant Load Factor
 for the past two years (FY 2011-12 and FY 2012-12-Till January). The Net energy sent out has
 been considered after considering the applicable auxiliary consumption as per the Central
 Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009.

- New Station: Further, it is also pertinent to mention here that the allocation from VSTPS-IV and Mauda Thermal Power Station has been considered (as per petitioner's submission) as per their schedule COD in October 2013 from VSTPS-IV (50 MW) and additional allocation of 25 MW from Mauda TPS-II from April 2013 and 25 MW from Mauda TPS-I from July 2013. The Commission has considered the PLF at 85% for new station which is equivalent to the Normative Availability specified in the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009.
- **Energy Available to the Petitioner:** The effective share from the stations is applied on the energy sent out to arrive at the energy available for the petitioner from respective stations.

The Commission has considered the following assumptions to arrive at the Power purchase cost for the FY 2013-14 from the NTPC stations:

- Fixed Charges: The fixed charges are considered based on the formula specified for the stations in the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009. The Annual Fixed Charges for each station have been taken as per the latest Tariff orders for the respective stations and for new stations, the fixed charges have been computed with the charges approved for similar station.
 - Variable Charges: The Commission has considered the average variable cost for the period July 2012 to September 2012 submitted by the petitioner (verified from the bills) for consideration of the per unit variable charges for the FY 2013-14 and variable charges for new stations have been computed with the charges for similar station and as per the submission made by the petitioner.

Accordingly, the Commission approves the following availability from NTPC stations based on the merit order dispatch principles

Table 7.8.4: Approved Power purchase quantum from NTPC stations under merit order dispatch

Sr. No.	_	Capaci ty (MW)	Average	Weig Aver		Gross	Auxiliary	Net	Purchas	PGCIL	Energy Available
	Source		PLF (%)	%	MW	Generatio n (MUs)	Consump tion (%)	Generati on (MUs)	e (MUs)	Losses (MUs)	at Periphery (MUs)
1	2	3	4	5	6	7	8	9	10	11	12
Α	Central Secto	or Power S	Stations								
ı	NTPC										
	KSTPS-I	2,100	84.26	3.30%	69.27	15,499.55	6.50%	14,492.08	478.05	16.98	461.07
	VSTPS - I	1,260	90.07	3.91%	49.29	9,941.57	8.50%	9,096.53	355.87	12.64	343.23

Sr.	Source	Capaci	Average	Weighted Average		Gross Generatio	Auxiliary Consump	Net	Purchas	PGCIL	Energy Available
No.		ty (MW)	PLF (%)	%	MW	Generatio n (MUs)	tion (%)	Generati on (MUs)	e (MUs)	Losses (MUs)	at Periphery (MUs)
1	2	3	4	5	6	7	8	9	10	11	12
	VSTPS - II	1,000	90.07	3.97%	39.73	7,890.13	6.50%	7,377.27	293.06	10.41	282.65
	VSTPS -III	1,000	90.07	4.22%	42.17	7,890.13	6.50%	7,377.27	311.06	11.05	300.01
	VSTPS -IV	500	85.00	10.00%	50.00	1,856.40	6.50%	1,735.73	173.57	6.17	167.41
	KGPP	656	70.68	12.34%	80.99	4,062.89	3%	3,941.00	486.41	17.28	469.13
	GGPP	657	70.53	8.89%	58.46	4,061.86	3%	3,940.00	350.37	12.45	337.93
	SIPAT	1,000								9.85	
	Stage 2		84.29	4.02%	40.17	7,383.37	6.50%	6,903.45	277.28		267.43
	KORBA - III	500								5.89	
	(KSTPS -										
	VII)		84.26	4.80%	24.02	3,690.37	6.50%	3,450.50	165.77		159.88
	SIPAT -	1,320								23.60	
	Stage I		85.00	7.23%	95.40	9,828.72	6.50%	9,189.85	664.16		640.57
	RGPPL	1,967	93.07	2.00%	39.34	16,036.82	3%	15,555.71	311.11	11.05	300.06
	NTPC	500								6.22	
	Mauda - II		85.00	5.00%	25.00	3,723.00	6.00%	3,499.62	174.98		168.76
	NTPC	500								5.18	
	Mauda - I		85.00	5.00%	25.00	3,100.80	6.00%	2,914.75	145.74		140.56
II	Eastern Region										
	KHSTPP - II	1,500	67.98	0.20%	3.00	8,932.57	6.50%	8,351.95	16.70	0.59	16.11

According to the approved energy the commission has approved the following cost from the NTPC stations:

Table 7.8.5: Approved Power purchase Cost from NTPC stations for FY 2013-14

Sr. No.	Source	Purchase (MUs)	Fixed Charges (Rs. Crores)	Variable Charges (Ps/kWH) - Average of July, August and Sep 2012	Variable Charges (Rs. Crores)	Total Cost (Rs. Crores)
1	2	3	4	5	6	7
Α	Central Sector Power Stations					
ı	NTPC					
	KSTPS-I	478.05	27.23	106	50.91	78.14
	VSTPS – I	355.87	24.20	154	54.69	78.88
	VSTPS – II	293.06	19.96	145	42.52	62.49
	VSTPS –III	311.06	36.15	145	45.14	81.29
	VSTPS –IV	173.57	19.88	145	25.19	45.07
	KGPP	486.41	61.99	245	119.19	181.18

	GGPP	350.37	52.34	243	85.27	137.61
	SIPAT Stage 2	277.28	37.64	140	38.72	76.36
	KORBA - III (KSTPS - VII)	165.77	25.66	106	17.58	43.24
	SIPAT - Stage I	664.16	112.60	155	103.28	215.88
	RGPPL	311.11	38.39	274	85.24	123.63
	NTPC Mauda – II	174.98	32.00	228	39.98	71.98
	NTPC Mauda – I	145.74	32.00	278	40.56	72.56
II	Eastern Region					
	KHSTPP – II	16.70	2.27	235	3.92	6.19

In addition to the existing stations of NTPC, the petitioner has submitted the allocation from upcoming plant of NTPC at Mauda, Maharashtra and VSTPS-IV

- Energy Availability: The availability of Mauda TPS-I, Mauda TPS-II and VSTPS-IV has been considered as submitted by the petitioner from the first quarter of FY 2013-14.
- **Fixed and Variable Charges**: The variable charges for Mauda TPS-II of Rs. 2.28 per unit and Mauda TPS-I at Rs. 2.78 per unit and fixed charges of Rs. 32 Crores as submitted by the petitioner have been considered. The variable charges of VSTPS-IV have been computed with the charges for similar station.

Central Generating Stations – Nuclear Power Corporation of India Limited

The petitioner has firm allocation in the Central Sector Generating Stations of NPCIL from the following stations

- Kakrapara Atomic Power Station (KAPS)
- Tarapur Atomic Power Station (TAPS)

The Commission while estimating the energy availability from the above stations has considered the following assumption:

- Allocation of Share: The Commission has considered the firm allocation and allocation from the unallocated quota from the above stations as per the notification of the Western Region Power Committee vide WRPC/Comml-I/6/Alloc/2012/7576 dated July 30' 2012.
- Gross Energy Availability: The Commission has estimated the gross energy availability from the existing NPCL stations based on the installed capacity and the average Plant Load Factor for the past two years (FY 2011-12 and FY 2012-13-Till January) as recorded

by CEA in its monthly generation reports. The Net energy sent out is considered after reducing the recent available levels of auxiliary consumption.

• **Energy Available to the Petitioner:** The effective share from the stations is applied on the energy sent out to arrive at the energy available for the petitioner from respective stations.

The Commission has considered the following assumptions to arrive at the single part tariff for the NPCIL stations during FY 2013-14:

- Variable Charges: The Commission has considered the average variable cost for the period July 2012 to September 2012 submitted by the petitioner for consideration of the per unit variable charges for the FY 2013-14.
- **Merit order Dispatch**: The Commission has considered the nuclear plants as must run and has not subjected them for merit order dispatch.

Accordingly, the Commission approves the following availability from NPCIL stations based on the merit order dispatch principles.

Table 7.8.6: Approved Power purchase quantum from NPCIL stations under merit order dispatch

Sr. N o.	Source	Capacity (MW)	Average PLF (%)	Ave	ghted erage	Gross Generati on (MUs)	Auxiliary Consum ption (%)	Net Generat ion	Purcha se (MUs)	PGCIL Losses (MUs)	Energy Available at Periphery
				%	MW			(MUs)			(MUs)
1	2	3	4	5	6	7	8	9	10	11	12
II	NPCIL										
	KAPS	440	92.92	2.91%	12.80	3,581.51	10%	3,223.36	93.73	3.33	90.40
	TAPS	1,080	80.49	4.30%	46.45	7,615.00	10%	6,853.50	294.76	10.47	284.29

According to the approved energy the commission has approved the following cost from the NPCIL stations:

Table 7.8.7: Approved Power purchase Cost for NPCIL Stations

Sr. No.	Source	Purchase (MUs)	Fixed Charges (Rs. Crores)	Variable Charges (Ps/kWH) - Average of July,Aug. &Sep. 2012	Variable Charges (Rs. Crores)	Total Cost (Rs. Crores)
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1	2	3	4	5	6	7
Α	Central Sector Power					
	Stations					
Ш	NPCIL					
	KAPS	93.73	-	236	22.11	22.11
	TAPS	294.76	-	283	69.54	69.54

➤ NSPCL

The petitioner has firm allocation from the following station of NSPCL

• NSPCL - Bhilai

The Commission has considered the following assumptions to arrive at the Power purchase cost for the FY 2013-14 from the NSPCL stations:

- **Fixed Charges:** The fixed charges are considered based on the formula specified for the stations in the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009.
- Variable Charges: The Commission has considered the average variable cost for the period July 2012 to September 2012 submitted by the petitioner for consideration of the per unit variable charges for the FY 2013-14.
- Merit Order Dispatch: Further, the NSPCL stations have been subjected to merit order dispatch and accordingly the power purchase quantum and variable cost has been approved. However the fixed charges are approved for full allocation.

Accordingly, the Commission approves the following availability from NSPCL stations based on the merit order dispatch principles

Energy Weighted Auxilli Gross Availabl **PGCIL Average Purcha** ary Net Sr. Capacity **Average** Generati e at Source Consu Generatio Losses se (MW) **PLF (%)** No. on Periphe mptio n (MUs) (MUs) (MUs) (MUs) ry MW% n (%) (MUs) 3 1 6 8 10 12 11 В Other Generating Stations **NSPCL** 1 Bhilai 500 9.00% 33.24 91.44 32.80% 164.00 4,005.07 3,644.62 935.48 902.25

Table 7.8.8: Approved Power purchase quantum and Cost from NSPCL-Bhilai

Note: Partial availability is considered based of merit order dispatch

Sr.	Source	Purchase (MUs)	Fixed Charges (Rs. Crores)	Variable Charges (Ps/kWH) - Average of July,Aug. &Sep. 2012	Variable Charges (Rs. Crores)	Total Cost (Rs. Crores)
1	2	3	4	5	6	7
ı	NSPCL – Bhilai	935.48	181.89	243	227.57	409.46

> EMCO Energy Limited

The petitioner has contracted Power from the TATA Power trading for power from Haldia Plant till March 2013 and has not sought any extension in the said agreement for FY 2013-14. The Petitioner has submitted that the Power purchase agreement is proposed to be executed with EMCO Energy Limited Power Plant for the estimated energy availability of 279 million units. Commission vide order dated February 19'2013 had approved the PPA to be entered between Electricity Department of DNH and EMCO Energy Limited for procurement of 200 MW power on long term basis as per the case-I bidding guidelines of Ministry of Power. Commission has considered the power from EMCO Energy Limited under the merit order dispatch principles. As submitted by the petitioner, it helps ED-DNH to clear all the pending applications since 2008; therefore net effect of increase in energy consumption that shall arise after disposing of pending applications; shall be considered at the time of review/truing up of ARR of FY 2013-14. The Commission for the purpose of ARR of FY 2013-14 has not considered the energy availability from this source, due to immense availability of power from central generating stations to meet the estimated power requirements of the utility for the purpose of ARR of FY 2013-14. It is further stated that the net effect of increase in energy consumption after disposing of pending applications shall be considered at the time of review/truing up of ARR of FY 2013-14.

Renewable Energy Obligation

As per JERC (Procurement of Renewable Energy) Regulations 2010 clause 1 sub clause (1)

Each distribution licensee shall purchase electricity (in kWh) from renewable energy sources, at a defined minimum percentage of the total consumption of all the consumers in its area during a year.

The Petitioner has to purchase 3% of total energy purchase from renewable sources for FY 2013-14 including 0.40% for Solar and 2.60% for Non-Solar. The petitioner in its petition (compliance to directives) has submitted that it is considering procuring renewable energy to meet its renewable energy obligation and has initiated the procurement through competitive bidding route.

The Commission has therefore considered the submission of the petitioner and accordingly allowed the procurement of renewable energy as proposed by the petitioner.

Variable Charges Fixed Variable Total Charges Sr. **Purchase** (Paisa/KWh) Charges Source Cost (Rs No. (MUs) (Rs (Rs Crores) Crores) Crores) D **Renewable Energy Sources** 74.83 74.83 156.76 (2.60% for - Non Solar) 135.86 400 54.34 54.34 (0.40% for Solar) 980 20.90 20.48 20.48

Table 7.8.9: Approved Power purchase quantum and Cost from Renewable Energy Sources

Transmission Charges (PGCIL, NRLDC F&C and Reactive Energy Charges)

The Commission has considered the PoC rates as specified by the Central Electricity Regulatory Commission vide its order no L-1/44/2010- CERC dated 30.11.2012 applicable for October 2012 to March 2013 for approving the Transmission charges for the FY 2013-14. Accordingly the Transmission charges for usage of PGCIL network is approved at **Rs 188.2 Crores.**

The petitioner also utilizes the network of MSTCL for wheeling of power scheduled from different stations. The Commission therefore approves the petitioner's estimates of **Rs 11.58 Crores** as charges towards MSTCL, reactive charges, other charges as proposed by the petitioner. Further, the Commission also allows the petitioner's claim of other charges for FY 2013-14 including SLDC Charges, WRLDC charges amounting to **Rs 7.48 Crores**.

Accordingly the total Transmission charges approved for the FY 2012-13 is Rs. 207.27 Crores.

Power Purchase Cost Approved

For determining the power purchase cost, merit order dispatch principles have been applied. The must-run stations have been assumed at the top of the merit order and variable cost incurred for meeting the energy requirement within the state has been calculated from the plants at the top of the merit order.

In accordance with the foregoing paragraphs the Commission has approved the following Power Purchase Cost.

Table 7.8.10: Power Purchase cost approved for FY 2013-14 after considering MOD principles

Sr. No.	Source	Energy Available at Periphery (MUs)	Fixed Charges (Rs. Crores)	Variable Charges (Ps/kWH) - Average of July, August and Sep 2012	Variable Charges (Rs. Crores)	Total Cost (Rs. Crores)
1	2	3	4	5	6	7
	0					
A	Central Sector Power Stations NTPC	4,039	520		748	1,268
-	KSTPS-I	-		106		_
		461.07	27.23		50.91	78.14
	VSTPS - II	343.23	24.20	154 145	54.69	78.88 62.49
	VSTPS - III	282.65	19.96 36.15	145	42.52	
	VSTPS -IV	300.01 167.41	19.88	145	45.14 25.19	81.29 45.07
	KGPP	469.13	61.99	245	119.19	181.18
	GGPP	337.93	52.34	243	85.27	137.61
	SIPAT Stage 2	267.43	37.64	140	38.72	76.36
	KORBA - III (KSTPS - VII)	159.88	25.66	106	17.58	43.24
	SIPAT - Stage I	640.57	112.60	155	103.28	215.88
	RGPPL	300.06	38.39	274	85.24	123.63
	NTPC Mauda - II	168.76	32.00	228	39.98	71.98
	NTPC Mauda - I	140.56	32.00	278	40.56	72.56
	NIT CIVICUU I	140.50	32.00	270	40.50	72.30
П	NPCIL	374.70			91.65	91.65
	KAPS	90.40		236	22.11	22.11
	TAPS	284.29		283	69.54	69.54
	-				30.0	30101
В	Other Generating Stations					
ı	NSPCL	918.36	184.16		231.50	415.65
	Bhilai	902.25	181.89	243	227.57	409.46
Ш	Eastern Region					
	KHSTPP - II	16.11	2.27	235	3.92	6.19
С	Power purchase from other sources	151.19			74.83	74.83
	(2.60% for - Non Solar)	131.03		400	54.34	54.34
	(0.40% for Solar)	20.16		980	20.48	20.48
	Power purchase from Indian E. Exchange					
	UI overdrawl					
D	Power Purchase Cost	5,482.92	704.20		1,146.23	1,850.43
_		2,12=12.2			_,_ :::=3	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,

Sr. No.	Source	Energy Available at Periphery (MUs)	Fixed Charges (Rs. Crores)	Variable Charges (Ps/kWH) - Average of July, August and Sep 2012	Variable Charges (Rs. Crores)	Total Cost (Rs. Crores)
1	2	3	4	5	6	7
E	OTHER CHARGES					
	PGCIL Transmission Charges (POC Charges WR + SR)					188.22
	WRLDC charges					7.48
	MSTCL - Wheeling Charges, reactive charges, reactive charges, others,					11.58
F	Total	5,483	704		1,146	2,058

Further, any variation on account of Fuel and Power Purchase cost shall be calculated as per the formula specified by the Commission separately and any impact shall be passed directly to the consumers. The formula will be applicable from FY 2013-14.

The licensee will compute fuel and power procurement cost variations on quarterly basis and adjustment shall be made in consumer bills starting after a month following the end of the quarter based on the Fuel & Power Purchase Cost Adjustment (FPPCA) formula notified separately by the Commission. For the purpose of calculation using FPPCA formula notified by the Commission, the approved per unit cost of power purchase (R_{Approved}) for use in the FPPCA formula (paisa per unit) is 325 paisa per unit for FY 2013-14. The approved per unit cost of power purchase for FY 2013-14 to be considered in the FPPCA formula excludes transmission charges of PGCIL,SLDC charges, RLDC charges and charges for reactive energy.

7.9 Operation and Maintenance Expenses Petitioner's Submission

The petitioner has submitted that the 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.

Summary of the past three years operation and maintenance expense is summarized in table below:

 Year
 O&M Expenses

 Actual
 FY 09-10
 6.34

 FY 10-11
 6.56

 FY 11-12
 11.83

Table 7.9.1: Operation & Maintenance Expense of previous years (Rs. Crores)

The total O&M expense for FY 11-12 was Rs. 11.83 Crores as compared with FY 10-11 total O&M expense of Rs. 6.56 Crores. The increase in operation and maintenance cost in FY 11-12 was primarily due to increase in Employee and R&M expenses.

Commission's Analysis

Commission has considered the submission made by the petitioner in this regard and has accordingly approved the O&M expenses.

7.9.1 Employee Expenses

Petitioner's Submission

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. However the Petitioner does not maintain cost related to leave salary contribution and pension of the employee in the employee cost. Therefore, the Petitioner will claim these expenses relating to the employee cost at an appropriate time when the respective cost items become payable.

Based on the various expense head related to employee booked during six months of FY 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 annum

published by the Office of Economic Adviser, Government of India. 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.

ED-DNH has prayed to the Commission that salaries/employee cost increase should be considered as an uncontrollable factor specially factors like DA/Basic hike through Government, revision through 6th Pay Commission etc. Therefore, ED-DNH requested the Hon'ble Commission to approve the employee costs as projected.

Commission's Analysis

As per the regulation 27 of JERC tariff regulations 2009

Quote

27. Operation and Maintenance Expenses

- 1) 'Operation & Maintenance expenses' or 'O&M expenses' shall mean & include repair and maintenance (R&M) expenses, employee expenses and administrative & general (A&G) expenses including insurance.
 - While determining the O&M expenses for generation functions within the State, the Commission shall be guided, as far as feasible, by the principles and methodologies of Hon'ble CERC on the manner, as amended from time to time.
- 2) While determining the O&M expenses for transmission functions within the State, the Commission shall be guided, as far as feasible by the principles and methodologies specified by Hon'ble CERC on the matter, as amended from time to time:
 - Provided further that the Commission may, if it considers it just, practical and proper considering the size of the total transmission system of, and the quantum of electricity handled by, an integrated utility, treat its transmission system as an integral part of its distribution system itself.
- 3) O&M expenses for distribution functions shall be determined by the Commission as follows:
 - a) O&M expenses as approved by the Commission for the first time for a year shall be considered as base O&M expenses for determination of O&M expenses for subsequent years;
 - b) Base O&M expenses as above shall be adjusted according to variation in the rate of WPI per annum to determine the O&M expenses for subsequent year, where WPI is the Wholesale Price Index on April 1 of the relevant year;

- c) In case of unbundling of the Electricity Department and formation of separate distribution companies, the Commission will make suitable assessment of base O&M expenses of individual distribution companies separately and allow O&M expenses for subsequent years for individual companies on the basis of such estimation and above principle.
- 4) O&M expenses of assets taken on lease/hire-purchase and those created out of the consumers' contribution shall be considered in case the generating company or the licensee has the responsibility for its operation and maintenance and bear O&M expenses.
- 5) O&M expenses for gross fixed assets added during the year shall be considered from the date of commissioning on pro-rata basis.
- 6) O&M expenses for integrated utility shall be determined by the Commission on the norms and principles indicated above.

Unquote

As may be seen from para 6.8.1, Commission has considered Employee cost as Rs. 5.17 Crores for Review of ARR for FY 2012-13 for reasons explained therein. Taking Rs. 5.17 Crores as base for FY 2012-13 and applying escalation of 8.94³¹%, employee Cost for FY 2013-14 works out to Rs. 5.63 Crores. The latest WPI index till August 2012 has been used as available on the website of Economic Advisor, Ministry of Commerce and Industry for estimation of the increase in the average of WPI index from FY 2010-11 to FY 2011-12.

Commission considers the employee cost of Rs. 5.63 Crores as reasonable and approves the same for FY 2013-14.

7.9.2 Repair and Maintenance Expenses

Petitioner's Submission

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.

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³¹ As per the WPI index upto March 2012 as available on the website of Economic Advisor, Ministry of Commerce and Industry

The actual R&M expense for FY 11-12 for ED-DNH was Rs. 5.13 Crores. The revised estimate of R&M expense for FY 12-13 is Rs. 5.59 Crores. The estimated R&M expense for FY13-14 is Rs. 6.09 Crores. 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.

ED-DNH requested the Hon'ble Commission to approve the Repair & Maintenance 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.

Commission's Analysis

As may be seen from para 6.8.2, Commission has considered R&M expenses as Rs. 5.58 Crores for Review of ARR for FY 2012-13 for reasons explained therein. Taking Rs. 5.58 Crores as base for FY 2012-13 and applying escalation of 8.94³²%, the R&M expense works out to Rs. 6.08 Crores for FY 2013-14.

The Commission considers the R&M expenses of Rs. 6.08 Crores as reasonable and approves the same for FY 2013-14.

7.9.3 Administration and General Expenses

Petitioner's Submission

The 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

The actual A&G expense for FY 11-12 was Rs. 1.95 Crores. 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.

³² As per the WPI index upto March 2012 as available on the website of Economic Advisor, Ministry of Commerce and Industry

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. 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. 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 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 Crores in consideration of the above expenses.

Commission's Analysis

As may be seen from para 6.8.3, Commission has considered A&G expenses as Rs. 2.13 Crores for Review of ARR for FY 2012-13 for reasons explained therein. Taking Rs. 2.13 Crores as base for FY 2012-13 and applying escalation of 8.94³³%, the A&G expense works out to Rs. 2.32 Crores for FY 2013-14.

The Commission considers the A&G expenses of Rs. 2.32 Crores as reasonable and approves the same for ARR for FY 2013-14.

7.9.4 Summary of Operation and Maintenance Expenses

The overall summary of O&M expenditure estimated by the petitioner vis-à-vis approved by the Commission for FY 2013-14 is given below:

JOINT ELECTRICITY REGULATORY COMMISSION FOR THE STATE OF GOA and UNION TERRITORIES

³³ As per the WPI index upto March 2012 as available on the website of Economic Advisor, Ministry of Commerce and Industry

Table 7.9.4.1: Summary of Operation & Maintenance Expenses (in Rs. Crores)

		2013-14				
Sr. No.	Particulars	(Petitioner's submission)	Approved			
1	2	3	4			
1	Employee Expenses	5.63	5.63			
2	A&G Expenses	2.32	2.32			
3	R&M Expenses	6.08	6.08			
4	Sub-Total	14.03	14.03			
5	Less: Expenses Capitalized	-	-			
6	Total O&M Expenses	14.03	14.03			

7.10 Capital Expenditure and Capitalization

Petitioner's submission

The petitioner submitted the following:

Quote

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.

Unquote

As discussed in para 5.10, the petitioner has recently submitted the verified asset Registers as per the directives of Hon'ble Commission. However there are still certain anomalies explained therein especially absence of physical verification of assets.

The petitioner further submits that each year they draft 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. The petitioner has proposed the capital expenditure of Rs. 81.48 Crores for FY 2013-14, out of which the petitioner has projected the addition of Rs. 61.60 Crores in the Gross Fixed Assets during FY 2013-14.

Commission's analysis

Commission observes that the capital expenditure and the capitalization submitted by the petitioner for FY 2012-13 and FY 2013-14 and the requirement of maintaining the reliable supply for the consumers of UT of Dadra and Nagar Haveli

As per the Regulation 21, of JERC for the states of Goa and UTs (Terms and conditions for determination of Tariff), Regulation 2009 specifies that the licensee shall propose in their filings, a detailed capital investment plan, showing separately ongoing projects that will spill into the Ensuing Year and new projects (along with their justification) that will commence in the ensuing year. The petitioner had not submitted the capital investment plan as per the regulations and did not give the present status of the capital expenditure incurred/capitalized during past years. As discussed in para 6.10 of this order, for the purpose of this ARR computation, **Commission provisionally approves the capital expenditure of Rs. 81.48 Crores proposed by the petitioner for ARR for FY 2013-14.** A detailed statement of the capital expenditure incurred quarterly, the asset capitalized and added in the gross fixed assets upto 31.03.2014 on different dates during the year be provided for true-up.

This expenditure is being permitted as a special case to ensure the creation of infrastructure for adherence to Standard of Performance and Supply Code Regulations.

7.11 GFA and Depreciation

Petitioner's submission

The petitioner in ARR and tariff petition for FY 2013-14 had submitted that they had Rs. 475.10 Crores of Opening Gross Fixed Assets (GFA) in FY 12-13. ED-DNH has further proposed capital expenditure of Rs. 52.00 Crores 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 Crores have been estimated to be added in the GFA during FY 12-13. For FY 13-14, ED-DNH has proposed Rs. 81.48 Crores capital expenditure out of which Rs. 61.60 Crores estimated to be capitalized.

Further, the Petitioner has submitted the audited accounts for FY 2011-12 containing the audited value of opening gross fixed assets as on April 1'2011 along with the true-up petition for FY 2011-12 and has also submitted the Fixed Asset Registers showing the details of assets as on March 31'2012.

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

Table 7.11.1: Depreciation rate specified by Hon'ble CERC

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

Depreciation of Rs. 28.09 Crores for the FY 13-14 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 13-14.

Commission's analysis

As discussed in para 5.10 of this order, review order dated January 24'2013 and as per Regulation 26 of JERC for the states of Goa and UTs (Terms and conditions for determination of Tariff), Regulation 2009 depreciation shall be computed on historical cost of the assets including additions during the year. Since historical assets are on assumption basis, the Commission has therefore taken a pragmatic view and has allowed 50% of opening value of gross fixed assets as on April 1'2010 being the first year (FY 2010-11) for which ARR and tariff petition was filed by the petitioner, subject to adjustment in true-up depending upon the certificate to be submitted by September 30'2013.

As per the Regulation 26 of JERC (Terms and Conditions for Determination of Tariff) Regulations, 2009 specifies that depreciation for the assets shall be calculated annually at the rates specified by Hon'ble CERC from time to time. The depreciation rates for distribution assets as specified by Hon'ble CERC vide Appendix-III (Depreciation schedule of Hon'ble CERC (Terms and Conditions of Tariff) Regulations,

2009 has been used to calculate the depreciation. The depreciation for the FY 2013-14 has been worked out at Rs. 17.97 Crores.

Table 7.11.2 : GFA & Depreciation submitted by the petitioner and approved in the review for FY 2013-14(in Rs. Crores)

		2013-14			
Sr. No.	Particulars	(Petitioner's submission)	Approved		
1	2	3	4		
1	Opening Value of Assets at the beginning of the year	521.62	320.17		
2	Additions during the year	61.60	61.60		
3	Gross Fixed Assets at the end of year	583.22	381.77		
4	Average Assets	552.42	350.97		
5	Average Rate of Depreciation				
6	Depreciation for the year	28.09	17.97		

Table 7.11.3: Calculation for working out the Depreciation for FY 2013-14(in Rs. Crores)

Sr. No.	Particulars	Value of assets at the beginning of FY 2013-14	Addition during FY 2013-14	Closing balance at the end of FY2013-14	Rate of Depreciation	Depreciation for FY 2013- 14
1	2	3	4	5	6	7
1	Plant & Machinery	306.87	61.60	368.47	5.28%	17.83
2	Buildings	3.54	-	3.54	3.34%	0.12
3	Vehicles	0.16	-	0.16	9.50%	0.02
4	Furniture and Fixtures	0.03	-	0.03	6.33%	0.00
5	Computers and Others	0.10	-	0.10	6.33%	0.01
6	Land	9.46	-	9.46	0.00%	-
7	Total	320.17	61.60	381.77		17.97

Commission considers the depreciation of Rs. 17.97 Crores as reasonable and approves the same for ARR of FY 2013-14.

7.12 Interest on Loan

Petitioner's submission

The petitioner in ARR and tariff petition for FY 2013-14 has submitted that 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.

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.

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.

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.

Commission's analysis

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

- (1) For existing loan capital interest and finance charges on loan capital shall be computed on the outstanding loans, duly taking into account the rate of interest and schedule of repayment as per the terms and conditions of relevant agreements.
- (2) Interest and finance charges on loan capital for new investments shall be computed on the loans, duly taking into account the rate of interest and the schedule of repayment as per the terms and conditions of relevant agreements. The rate of interest shall, however, be restricted to the prevailing Prime Lending Rate of the State Bank of India".

The ED DNH being an integrated utility in its present form as defined in Regulation 2(9) of the JERC (Terms and Conditions for Determination of Tariff) Regulations, 2009 as the ED DNH is not restructured and corporatized till date. Considering this an integrated utility and its entitlement to return on its capital base under the provisions of Schedule VI of the repealed Electricity (Supply) Act, 1948 vide provision under Regulation 23 of JERC (Terms and Conditions for Determination of Tariff) Regulations, 2009. The basic requirement for consideration of interest on loans the adequate information of the value of fixed assets of the utility in service (net fixed assets) at the beginning of such year and funding pattern as well as terms & conditions of funding of capital assets.

The Commission would like to place reliance on the Section 23 of the JERC Tariff regulations which is reproduced below:

Quote

23. Debt-Equity Ratio

For the purpose of determination of tariff, debt-equity ratio in case of existing, ongoing as well as new projects commencing after the date of notification of these Regulations shall be 70:30. Where equity employed is more than 30%, the amount of equity for the purpose of tariff shall be limited to 30% and the balance amount shall be considered as loan. Where actual equity employed is less than 30%, the actual debt and equity shall be considered for determination of tariff:

Provided that the Commission may, in appropriate cases, consider equity higher than 30% for the purpose of determination of tariff, where the generating company or the licensee is able to establish to the satisfaction of the Commission that deployment of equity more than 30% is in the interest of the general public: .

(2) The debt and equity amounts arrived at in accordance with sub-regulation (1) above shall be used for all purposes including for determining interest on loan, return on equity, Advance against Depreciation and Foreign Exchange Rate Variation.:

Provided that in the case of an Integrated Utility, till the time it remains Integrated Utility, it shall be entitled to return on its capital base as per Schedule VI to the repealed Electricity (Supply) Act, 1948.

Unquote

The above stated regulations mandate the debt equity ratio for assets deployed post the commencement of the JERC Tariff Regulations. It is pertinent to mention here that the first application filed by the petitioner before this Commission under the above stated regulation was for the FY 2010-11, wherein the Commission had determined Tariff in accordance with the JERC Tariff Regulation. The Commission has also perused the accounts certified by a chartered accountant submitted by the petitioner. It has been observed that the petitioner does not have any opening loan portfolio and the entire capital base is funded through internal accruals.

As discussed in para 5.11 and 6.11 of this order, the normative interest under the JERC Tariff Regulations could therefore be considered on the assets created during the year FY 2010-11 onward excluding the opening capital base. Commission has accordingly considered the opening normative loan of Rs. 54.21 Crores and normative debt of 70% of addition to GFA of Rs. 43.12 Crores during the FY 2013-14 and has calculated the normative interest as per the regulations amounts to Rs 9.65 Crores. Accordingly, the Commission has considered the Normative Interest on loans as Rs. 9.65 Crores as reasonable and approves the same for ARR for FY 2013-14. The calculation is given below:

Table 7.12.1: Normative Interest on Loan approved in the ARR for FY 2013-14(in Rs. Crores)

		2013	-14
Sr. No.	Particulars	(Petitioner's submission)	Approved
1	2	3	4
1	Opening Normative Loan	78.31	54.21
2	Add: Normative Loan during the year	43.12	43.12
3	Less: Normative Repayment pegged at Depreciation	3.92	17.97
4	Closing Normative Loan	117.51	79.36
5	Average Normative Loan	97.91	66.79
6	Rate of Interest (@SBAR rate)	14.75%	14.45%
7	Interest on Normative Loan including bank charges	14.44	9.65

7.13 Interest on Working Capital

Petitioner's submission

The petitioner has computed the Interest on Working Capital for FY 12-13 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 13-14 has been computed considering the following parameters:

- i. One month Power purchase cost
- ii. One month Employees cost
- iii. One month Administration & general expenses
- iv. One month Repair & Maintenance expenses.
- v. Sum of two month requirement for meeting Fuel cost.

A rate of interest of 14.75% has been considered for FY 13-14 on the working capital requirement, being the SBI Prime Lending Rate as on April 1st 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."

The normative interest on working capital for FY 13-14 as per the revised estimates amounts to Rs. 28.70 Crores.

Commission's analysis

Commission has considered the approved Power purchase expenses of FY 2013-14 and approved O&M expenses to work out the normative working capital required for FY 2013-14.

As per the regulation 29 of JERC tariff regulations

Quote

"

29. WORKING CAPITAL AND INTEREST RATE ON WORKING CAPITAL

For generation and transmission business, the working capital shall be as per Hon'ble CERC norms. Subject to prudence check, the working capital for distribution business shall be the sum of one month requirement for meeting:

- a. Power purchase cost.
- b. Employees cost.
- c. Administration & general expenses and
- d. Repair & Maintenance expenses.
- 1) Subject to prudence check, the working capital for integrated utility shall be the sum of one month requirement for meeting :
 - a. Power purchase cost
 - b. Employees cost
 - c. Administration & general expenses
 - d. Repair & Maintenance expenses.
 - e. Sum of two month requirement for meeting Fuel cost.
- 2) The rate of interest on working capital shall be equal to the short term Prime Lending Rate of State Bank of India on the 1st April of the relevant financial year. The interest on working capital

shall be payable on normative basis notwithstanding that the generating company / licensee has not taken working capital loan from any outside agency or has exceeded the working capital loan amount worked out on the normative figures."

Unquote

In accordance with Section 47(4) of the Electricity Act 2003, the distribution licensee is required to pay interest on security deposit collected from the consumers. If this security deposit is invested in the form of interest earning fixed deposits or other similar instruments. The interest earned from such investment could be utilized to pay the interest to the consumers under section 47(4) of the Electricity Act 2003. However it is noted that the petitioner has not invested any of the security deposit held and the said amount is available to the petitioner. Accordingly, the Commission has allowed the interest payable to the consumer as expense in this order. Commission has considered the security deposit available with the Petitioner as a source to meet working capital requirements and has deducted this amount from the working capital requirement considered for interest from working capital for FY 2013-14. Further, Commission clarifies that SBI PLR rate has now been substituted as SBI Advance Rate. The Commission has considered the SBI advance rate of 14.45%³⁴ as on 1st April 2013 for ARR of FY 2013-14. Commission has not considered the revenue from short term sale of power of units deducted under merit order dispatch principles in the total power purchase cost for the purpose of estimating the working capital requirement for FY 2013-14. The detailed calculation for the calculation of interest on working capital is mentioned below:

Table 7.13.1 : Interest on working capital submitted by the petitioner and approved in ARR for FY 2013-14
(in Rs. Crores)

C		2013-14			
Sr. No.	Particulars	(Petitioner's submission)	Approved		
1	2	3	4		
1	Fuel Cost for 2 months	0.00	0.00		
2	Power Purchase Cost for one month	193.39	171.48		
3	Employee Cost for one month	0.47	0.47		
4	A&G Expenses for one month	0.19	0.19		
5	R&M Expenses for one month	0.51	0.51		
6	Total Working Capital for one	194.56	172.65		

³⁴ SBI advance rate notified on 14.02.2011; Thereafter four revisions in the SBI advance rate was notified in FY 2011-12 and are as under: 25.04.2011-13.25%; 12.05.2011-14%; 11.07.2011-14.25%; 13.09.2011 – 14.75%; 27.09.12 – 14.50% and 04.02.13-14.45%.

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C		2013-14			
Sr. No.	Particulars	(Petitioner's submission)	Approved		
1	2	3	4		
	month				
7	Total Working after deduction of Security Deposit from Working Capital Requirement	194.56	154.59		
8	SBAR Rate	14.75%	14.45%		
9	Interest on Working Capital	28.70	22.34		

The Commission considers Rs. 22.34 Crores as Interest on Working Capital as reasonable and approves the same for ARR for FY 2013-14.

7.14 Interest on Security Deposit

Petitioner's submission

The petitioner has not claimed interest on security deposit and has not shown the security deposit available with them during FY 2013-14.

Commission's analysis

In terms of the section 47 (4) of the Electricity Act, 2003 'the distribution licensee is required to pay interest on security deposit collected from consumers equivalent to bank rate or more as may be specified by the Commission.'

The petitioner has submitted the details of security deposits from consumers in the audited accounts. The petitioner in its additional information submitted the list of consumers who has converted their bank guarantees into deposits. Further, the petitioner had submitted that they collect security deposits from consumers and contractors (as earnest money deposit or security). While security deposit from consumers is taken at the time of providing the connection and has to be repaid to the consumers at the time of surrender of the connection, security deposit from contractors is adjusted, subsequent to satisfactory completion of the contracted work. These deposits are in the form of fixed deposit receipts (FDR) / Bank Guarantee and in case of FDR the interest is directly paid to the consumer. These directions were issued in earlier order and as discussed in para 6.13 of this order that all the instruments of security deposit must satisfy the requirements as mentioned in para 6.13 or alternatively the security deposit be accepted directly by way of cash, cheque, bank draft or pay order

by the licensee payable to the licensee in the event of default/delayed payment/any reasonable outstanding.

The Commission in its ARR and tariff order dated September 13'2011 and July 31'2012 had directed the petitioner should follow the provisions of Regulation 6.10 of JERC (Electricity Supply Code) Regulations, 2010. Wherever existing mode of deposit i.e. bank guarantee, fixed deposit etc. is different from those provided in the Regulation, the same be replaced by those as specified therein, as per section 47(1) Electricity Act 2003 and pay interest as per section 47(4) Electricity Act, 2003.

On account of provisions mentioned in the Act and regulation, Commission re-directs the Petitioner to pay the interest on security deposit collected from the consumers with effect from April 1st 2012 irrespective of their constraints.

The petitioner in its additional information submitted the list of consumers who have converted their bank guarantees into deposits. Commission appreciates the effort made by the petitioner for conversion of BGs into Deposit but still this mode of consumer security deposit is different from those provide in the regulation 6.10 of JERC (Electricity Supply Code) Regulations, 2010, the same be replaced by those as specified therein, as per section 47(1) Electricity Act 2003 and pay interest as per section 47(4) Electricity Act, 2003. 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 2013-14 (at the Bank Rate i.e. 8.75³⁵% per annum to be applicable as on 1st April 2013) with effect from January 29'2013 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 2013-14' on the bills of the consumers. Any non-compliance in this regard shall be viewed seriously by the Commission.

In view of the above, the Commission allows Rs. 1.58 Crores as the interest on security deposits and considers as expenditure in ARR for FY 2013-14.

 $^{^{35} \}text{ As per RBI circular no. RBI/} 2012-13/402 \text{ Ref:DBOD.No.Ret.BC.} \\ 77/12.01.001/2012-13 \text{ dated January 29, 2013 on bank rate.} \\$

7.15 Return on Capital Base

Petitioner's submission

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.

As per the Hon'ble 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.

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 13-14 in its Petition.

Return on equity has been computed based on 30% normative equity for capitalization during FY 13-14 in line with the JERC (Terms and Conditions for Determination of Tariff) Regulations, 2009. Return on equity for ED-DNH has been computed as Rs. 3.90 Crores for FY 13-14.

Commission's analysis

ED DNH is an integrated utility in its present form as defined in Regulation 2(9) of the JERC (Terms and Conditions for Determination of Tariff) Regulations, 2009 and it is entitled to return on capital base under the provisions of Schedule VI of the repealed Electricity (Supply) Act, 1948 vide Regulation 23 of JERC (Terms and Conditions for Determination of Tariff) Regulations, 2009. The basic requirement for consideration of either return on capital base or return on equity for historical assets is the basic information in the form of the assets and depreciation registers besides other data. As discussed in para 5.10 of this order and review order dated January 24'2013; ED DNH has provided the required verified asset registers till March 31'2012 along with audited accounts of FY 2011-12.

As discussed in para 5.10, 5.14, 6.10 and 6.14 of this order review order dated January 24'2013, Commission has therefore considered return on capital base in accordance with Regulation 23 of JERC (Terms and Conditions for Determination of Tariff) Regulations, 2009 and has considered Rs. 10.83 Crores as a 3% return on net block at the beginning of the FY 2013-14.

Commission considers the Return on Capital Base of Rs. 10.83 Crores as reasonable and approves the same for ARR of FY 2013-14.

7.16 Provision for Bad and Doubtful debts

Petitioner's submission

The petitioner had considered the provision of 1% of the receivables in the revenue requirement for FY 2013-14.

Table 7.16.1: Provision for Bad & Doubtful debts for FY 2013-14

Provision for Bad & Doubtful Debts (in Rs. Crores)	FY 13-14
Provision for Bad & Doubtful Debts (iii ks. Croles)	Projected
Receivables	2,151.84
Provision for Bad &Doubtful Debts as 0.50% of	1%
Receivables	
Provision for Bad & Doubtful Debts	21.52

Commission's analysis

As can be observed from the audited accounts, there was no bad & doubtful debt in FY 2011-12. Further, as specified in the regulation no. 28 of JERC Tariff regulations read with the format is explained below.

Quote

28. Bad and Doubtful Debts

The Commission may, after the generating company/licensee gets the receivables audited, allow a provision for bad debts up to 1% of receivables in the revenue requirement of the generating company/licensee. (Information to be furnished in format 18)"

Format -18

S.No.	Particulars	Amount (Rs. in Crores)
1.	2.	3.
1.	Amount of receivable bad and doubtful	
	debts (audited)	
2.	<u>Provision made for debts</u> in ARR	

Unquote

The petitioner has claimed 1% provisioning of bad and doubtful debt. As there was no write offs as per audited accounts of FY 2011-12. Commission has therefore considered the provision of 0.5% of the receivables towards bad and doubtful debts as per the provisions of the regulations subject to availability (at the time of true up) of audited accounts.

Commission has considered the provision of bad and doubtful debt as Rs. 10.39 Crores as reasonable and approves the same as per the regulations for ARR for FY 2013-14.

7.17 Non-Tariff Income

Petitioner's submission

The petitioner has submitted that the 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.

For FY 13-14, an increase at 5% p.a. has been considered over the estimated FY 12-13 non-tariff income and has worked out Rs. 11.28 Crores.

Commission's analysis

The Commission considers the petitioner's claim of Non-Tariff Income of Rs. 11.29 Crores as reasonable and approves the same for ARR for FY 2013-14.

7.18 Revenue from Sale of Surplus Power

Petitioner's submission

As mentioned in Power purchase section above, ED-DNH has projected a surplus energy of 291 MUs for FY 13-14 and has considered the revenue of Rs. 87.84 Crores.

Commission's analysis

The Commission as discussed in the section of power purchase of this chapter, has applied merit order dispatch principles in estimating the power procurement requirement of the utility. Based on this, the Commission has only allowed power purchase as required to meet the power requirements as

approved in this order for FY 2013-14. The petitioner is however allowed to deal with the surplus energy in such a manner that it does not result into additional financial burden on the consumers.

7.19 Aggregate revenue Requirement and Revenue Surplus/Deficit for ARR of FY 2013-14

Petitioner's submission

The petitioner estimated the Net Aggregate Revenue Requirement for FY 2013-14 to be Rs. 2420.08 Crores.

Commission's analysis

Based on the estimates approved in the preceding chapters, the aggregate revenue requirement is summarized in the table below:

Table 7.19.1 : Aggregate Revenue Requirement approved for ARR of FY 2013-14 (in Rs. Crores)

		2013	3-14
Sr. No.	Particulars	Petitioner's submission	Approved
1	2	3	4
1	Cost of fuel	•	-
2	Cost of power purchase for full year	2,320.68	2,057.71
3	Employee costs	5.63	5.63
4	Administration and General Expenses	2.32	2.32
5	Repair and Maintenance Expenses	6.08	6.08
6	Depreciation	28.09	17.97
7	Interest and Finance charges	14.44	9.65
8	Interest on working capital & Interest on Security Deposit	28.70	23.92
9	Return on NFA /Equity	3.90	10.83
10	Provision for Bad Debt	21.52	10.39
11	Advance against Depreciation	-	-
12	Incentive on achievement of norm of T&D loss	-	-
13	Total Revenue Requirement	2,431.36	2,144.50
14	Less: Non-Tariff Income	11.28	11.29
15	Less: Revenue from Surplus Power Sale/UI	87.44	-
16	Less: Revenue from Short term sale	-	-

		2013-14			
Sr. No.	Particulars	Petitioner's submission	Approved		
1	2	3	4		
17	Net Revenue Requirement (13-14-15-16)	2,332.64	2,133.21		

The estimated (surplus)/gap has been mentioned including the carrying cost in the following table:

Table 7.19.2: Estimation of Deficit considered for ARR of FY 13-14 (in Rs. Crores)

		201	3-14
Sr. No.	Particulars	Petitioner's submission	Approved
1	2	3	4
17	Net Revenue Requirement (13-14-15-16)	2,332.64	2,133.21
18	Revenue from Retail Sales at Existing Tariff of FY 2012-13	2,053.51	2,078.93
19	Net Gap (17-18)	279.13	54.28
20	Recovery on account of PPC variations	98.33 ³⁶	-
21	Gap after adjusting PPC variations	180.80 54.28	
22	Refunds to consumers on account of excess recovery of PPCA variations	-	-
23	Any other refunds	-	-
24	Net Gap after refund to the Consumers	180.80	54.28
25	Gap for the previous year	(112.38)	(57.13)
26	Carrying Cost	-	-
27	Past Arrears/Refunds to Consumers	-	-
28	Total gap (24+25+26+27)	68.41	(2.84)
29	Additional revenue from proposed tariff	124.23	-
30	Revenue Gap/ (Surplus), if any, after proposed tariffs (28-29)	(55.82)	(2.84)
31	Budgetary Support from Government	-	-
32	Net Final Revenue Gap/ (Surplus) (30-31)	(55.82)	(2.84)

 $^{^{36}}$ The recovery should be made after taking into account the surplus/excess recovery of FPPCA in FY 2012-13 vis-a-vis actual expenditure.

As can be observed there is a revenue surplus of **Rs. 2.84 Crores** at the end of FY 2013-14 considering estimated surplus of previous years **as reasonable and approves the same for ARR of FY 2013-14.** As per commitment for reduction in cross-subsidy, the tariff for domestic consumers was to be increased by 10 paisa and increase in other consumer categories. However the revenue position of FY 2013-14 does not warrant increase in the tariffs. Hence the tariff of domestic and other categories not increased.

8. DIRECTIVES

8.1 Commission's Observation

While examining the compliance note and supporting documents submitted by the Petitioner in the proposed ARR and Tariff Petition for FY 2013-14, it has been observed that the some of the directives issued in tariff order dated July 31'2012 for FY 2012-13 have not been fully compiled with by ED-DNH. Though Commission appreciates the efforts made by the petitioner in reduction of T&D losses. Actions taken on the directions need more effort and seriousness on the part of the petitioner.

Compliance of Directives issued by the Commission in the tariff order on Petition no 62/2012 for FY 2012-13 dated July 31'2012.

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/Action Taken mentioned in ARR and tariff petition for FY 2013-14 Petitioner's submission

Quote "

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.

"Unquote

Commission's Comments

Action taken is noted and the Petitioner is directed to submit the status report and progress of the said facility by September 2013.

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 i.e. by November 15'2013.

Compliance/Action Taken mentioned in ARR and tariff petition for FY 2013-14 Petitioner's submission

Quote "

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.

"Unquote

Commission's Comments

Action taken is noted and the Petitioner is directed to submit the status report and progress in this regard by September 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/underdrawls 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/Action Taken mentioned in ARR and tariff petition for FY 2013-14 Petitioner's submission

Quote "

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.

"Unquote

Commission's Comments

The response of the Petitioner is noted and the Commission directs the Petitioner to be prudent while purchasing power through the UI route. All efforts should be made by the licensee to meet its RPO obligations and maintain compliance with the RPO regulations of the Commission.

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/Action Taken mentioned in ARR and tariff petition for FY 2013-14 Petitioner's submission

Quote "

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.

"Unquote

Commission's Comments

Commission appreciates the efforts made by the Petitioner in this regard. The status of the said facility has not been received by the Commission. The progress of the facility of 'online bill payments' as per the earlier directions should be submitted to the Commission by July 31' 2013.

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/Action Taken mentioned in ARR and tariff petition for FY 2013-14 Petitioner's submission

Quote "

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."

Unquote

Commission's Comments

Action taken is noted. It is observed that the Petitioner has not made any renewable energy purchase during FY 2011-12 and H1 of FY 2012-13. The Petitioner should ensure that its RPO obligations as per the JERC Procurement of Renewable Energy Regulations 2010 are met for FY

2012-13 and FY 2013-14. The RPO obligations in respect of both solar and non-solar power purchase should be ensured separately by the licensee.

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/Action Taken mentioned in ARR and tariff petition for FY 2013-14 Petitioner's submission

Quote "

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"

Unquote

Commission's Comments

Compliance with the Commission's direction is noted.

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/Action Taken mentioned in ARR and tariff petition for FY 2013-14 Petitioner's submission

Quote "

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.

"Unquote

Commission's Comments

The submission of the Petitioner is noted. The timeline stipulated for the submission as per the direction should be adhered to and quarterly submissions should be made for the remaining quarters of FY 2012-13 and going forward for the coming years.

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/Action Taken mentioned in ARR and tariff petition for FY 2013-14 Petitioner's submission

Quote "

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.

"Unquote

Commission's Comments

Action taken is noted and hereby the petitioner is directed to status report of the progress made in this direction on quarterly basis. The report of the quarter ending March 31'2013 should be sent by April 15'2013.

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/Action Taken mentioned in ARR and tariff petition for FY 2013-14 Petitioner's submission

Quote "

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.

"Unquote

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Commission's Comments

The Commission understands that as per the existing tariff schedule there is no separate category for the users of advertisement, hoardings, signboards, signage's etc. The Petitioner was directed to separately capture the data regarding consumption and the load profile of these users so that differential tariff for this category could be set.

As the directive has not been adhered to, the Commission re-directs the Petitioner to separately capture the data regarding consumption and the load profile of the users of advertisement hoardings, signboards, signage's etc. in its licensee area and submit the same to the Commission by July 31' 2013, failing which the Commission would be forced to take serious action.

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/Action Taken mentioned in ARR and tariff petition for FY 2013-14 Petitioner's submission

Quote "

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)."

Unquote

Commission's Comments

The process of operationalization of open access in the licensee's area should be expedited and the Commission should be updated about the progress of the same by September 2013.

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/Action Taken mentioned in ARR and tariff petition for FY 2013-14 Petitioner's submission

Quote "

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.

"Unquote

Commission's Comments

The submission of the Petitioner is noted.

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 2011-12 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/Action Taken mentioned in ARR and tariff petition for FY 2013-14 Petitioner's submission

Quote "

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.

"Unquote

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Commission's Comments

The submission of the Petitioner is noted. Timely submission as per the requirements laid down in the JERC (Standards of Performance) Regulation, 2009 should be duly adhered to. The process of developing the software for availing the data of each complaint centre and office details should be expedited so that data collection can happen in a timely manner.

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/Action Taken mentioned in ARR and tariff petition for FY 2013-14 Petitioner's submission

Quote "

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.

"Unquote

Commission's Comments

The submission is noted; adherence to the Regulations should be ensured by the Licensee before September 30'2013.

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/Action Taken mentioned in ARR and tariff petition for FY 2013-14 Petitioner's submission

Quote "

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.

"Unquote

Commission's Comments

The status and the progress of the load forecasting study should be submitted to the Commission by September 2013.

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/Action Taken mentioned in ARR and tariff petition for FY 2013-14 Petitioner's submission

Quote "

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.

"Unquote

Commission's Comments

Action taken is noted and hereby the petitioner is directed to file status report of the progress made in this direction on quarterly basis by September 2013.

16. Directive 16: Continuous & Non-Continuous Industries

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

Compliance/Action Taken mentioned in ARR and tariff petition for FY 2013-14 Petitioner's submission

Quote "

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.

"Unquote

Commission's Comments

Action taken is noted. The petitioner is hereby directed to submit the status report of the progress made in this direction by September 30' 2013.

17. Directive 17: Assets verification

The third party physical verification of assets 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/Action Taken mentioned in ARR and tariff petition for FY 2013-14 Petitioner's submission

Quote "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." **Unquote**

Commission's Comments

Action taken is noted and Commission appreciates the effort made by the petitioner in this regard. Ongoing through the submission of the Petitioner, it was observed that the fixed asset register submitted did not have any mention of the actual physical verification of the assets by the Chartered Accountant. The same was pointed out to the Petitioner during the technical validation session dated January 17'2013, but the petitioner did not responded to the same. As per para 5.10, the petitioner to indicate the value list of assets being used for rendering the services or alternatively indicate as to what %age of Gross block be considered on ad hoc basis & the basis thereof

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 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/Action Taken mentioned in ARR and tariff petition for FY 2013-14 Petitioner's submission

Quote "

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

"Unquote

Commission's Comments

Action taken is noted. The petitioner is directed to file the roadmap latest by July 31'2013.

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 2011-12 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 2011-12. 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/underdrawls.

Compliance/Action Taken mentioned in ARR and tariff petition for FY 2013-14 Petitioner's submission

Quote "

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

"Unquote

Commission's Comments

Submission is noted; the Commission would like to reiterate that overdrawals/underdrawals beyond the frequency band specified by CERC attract penal charges and would not be allowed as a pass-through in the ARR. This puts undue burden on the grid and should be avoided by the licensee through proper load management and appropriate load forecasting.

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. 9.50³⁷% 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/Action Taken mentioned in ARR and tariff petition for FY 2013-14 Petitioner's submission Quote "

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. "Unquote

Commission's Comments

Action taken is noted. The Commission has observed that the petitioner has not paid any interest to the consumers on the security deposit held during FY 2011-12. Though Commission appreciates the effort made by the petitioner for conversion of BGs into Deposits but still this mode of consumer security deposit is different from those provided in the provided in the provisions of Sub regulation no. 6.10 of JERC (Electricity Supply Code) Regulations, 2010, the same be replaced by those as specified therein, as per section 47(1) Electricity Act 2003 and pay interest as per section 47(4) Electricity Act, 2003.

 $^{^{37} \}text{ As per RBI circular no. RBI/2011-12/432, UBD.BPD. (PCB).Cir. No. 26/16.11.00/2011-12 dated March 07'2012 on bank rate.} \\$

9. Determination of open access charges

The Commission with an objective to generate debate and seek suggestions/comments of the stakeholders on this issue, had also highlight the steps required & sample calculation of open charges as per the open access regulations notified by the Commission to enable open access in the state of Goa and the UTs had floated a staff paper titled 'STAFF PAPER ON OPERATIONALISATION OF OPEN ACCESS (OA) IN THE STATE OF GOA AND THE UTs' in September 2012. The complete draft consultation paper is available on the Commission's website www.jercuts.gov.in

The Joint Electricity Regulatory Commission (JERC) for the State of Goa and UTs notified its "Joint Electricity Regulatory Commission (Open Access Regulations) Regulations, 2009" which cover the following Constituent Territories in the jurisdiction of the Commission, with effect from the date specified in the Regulation.

- i. State of Goa
- ii. Union Territory of Chandigarh
- iii. Union Territory of Dadra & Nagar Haveli
- iv. Union Territory of Daman & Diu
- v. Union Territory of Puducherry

However, the following Constituent territories do not have any alternate source of Electric Power Supply, as these are not connected to the Grid as of now. The OA regulation will come into effect immediately once the following respective Constituent Territories are connected to the alternate source of Electric Power Supply.

- vi. Union Territory of Andaman & Nicobar
- vii. Union Territory of Lakshadweep

In pursuance of the provisions of the Electricity Act, 2003, the Joint Electricity Regulatory Commission for the State of Goa and the UTs had notified its Open Access Regulations JERC 9 / 2009 on February 11' 2010, wherein the phasing of Open Access to the Distribution system in the UTs and the State of Goa has been stated by the Commission (available on the website http://www.jercuts.gov.in/) at the specific link: http://www.jercuts.gov.in/writereaddata/Files/OpenAccessIntraStateTransReg.pdf

The Commission had floated the draft paper for comments/suggestions/objections from the stakeholders for further consideration and implementation in the forthcoming tariff orders. However,

the Commission did not receive adequate comments/suggestions from all the licensees and other stakeholders. There were no objections/suggestions from some of the licensees under the jurisdiction of JERC.

The Electricity Departments in the State of Goa and the UTs have been working as independent integrated utilities. Steps have been initiated in this regard for the creation of separate entity of 'transmission utility' and 'load dispatch center' which shall facilitate open access transactions and manage operations related to evacuation of power, scheduling & dispatch of power. Till the unbundling in the form of STU & SLDC is achieved, the Electricity Departments will continue to play the role of 'transmission utility' (STU) and 'load dispatch center (SLDC)' through a separate division for each of the above roles. It has been observed that the Electricity Department of Dadra and Nagar Haveli did not submit the petition for determination of open access charges for FY 2013-14.

Having decided that Open Access would be available to consumers in the prescribed period, the Commission will now have to determine the various charges, which have to be recovered from each of the Open Access Consumer. These charges are Transmission Charge/Wheeling Charge, Surcharge, Additional Surcharge, Scheduling Charge (payable to the State Load Dispatch Centre), Unscheduled Interchange (UI) Charge, Reactive Energy Charge and such other charges, as the Commission may determine from time to time as a part of the tariff under Section 61, 62 and 86 of the Electricity Act, 2003. While determining the various charges, the Commission is aware of the fact that there is a need for balancing the interests of the consumers of the Licensees and Open Access Consumers in view of the universal service obligation on the Licensees, which includes supply to subsidized categories of consumers as well. The Charges so decided should provide some economic incentive to the Consumers availing open access and at the same time it should not burden the other consumers by way of a higher tariff.

Commission as part of this tariff order has determined the Transmission Charge/Wheeling Charge, Surcharge, Additional Surcharge, Scheduling Charge (payable to the State Load Dispatch Centre), Unscheduled Interchange (UI) Charge, and Reactive Energy Charge applicable on open access transactions for FY 2013-14 on suo-moto basis.

It has been observed that the Transmission and Distribution business has not been segregated and the ED-DNH continues to function as an integrated utility. The Commission in line with fact that the expenses of the utility are consolidated has considered "NIL" transmission charges for the open access consumers in the UT.

9.1 Allocation of ARR into Wheeling and Retail Supply of Electricity

The JERC regulations have not specified the mechanism for determination of wheeling charges nor have the allocation percentages been stated. The petitioner has also not proposed any calculation of the open access charges. Considering the fact that the Open access should be operationalized to maintain the spirit of the Electricity Act 2003 and impart healthy competition the Commission has considered ARR into wheeling and retail based on benchmarking with other states, Tariff Policy and the JERC regulations. The said allocation and determination of the charges would be reviewed during the next tariff determination process after measuring the impact of the allocation and charges determined hereunder. As the petitioner has not proposed any such bifurcation the Commission feels prudent to consider the allocation matrix for bifurcation of wheeling and retail ARR as proposed in the 'STAFF PAPER ON OPERATIONALISATION OF OPEN ACCESS (OA) IN THE STATE OF GOA AND THE UTs' in September 2012. The allocation between wheeling and retail supply business for FY 2012-13 and FY 2013-14 as per the approved ARR in this order is provided in the table below:

Table 9.1.1: Allocation of ARR into Wheeling and Retail Supply of Electricity

		Allocatio	on (%)	Alloca	ation FY 201	.2-13	Alloca	ation FY 20:	13-14
S.No.	Particulars	Wheeling	Supply	Wheeling	Supply	Total	Wheeling	Supply	Total
1	Cost of Fuel	0%	100%	-	-	-	-	-	-
	Power Purchase								
	Expenses (incl								
2	transmission charges)	0%	100%	-	1,918.92	1,918.92	-	2,057.71	2,057.71
3	Employee cost	70%	30%	3.62	1.55	5.17	3.94	1.69	5.63
	Repair & Maintenance								
4	expenses	90%	10%	1.91	0.21	2.13	2.09	0.23	2.32
	Administration & General								
5	expenses	50%	50%	2.79	2.79	5.58	3.04	3.04	6.08
6	Depreciation	90%	10%	13.61	1.51	15.12	16.17	1.80	17.97
	Interest & Finance								
7	Charges	90%	10%	5.98	0.66	6.65	8.69	0.97	9.65
	Interest on working								
8	capital	22%	78%	4.60	16.29	20.89	4.91	17.42	22.34
	Interest on Security								
9	Deposit	0%	100%	-	1.72	1.72	-	1.58	1.58
	Return on Net Fixed								
10	Assets /Equity	90%	10%	8.08	0.90	8.98	9.75	1.08	10.83
	Provision for Bad &								
11	Doubtful Debt	0%	100%	-	9.06	9.06	-	10.39	10.39
	Advance against								
12	Depreciation	90%	10%	-	-	-	-	-	-
	Total Revenue								
13	Requirement			40.59	1,953.62	1,994.21	48.59	2,095.91	2,144.50

		Allocation (%)		Allocation FY 2012-13			Allocation FY 2013-14		
S.No.	Particulars	Wheeling	Supply	Wheeling	Supply	Total	Wheeling	Supply	Total
14	Less: Non-Tariff Income	0%	100%	1		10.76	-	11.29	11.29
	Less: Revenue from Sale								
15	through UI	0%	100%	-		31.61	-	-	-
	Less: Revenue from Sale								
16	of Power (Exchanges)	0%	100%	-		-	-	-	-
	Net Revenue								
	Requirement (13-14-15-								
17	16)			40.59	1,953.62	1,951.85	48.59	2,084.62	2,133.21

9.1.1 Calculation of Losses at 'LT level' and at '11 KV and above' as per the target loss level of FY 2013-

The Commission opines that in the absence of the details of bifurcation of assets and expenses the open access should not be restricted due to lack of information. The Commission in this regard would like to mention that the apportionment of wheeling charges have to account for losses. Therefore in the absence of the voltage wise details the Commission has considered the bifurcation of wheeling cost based on the sales and losses at each voltage level. The Commission has considered a loss level of 3.00% at EHT and HT level which has been grossed (which is below the loss level of 3.636% submitted by the ED-DD) with the sales at this level to arrive at the energy input for the sales at EHT & HT level. The total loss approved for FY 2013-14 has been approved by the Commission at 4.70% in this order. Accordingly the balancing loss has been considered at the LT level.

Therefore to arrive at the network usage the input energy at each level has been arrived and shown in the table below:

Table 9.1.1.1 : Calculation of Losses at 'LT Level' and '11 KV and above'

Particulars	UoM	Amount
Input	MU	5,482.92
Losses upto 11 kV	%	3.00%
Losses	MU	164.49
Sales at 11 kV and above	MU	4,934.86

Particulars	UoM	Amount
Input at next level	MU	383.57
Losses	%	24.30%
Losses	MU	93.21
Sales at LT level	Mu	290.36
Balance	MU	-

9.1.2 Calculation of Transmission/Wheeling Charges

Accordingly the wheeling cost has been considered in the ratio of 80:20 and the wheeling charge of **Paisa 9 per KWh** so arrived has been shown in the table below

Table 9.1.2.1: Calculation of Wheeling Charges

		Allocation FY 2013-14		
S.No.	Particulars	Wheeling	Supply	Total
1	Net Revenue Requirement (13-14-15-16)	48.59	2,084.62	2,133.21
2	Total Energy to be wheeled by the distribution licensee (energy required at discom's periphery)			5,482.92
3	Wheeling Charges (Paisa/KWh) to be paid by long term open access users			9

9.1.3 Cross-Subsidy Surcharge

The Cross subsidy surcharge is based on the following formula given in the Tariff Policy as below:

$$S = T-[C(1+L/100) + D]$$

Where,

S is the surcharge

T is the Tariff payable by the relevant category of consumers;

C is the Weighted average cost of power purchase of top 5% at the margin excluding

liquid fuel based generation and renewable power

D is the Wheeling charges

L is the System losses for the applicable voltage level, expressed as percentage.

The Computation of cross subsidy surcharge for HT consumers getting supply above 11 KV voltage level is given below

The cross subsidy surcharge shall be taken as 'NIL' if negative. The calculation of cross-subsidy surcharge is given below

Table 9.1.3.1: Cross-Subsidy Surcharge for FY 2013-14

Particulars	Average unit revenue rate at revised tariff	Voltage Level	Losses at Voltage Level (in %age)	Cross subsidy surcharge (S)=T-[C(1+L/100)+D]
High Tension Supply	4.06	11 KV & above	3.00%	-1.34

9.1.4 Calculation of Short term rates (ST RATE)

Table 9.1.4.1 : Calculation of Short term rates (ST_Rate)

S.No.	Particulars	
	TSC-Annual Distribution Charges of discom for the immediately preceding	
1	financial year (Rs. Crores)	40.59
2	Av CAP (in MW)	865.08
3	ST RATE = 0.25*[TSC/Av CAP]/365 (Rs. per MW per day)	

9.1.5 Additional Surcharge

Commission approves "Nil" Additional Surcharge for this tariff order. However this would be revisited at the time of next tariff order based on the implication of the Open Access implementation.

10. Rationalization and Reform of Tariff Schedule and Terms & Conditions of Supply

The Commission in pursuit of the rationalization and reform of the tariff schedule and terms & conditions of supply had floated a draft consultation paper titled 'Draft Consultation Paper - Seeks to provide a policy framework to address uniformity in consumer classification based on uses of electricity, voltage-wise contract load/demand limits and terms and condition of LT and HT supply to various consumer categories' in December 2012.

The Joint Electricity Regulatory Commission (JERC) for the State of Goa and UTs notified its "Joint Electricity Regulatory Commission (Electricity Supply Code) Regulations, 2010" which was applicable to all distribution licensees and its consumers. Presently, all the seven licensees have different supply voltage for different contract demand / load, different consumer categories and different terms & conditions. The supply voltage for different contract demand/load has not been specified in the JERC (Electricity Supply Code) Regulation, 2010. Until a common uniform supply voltage for different contract demand / load, consumer categories, Terms & Conditions for LT supply and HT supply are framed; there would always be dissimilarities in the above amongst all the seven utilities under JERC.

The objective of the draft paper was to bring about uniformity mainly in the following areas for the seven licensees under the jurisdiction of JERC.

- 1. Uniform categorization of consumers based on uses;
- 2. Uniform supply voltage for different contract demand/load;
- 3. Uniform terms & conditions for LT supply;
- 4. Uniform terms & conditions for HT supply

Further, there is dissimilarity in the terms and conditions for both LT and HT voltage level between the licensees on various parameters as listed below:

- Power Factor;
- 2. Power Factor Incentive;
- 3. Power Factor Surcharge;
- 4. Disconnection;
- 5. Billing;
- 6. Excess Demand; and
- 7. Over drawl

The draft paper proposes to bring about uniformity in the above mentioned parameters through a common terms and conditions of supply for all the seven licensees.

The Commission had floated the draft paper for comments/suggestions/objections from the stakeholders for further consideration and implementation in the forthcoming tariff orders. However, the Commission did not receive adequate comments/suggestions from all the licensees and other stakeholders. There were no objections/suggestions from some of the licensees under the jurisdiction of JERC. In view of the lack of awareness and for greater participation from the public at large, the Commission has included a gist of the proposed tariff schedule and terms & conditions of supply in this tariff order which is reproduced below here. The Commission wants the licensees and other stakeholders to be more participative and give their suggestions/comments/objections so that the proposed common tariff schedule and terms & conditions of supply can be made applicable in the next year's tariff order with necessary changes. From the below mentioned schedule, the Commission has already introduced the proviso of advance payment rebate and prompt payment rebate in this year's tariff schedule for the benefit of the stakeholders. The Commission is inviting comments/suggestions from the stakeholders on other features of the draft tariff schedule which are yet to be implemented.

The complete draft consultation paper is available on the Commission's website www.jercuts.gov.in.

<u>Proposed Uniform Tariff Schedule and Terms & Conditions of Supply</u> (To be implemented in Tariff Orders of FY 2014-15 and onwards)

PART - A: LOW TENSION (LT) SUPPLY

System of supply: Low Tension – Alternating Current, 50 cycles per second

Single Phase supply at 230 Volts Three Phase supply at 400 Volts

The tariffs are applicable for supply of electricity to LT consumers with a contracted load/demand upto 75 kW (100 HP) for Domestic, non-domestic, Public lighting, Industrial, Agricultural and Public water works categories.

Single Phase supply - contracted load upto 5.0 kW Three Phase supply - contracted load above 5.0 kW

CATEGORY OF SERVICE AND TARIFF RATES

1. DOMESTIC SERVICE

Applicability

This tariff shall be applicable for supply of electricity for a contracted load/demand upto 75 KW for domestic purposes such as lights, fans, radios, televisions, heaters, air-conditioners, washing machines, air-coolers, geysers, refrigerators, ovens, mixers and other domestic appliances including motor-pumps for lifting water for domestic purposes in residential houses, bungalows, multi-storied flats, farm houses, ashrams, mutts, housing colonies etc. This shall also be applicable to the common

facilities in the multi-storied, purely residential apartments, buildings having contracted load/demand upto 75 kW.

1.1 DOMESTIC SERVICE-I (DS-I)

This tariff shall be applicable to all huts and dwelling houses of families below the poverty line (BPL) and houses, including pucca houses, built under Government schemes, including rehabilitation for BPL families, having contracted load of 100 Watts only. Consumption of consumers under this category shall be limited to 30 kwh per month.

Note: In case it is detected that load of consumers under this category exceeds 100 watt or monthly consumption exceeds 30 kwh for three consecutive months, it shall be considered under unauthorised use of electricity and shall be dealt as per JERC Electricity Supply Code Regulations, 2010 and the BPL Tariff shall immediately become inoperative and shall further be billed under DS-II category.

1.2 DOMESTIC SERVICE-II (DS-II)

This is applicable for domestic premises for single phase supply for contracted load/demand upto 5 kW and three phase supply for contracted load/demand above 5 kW upto 75 KW.

Note

- i. If a portion of the domestic premises limited to only one room is used for running small household business having DS-II connection, such connection shall be billed under DS-II category provided that the total monthly consumption of the consumer does not exceed 150 KWH.
- ii. If either more than one room or only one room having monthly consumption exceeding 150 KWH for consecutive three months are detected in the domestic premises being used for mixed purposes having DS-II connection, it shall be considered under unauthorised use of electricity and shall be dealt as per JERC Electricity Supply Code Regulations, 2010 and such connection shall further be billed under NDS-I category until a separate connection of appropriate tariff is taken for that portion used for non-domestic purpose.

TARIFF RATES

1.0 DOMESTIC SERVICE

1.1 DOMESTIC SERVICE-I (DS-I)

SI.	Category of consumers	Fixed charge (Rs/connection/ month or part thereof)	Energy charge (Paisa/kwh)
	Metered	х	
	unmetered		Х

1.2 DOMESTIC SERVICE-II (DS-II)

SI.	Category of consumers	Fixed charge	Energy charge	
		(Rs/KW/ month or part thereof)	Consumption/ month (Units)	Rate (Ps/unit)
	Single / Three Phases		Upto 100	
			101-300	
			301-500	
			Above 500	

OPTIONAL

1.2.1 DOMESTIC SERVICE-II/D (DS-II/D)

All those consumers under DS-II category with 3 phase supply opting for demand based tariff shall be required to pay at the rates indicated below:

1.2.1 DOMESTIC SERVICE-II/D (DS-II/D)

SI.	Category of consumers	Demand charge	Energy charge	
		(Rs/KW/ month or part thereof)	Consumption/ month (Units)	Rate (Ps/unit)
	All Three Phase		For all units	

2.0 NON-DOMESTIC SERVICE

Applicability

This shall be applicable for supply of electrical energy for non-domestic consumers having contracted load/demand upto 75 kW, using electrical energy for light, fan and power loads for non-domestic purposes like shops, offices, government and semi–government offices, show rooms, laundries, photostudios, bakery shops, parlours, bars, coffee houses, advertisement hoardings, neon sign-boards, hospitals, nursing homes, clinics, dispensaries, diagnostic centres, X-ray plants, private schools, colleges, libraries, coaching institutes and research institutes, restaurants, hotels, clubs, gymnasium, sport institutions, stadiums, guest houses, boarding / lodging houses, marriage houses, public halls, auditorium, exhibitions, theatres, circus, cinemas, fuel/oil stations, service stations, printing presses, museums, banks, race-course, burial /crematorium grounds, bus-stations, railway stations, telephone exchanges, All India Radio / T.V. installations, shops having welding set, small lathe, electric drill etc, IT establishments, common facilities in multi-storied commercial office / buildings, commercial trusts, societies, shopping malls, multiplexes, commercial establishments and other installations not covered under any other tariff schedule.

This shall also be applicable to government educational institutions, their hostels and libraries, government hospitals, government research institutions, government sport institutions and non-profitable government aided educational institutions, their hostels and libraries, government run youth hostels, harijan hostels, rehabilitation centres, anganwadies, balwadies etc, non-profitable recognized

charitable institutions, orphanage homes and old-age homes run by religious and charitable organisations recognised by government, etc.

Religious places such as temples, mosques, gurudwaras, churches etc, are also covered under this tariff.

2.1 NON-DOMESTIC SERVICE-I (NDS-I)

This shall be applicable for supply of electrical energy for non-domestic services such as shops, offices, government and semi–government offices, show rooms, laundries, photo-studios, bakery shops, parlours, bars, coffee houses, advertisement hoardings, neon sign-boards, hospitals, nursing homes, clinics, dispensaries, diagnostic centres, X-ray plants, private schools, colleges, libraries, coaching institutes and research institutes, restaurants, hotels, clubs, gymnasium, sport institutions, stadiums, guest houses, boarding / lodging houses, marriage houses, public halls, auditorium, exhibitions, theatres, circus, cinemas, fuel/oil stations, service stations, printing presses, museums, banks, race-course, burial /crematorium grounds, bus-stations, railway stations, telephone exchanges, All India Radio / T.V. installations, shops having welding set, small lathe, electric drill etc, IT establishments, common facilities in multi-storied commercial office / buildings, commercial trusts, societies, shopping malls, multiplexes, commercial establishments and other installations not covered under any other tariff schedule for single phase supply for contracted load/demand upto 5 kW and three phase supply for contracted /demand above 5 KW upto 75 KW.

This shall also be applicable to government educational institutions, their laboratories, hostels and libraries, government hospitals, government research institutions, government sport institutions and government aided educational institutions, their laboratories, hostels and libraries, government run youth hostels, harijan hostels, rehabilitation centres, anganwadies, balwadies etc.

2.2 NON-DOMESTIC SERVICE-II (NDS-II)

This shall be applicable for supply of electrical energy for non-domestic services such as orphanage homes and old-age homes run by religious and charitable organisations recognised by the government for single phase supply for contracted load/demand upto 5 kW and three phase supply for contracted load/demand above 5 KW upto 75 KW

This shall be applicable for supply of electrical energy for non-domestic (Religious) service such as places of worship like temples, mosques, gurudwaras, churches.

2.3 NON-DOMESTIC SERVICE-III (NDS-III)

This shall be applicable for supply of electrical energy for advertisement hoardings and neon sign boards for single phase supply for contracted load/demand upto 5 kW and three phase supply for contracted load/demand above 5 KW upto 75 KW

TARIFF RATES
2.0 NON-DOMESTIC SERVICE

2.1 NON-DOMESTIC SERVICE-I (NDS-I)

SI.	Category of consumers	(Rs/KW/	Energy charge	
			Consumption/ month (Units)	Rate (Ps/unit)
	Single/Three Phases		Upto 100 Above 100	

OPTIONAL

2.1.1 NON-DOMESTIC SERVICE-I/D (NDS-I/D)

All those consumers under NDS-I category with 3 phase supply opting for demand based tariff shall be required to pay at the rates indicated below:

2.1.1 NON-DOMESTIC SERVICE-I/D (NDS-I/D)

SI.	Category of consumers	Demand charge	Energy charge	
		(Rs/KW/ month or part thereof)	Consumption/ month (Units)	Rate (Ps/unit)
	All Three Phase		For all units	

2.2 NON-DOMESTIC SERVICE-II (NDS-II)

SI.	Category of consumers	Fixed charge (Rs/KW/ month or part thereof)	Energy charge Consumption/ month (Units)	Rate (Ps/unit)
	Single/ Three Phases		For all units	

OPTIONAL

2.2.1 NON-DOMESTIC SERVICE-II/D (NDS-II/D)

All those consumers under NDS-II category with 3 phase supply opting for demand based tariff shall be required to pay at the rates indicated below:

2.2.1 NON-DOMESTIC SERVICE-II/D (NDS-II/D)

SI.	Category of consumers	Demand charge	Energy charge	
		(Rs/KW/ month or part thereof)	Consumption/ month (Units)	Rate (Ps/unit)
	All Three Phase		For all units	

2.3 NON-DOMESTIC SERVICE-III (NDS-III)

SI.	Category of consumers	Fixed charge	Energy charge	
		(Rs/KW/ month or part thereof)	Consumption/ month (Units)	Rate (Ps/unit)
	Single/ Three Phases		For all units	

OPTIONAL

2.3.1 NON-DOMESTIC SERVICE-III/D (NDS-III/D)

All those consumers under NDS-III category with 3 phase supply opting for demand based tariff shall be required to pay at the rates indicated below:

2.3.1 NON-DOMESTIC SERVICE-III/D (NDS-III/D)

SI.	Category of consumers	Demand charge	Energy charge	
		(Rs/KW/ month or part thereof)	Consumption/ month (Units)	Rate (Ps/unit)
	All Three Phase		For all units	

3.0 IRRIGATION AND AGRICULTURAL SERVICE (IAS)

Applicability

This shall be applicable for supply of electrical energy for contracted load/demand upto 100 HP for bonafide use for irrigation pumping and agricultural purposes including processing of Agricultural Produce, confined to chaff - cutter, thrasher, cane crusher and rice Huller including lighting loads when operated by the agriculturist in the field or farm. This is also applicable to nurseries growing flowers/plants/ saplings/ fruits, hatcheries, poultries (with more than 1000 birds) and fisheries (fish ponds), piggery, aquaculture, sericulture, cattle breeding farms, mushroom growing farms, and those dairy units where only extraction of milk and its processing such as chilling, pasteurisation, etc is done.

3.1 IRRIGATION AND AGRICULTURAL SERVICE-I (IAS-I)

This shall be applicable for supply of electrical energy for contracted load/demand upto 25 HP for bonafide use for irrigation pumping and agricultural purposes including processing of Agricultural Produce

3.2 IRRIGATION AND AGRICULTURAL SERVICE-II (IAS-II)

This shall be applicable for supply of electrical energy for contracted load/demand above 25 HP upto 100 HP for bonafide use for irrigation pumping and agricultural purposes including processing of Agricultural Produce

3.3 IRRIGATION AND AGRICULTURAL SERVICE-III (IAS-III)

This shall be applicable for supply of electrical energy for contracted load/demand upto 100 HP for allied activities such as nurseries growing flowers/ plants/ saplings/ fruits, hatcheries, poultries (with more than

1000 birds) and fisheries (fish ponds), piggery, aquaculture, sericulture, cattle breeding farms, mushroom growing farms, and those dairy units where only extraction of milk and its processing such as chilling, pasteurisation, etc is done.

Tariff Rates

3.0 IRRIGATION AND AGRICULTURAL SERVICE (IAS)

3.1 IRRIGATION AND AGRICULTURAL SERVICE-I (IAS-I)

SI.	Category of consumers	Fixed charge (Rs/HP/ month or part thereof)	Energy charge (Paisa/kwh)
	Metered		
	Unmetered		X

3.2 IRRIGATION AND AGRICULTURAL SERVICE-II (IAS-II)

SI.	Category of consumers	Fixed charge (Rs/HP/ month or part thereof)	Energy charge (Paisa/kwh)

3.3 IRRIGATION AND AGRICULTURAL SERVICE-III (IAS-III)

SI.	Category of consumers	Fixed charge (Rs/HP/ month or part thereof)	Energy charge (Paisa/kwh)
	Metered		

4.0 LOW TENSION INDUSTRIAL SERVICE (LTIS)

Applicability

This shall be applicable for supply of electricity to low tension industrial consumers with a contracted load/demand upto 100 HP for industrial processing or agro-industries purposes, cold storage, arc welding sets, workshops, flour mills, wet grinding, oil mills, rice mills, dal mills, atta chakki, Huller, expellers, saw mills, milk dairies (where milk is processed other than chilling, pasteurisation etc to produce other milk products), ice cream manufacturing units, power-looms, garment manufacturing units, tyre retreading units, bakery manufacturing units, etc including lighting loads.

4.1 LOW TENSION INDUSTRIAL SERVICE-I (LTIS-I)

This shall be applicable for supply of electricity to low tension industrial consumers with a contracted load/demand upto 25 HP

4.2 LOW TENSION INDUSTRIAL SERVICE-II (LTIS-II)

This shall be applicable for supply of electricity to low tension industrial consumers with a contracted load/demand above 25 HP upto 100 HP

Tariff Rates

4.0 LOW TENSION INDUSTRIAL SERVICE (LTIS)

4.1 LOW TENSION INDUSTRIAL SERVICE-I (LTIS-I)

SI.	Category of consumers	Fixed charge (Rs/HP/ month or part thereof)	Energy charge Rate (Ps/unit)

OPTIONAL

4.1.1 LOW TENSION INDUSTRIAL SERVICE-I/D (LTIS-I/D)

All those consumers under LTIS-I category with 3 phase supply and with contract demand upto 25 HP opting for demand based tariff shall be required to pay at the rates indicated below:

4.1.1 LOW TENSION INDUSTRIAL SERVICE-I/D (LTIS-I/D)

SI.	Category of consumers	Demand charge (Rs/HP/ month or part thereof)	Energy charge Consumption/ months(Units)	Rate (Ps/unit)
	All Three Phase upto 25 HP			

4.2 LOW TENSION INDUSTRIAL SERVICE-II (LTIS-II)

SI.	Category of consumers	Fixed charge (Rs/HP/ month or part thereof)	Energy charge Rate (Ps/unit)

OPTIONAL

4.2.1 LOW TENSION INDUSTRIAL SERVICE-II/D (LTIS-II/D)

All those consumers under LTIS-II category with 3 phase supply and with contract demand above 25 HP upto upto 100 HP opting for demand based tariff shall be required to pay at the rates indicated below:

4.2.1 LOW TENSION INDUSTRIAL SERVICE-II/D (LTIS-II/D)

SI.	Category of consumers	Demand charge	Energy charge
-----	-----------------------	---------------	---------------

	(Rs/HP/ month or part thereof)	• •	
All Three Phase			

5.0 PUBLIC WATER WORKS & PUBLIC LIGHTING

Applicability

This shall be applicable to public water works, sewerage treatment plant and sewerage pumping stations including lighting loads functioning under state government and state government undertakings and local bodies for contracted load/demand upto 100 HP.

This shall also be applicable for supply of electricity for contracted load/demand upto 75 KW to street light system including signal system belonging to state / central government / local bodies. Also applicable to traffic lights, mast lights / blinkers etc.

5.1 PUBLIC WATER WORKS (PWW)

This shall be applicable to public water works, sewerage treatment plant and sewerage pumping stations including lighting loads functioning under state government and state government undertakings and local bodies for contracted load/demand upto 100 HP.

5.2 PUBLIC LIGHTING (PL)

This shall be applicable for supply of electricity for contracted load/demand upto 75 KW to street light system including signal system belonging to state / central government / local bodies. Also applicable to traffic lights, mast lights / blinkers etc.

Tariff Rates 5.0 PUBLIC WATER WORKS (PWW)

5.1 PUBLIC WATER WORKS-I (PWW-I)

SI.	Category of consumers	Fixed charge (Rs/HP/ month or part thereof)	Energy charge Rate (Ps/unit)

OPTIONAL

5.1.1 PUBLIC WATER WORKS/D (PWW/D)

All those consumers under PWW category with 3 phase supply and with contract demand upto 100 HP opting for demand based tariff shall be required to pay at the rates indicated below:

5.1.1 PUBLIC WATER WORKS/D (PWW/D)

SI.	Category of consumers	Demand charge	Energy charge	
		(Rs/HP/ month or part thereof)	•	Rate (Ps/unit)
	All Three Phase			

5.2 PUBLIC LIGHTING (PL)

SI.	Category of consumers	Fixed charge (Rs/KW/ month or part thereof)	Energy charge (Paisa/kwh)
	Metered		
	Unmetered		Χ

6.0 BULK SUPPLY SERVICES (BS)

Applicability

This tariff shall be applicable to supply of electrical energy for contracted load/demand above 30 KW upto 75 KW at three phase low tension at single point where onward distribution lines / service lines are owned and maintained by the consumers for domestic purpose or non-domestic purpose as specified in the respective tariff category.

6.1 BULK SUPPLY SERVICES-I (BS-I)

This tariff shall be applicable to supply of electrical energy for domestic services for contracted load/demand above 30 KW upto 75 KW at three phase low tension at single point where onward distribution lines / service lines are owned and maintained by the consumers as specified in the domestic service category above.

6.2 BULK SUPPLY SERVICES-II (BS-II)

This tariff shall be applicable to supply of electrical energy for non-domestic services for contracted load/demand above 30 KW upto 75 KW at three phase low tension at single point where onward distribution lines / service lines are owned and maintained by the consumers as specified in the non-domestic services category above.

Tariff Rates

6.1 BULK SUPPLY SERVICES-I (BS-I)

SI.	Category of consumers	Fixed charge (Rs/KW/ month or part thereof)	Energy charge (Paisa/kwh)

OPTIONAL

6.1.1 BULK SUPPLY SERVICES-I/D (BS-I/D)

All those consumers under BS-I category with 3 phase supply opting for demand based tariff shall be required to pay at the rates indicated below:

6.1.1 BULK SUPPLY SERVICES-I/D (BS-I/D)

SI.	Category of consumers	Demand charge	Energy charge	
		(Rs/KW/ month or part thereof)	Consumption (Units)	Rate (Ps/unit)
	All Three Phase			

6.2 BULK SUPPLY SERVICES-II (BS-II)

SI.	Category of consumers	Fixed charge (Rs/KW/ month or part thereof)	Energy charge (Paisa/kwh)

OPTIONAL

6.2.1 BULK SUPPLY SERVICES-II/D (BS-II/D)

All those consumers under BS-II category with 3 phase supply opting for demand based tariff shall be required to pay at the rates indicated below:

6.2.1 BULK SUPPLY SERVICES-II (BS-II/D)

SI.	Category of consumers	Demand charge (Rs/KW/ month or part thereof)	Energy charge Consumption/ MONTHS(Units)	Rate (Ps/unit)
	All Three Phase	thereofy		

TERMS AND CONDITIONS OF LOW TENSION (LT) TARIFF

- 1. Unless otherwise agreed to, these tariffs are applicable for power supply at one point only.
- 2. Unless otherwise specifically stated to the contrary, the figures of energy charges relates to paise per unit (kwh) for energy consumed during the month.
- 3. These tariffs are exclusive of statutory levies like electricity duty/cess or any other taxes, duties/cess etc, imposed by the State Government / Central Government or any other competent authority and shall be charged extra.

- 4. In case payment is made through cheque and the cheque is dishonoured, an amount of Rs.200/- shall be levied as cheque return charges. The licensee may initiate action u/s 138 of the Negotiable Instrument Act, 1981 in addition to disconnection of the service.
- 5. Fixed/Demand charges, wherever applicable, shall be charged on pro-rata basis from the date of release of connection. Fixed/Demand charges, wherever applicable, shall be double as and when bimonthly billing is done. Similarly, slabs of energy consumption shall also be doubled in case of bimonthly billing.
- 6. The electricity bill shall be rounded off in whole rupees. Amount less than 50 paisa shall be ignored and amount of 50 paisa and above shall be considered as one rupee.
- 7. Advance Payment Rebate: If payment is made in advance well before commencement of consumption period for which bill is prepared, a rebate @ 1% per month shall be given on the amount (excluding security deposit) which remains with the licensee at the end of the month. Such rebate, after adjusting any amount payable to the licensee, shall be credited to the account of the consumer.
- 8. Prompt Payment Rebate: If payment is made at least 7 days in advance of the due date of payment a rebate for prompt payment @ 0.25 % of the bill amount shall be given. Those consumers having arrears shall not be entitled for such rebate.
- 9. Delayed payment surcharge: In case a consumer does not pay energy bills in full by the due date specified in the bill, a delayed payment surcharge of one and half (1.5) percent per month or part thereof on the outstanding arrears shall be levied from the due date for payment until the payment is made in full without prejudice to right of the licensee to disconnect the supply in accordance with Section 56 of the Electricity Act, 2003.

10. Shunt Capacitor Installation

- a) Every LT consumer including irrigation pump set consumers whose connected load includes induction motor (s) of capacity 3 HP and above and other low power factor consuming appliances shall arrange to install low tension shunt capacitors of appropriate capacity at his cost across terminals of his motor (s). The consumer shall ensure that the capacitors installed by him are properly matched with the actual rating of the motor so as to ensure power factor of 90% (0.9 lagging).
- b) All LT consumers having welding transformers will be required to install suitable shunt capacitor(s) of adequate capacity so as to ensure power factor of not less than 90% (0.9 lagging).
- c) The capacitors shall be of standard manufacture and meet the Bureau of Indian Standards specification.
- d) Consumers not complying to above shall be liable to pay a power factor surcharge at the following rates:
 - (i) For the LT consumers whose meter is capable of recording average monthly power factor and If the monthly average power factor of a consumer falls below 90% (0.9 lagging), such consumer

- shall pay a surcharge in addition to his normal tariff @ 0.5% on billed demand and energy charges for each fall of 0.01 in power factor upto 0.7(lagging). If such consumers maintains power factor more than 95% (0.95 lagging), a power factor incentive @ 0.25% on demand and energy charges shall be given for each increase of 0.01 in power factor above 0.95 (lagging)
- (ii) For the LT consumers whose meter is not capable of recording average monthly power factor and such LT Consumers not complying to conditions a to c above shall be liable to pay a power factor surcharge of 10% (ten percent) of the billed fixed/demand and energy charges till the capacitors in healthy condition are installed.
- e) If the average power factor falls below 0.70 (lagging) consecutively for 3 months, the licensee reserves the right to disconnect the consumer's service connection without prejudice for the levy of the surcharge.
- f) No new supply to LT installations having low power factor consuming equipment such as induction motor of 3 HP and above or welding transformers etc., will be released unless shunt capacitors are installed to the satisfaction of the Board.
- 11. **Maximum Demand:** The maximum demand of supply of electricity during a month shall be twice the largest number of Kilo-Volt Ampere Hours (KVAH) delivered at the point of supply to the consumers during any consecutive 30 minutes in the month.
- 12. **Billing Demand:** Any LT consumer who has opted for demand based tariff, the billing of such consumer shall be on the maximum demand recorded during the month or contracted demand, whichever is higher. Such billing demand shall be rounded off to next higher digit for the purpose of billing.
- 13. Excess Demand: If in any month, the recorded maximum demand of the consumer exceeds 105% of its contracted demand, the normal tariff shall be applicable upto the 105% of the contract demand and that portion of demand which is in excess of 105% of the contracted demand shall be billed at double the normal rate. If the actual recorded demand of a consumer exceeds 105% of the contracted demand consecutively for three months, the licensee may issue a notice and inform the consumer to get additional contract demand sanctioned or to limit their drawl as per their contract. Otherwise the licensee shall take action as per provisions of the Act/Rules/Regulations.

Illustration: If contract demand is 60 kw whereas maximum demand recorded during the month is 70 kw, then demand for 63 kw (105% of 60 kw) shall be billed at normal rate and demand for 7 kw (70 kva-63 kw) shall be billed at twice the normal rate.

14. **Defective / Damaged / Burnt Meter:** In case of meter being defective / damaged / burnt the Licensee or the consumer as the case may be shall replace the same within the period specified in "Standards of Performance" Regulations issued by the Commission. Till defective meter is replaced the consumption shall be assessed and billed on an average consumption of last six meter reading cycles or average monthly consumption of corresponding six meter reading cycles of the preceding year

whichever is higher from the date of meter being out of order. Such consumption shall be treated as actual consumption for all practical purposes until the meter is replaced/rectified.

In case a functional check-meter is available then the readings of the check meter shall be used for billing purposes when main meter becomes defective/damaged/burnt.

In case the meter becomes defective within three meter reading cycles after its installation and prior consumption is not available, then billing shall be done provisionally on the basis of following load factor subject to adjustment on the average consumption of three meter reading cycles of the replaced meter:

SI	Category of consumers	Load	Average Unit
		Factor	
1.	Domestic	0.15	100 units/kW
2.	Non-domestic	0.20	150 units/kW
3.	Public Water Works	0.20	100 units/HP for water
			works
			125 unit/kW for street light
4.	Irrigation & Agicultural	0.15	80 units/HP
5.	LT Industrial	0.25	135 units/HP
6.	HT Industrial (at P.F.=0.0.90	0.40	260 units/kVA
	lag)		

- 15. Contracted/Connected load/Demand exceeding LT load limit: In case of existing LT consumers whose contracted/connected load or demand exceeds the upper limit of LT supply, such consumers may either shift to HT supply or optionally continue to remain as LT consumers subject to payment of 10% surcharge on fixed and energy charges. The licensee shall not release any new connection or enhance load of existing consumers whose contracted load/demand exceeds LT limits.
- 16. Usage of electricity for other purpose than authorized: If either more than one room or only one room having monthly consumption exceeding 150 KWH for consecutive three months are detected in the domestic premises being used for mixed purposes having DS-II connection or any other premises which is used for a purpose other than for which it was authorized and the tariff applicable for which is higher, it shall be considered under unauthorised use of electricity and shall be dealt as per JERC Electricity Supply Code Regulations, 2010 and such connection shall further be billed on appropriate higher tariff category until a separate connection of appropriate tariff is taken for that portion.
- 17. **FPPCA:** The adjustment on account of Fuel and Power Purchase Cost variation shall be calculated in accordance with FPPCA formula notified by the Commission. The value of K-factor shall be applicable to the different consumer categories as per the values approved in this tariff order. Such charges shall be recovered / refunded in accordance with terms & conditions specified in the FPPCA formula.

18. Temporary Supply (LT)

- (i) Temporary Supply is for connection temporary in nature for a maximum period of two year. The applicability shall be as given in the respective tariff category. Temporary supply cannot be claimed by a prospective consumer as a matter of right but will normally be arranged by the licensee when a requisition is made giving due notice subject to technical feasibility and in accordance with electricity supply code issued by the Commission.
- (ii) The tariff shall be chargeable as applicable to the corresponding appropriate tariff category at the following rates subject to minimum Rs:

SI	Period of Supply	Tariff Rate
1.	Upto 12 months	150% of normal rate of
		appropriate tariff category
2.	More than 12 months and upto	175% of normal rate of
	18 months	appropriate tariff category
3.	More than 18 months and upto	200% of normal rate of
	24 months	appropriate tariff category

Fixed/Demand charges, wherever applicable, shall be charged on pro-rata basis from the date of release of connection.

- (iii) Terms of Supply of Temporary Supply shall be as below:
- a) Temporary supply may be given for a period not exceeding 3 months in the first instance, the duration of which, may be extended on quarter to quarter basis subject to maximum total duration of two year.
- b) In addition to the tariff charges, the consumer shall have to deposit the following charges before commencement of the temporary supply:
- (i) Estimated cost of erection of temporary service line and dismantling.
- (ii) Cost of irretrievable materials which cannot be taken back to service.
- (iii) Meter rent for the full period of temporary connection as per appropriate tariff schedule and other miscellaneous charges.
- (iv) Rental on the cost of materials of the licensee as per estimate at the rate of Rs. 15/- per month on every Rs. 100/- or part thereof.
- (v) Ten per cent on the total cost of the estimate for the temporary service connection to cover as security for loss of materials and contingencies. In case such loss is not noticed, the amount will be refunded.
- c) The applicants for temporary supply shall be required to make a deposit in advance of the cost as detailed above including fixed/demand charges and the energy consumption charges estimated for full period on the basis of contracted load/demand. This will however, be adjusted against the final bill that will be rendered on disconnection of supply.
- d) If the consumer intends to extend the temporary supply beyond the period originally applied for, he will have to deposit in advance all applicable charges as detailed above including the estimated electricity consumption charges, for the period to be extended and final bill as well, for the previous period, if any.

19. Seasonal Supply (LT)

(i) Seasonal supply shall be given to any consumer on written request to the licensee subject to the following conditions.

SI	Period of Supply	Tariff Rate
1.	Upto 3 consecutive months in a	Appropriate tariff plus 40 percent
	year	
2.	More than 3 consecutive months	Appropriate tariff plus 30 percent
	and	
	upto 6 consecutive months in a	
	year	
3.	More than 6 consecutive months	Appropriate tariff plus 20 percent
	and	
	upto 9 consecutive months in a	
	year	
4.	More than 9 consecutive months	Appropriate tariff plus 10 percent.
	but	
	less than one year	

- (ii) The meter rent and other charges as provided in the appropriate tariff are applicable to seasonal loads and would be charged extra for the entire period of supply.
- (iii) The supply would be disconnected after the end of the period unless the consumer wants the supply to be continued. Any reconnection charges have to be borne by the consumer.
- (iv) Consumer proposing to avail seasonal supply shall sign an agreement with the licensee to avail power supply for a minimum period of 2 years in the case of LT category of supply.
- (v)The consumers must avail supply in terms of whole calendar month continuously.
- (vi) The consumer is required to apply for seasonal supply and pay initial cost and security deposit as an applicant for normal electricity supply.
- (vii) The consumer shall ensure payment of monthly energy bills within 7 days of its receipt. The supply will be disconnected if payment is not made on due date.
- 20. **Schedule** of Tariff and Other charges approved in this Tariff Order shall remain in force until it is amended by the Commission.

PART - B: HIGH TENSION (HT) SUPPLY

System of supply: High Tension – Alternating Current, 50 cycles per second, 3 phase at 11 KV / 22 KV / 33 KV

The tariffs shall be applicable for supply of electricity for use in installations with a minimum contract demand of 80 KVA and maximum contract demand of 5000 KVA depending upon the supply voltage for different contract demand as specified below:

CI	SI Supply Voltage	Contract Demand	
31		Minimum	maximum
1	11 kV or 22 kV	80 kVA	1500kVA
2	33 kV	1501 kVA	5000 kVA

CATEGORY OF SERVICE AND TARIFF RATES

8.0 HIGH TENSION SERVICE-HTS

Applicability

The tariffs shall be applicable for supply of electricity for use in installations with a minimum contract demand of 80 KVA and maximum contract demand of 5000 KVA on high tension voltage at 11 KV / 22 KV / 33 KV as per the specified voltage wise contract demand.

Note:

- (i) A surcharge @ 10% shall be levied on fixed/demand charge and energy charge if supply is availed at LT voltage by the existing consumers against specified 11 kV.
- (ii) A surcharge @ 5% shall be levied on fixed/demand charge and energy charge if supply is availed at 11 kV or 22 kV by the existing consumers against specified 33 kV.
- (iii) An incentive @ 3% shall be given on demand charge and energy charge if supply voltage is at 33 kV against specified 11 kV.
- (iv) An incentive @ 3% shall be given on demand charge and energy charge if supply voltage is at 66 kV EHT voltage against specified 33 kV HT voltage.

8.1 HIGH TENSION/DS (HT/DS)

The tariffs shall be applicable for supply of electricity for domestic use defined under 1.0 above in installations with a minimum contract demand of 80 KVA and maximum contract demand of 5000 KVA on high tension voltage at 11 KV / 22 KV / 33 KV as per the specified voltage wise contract demand.

8.2 HIGH TENSION/NDS (HT/NDS)

8.2.1HIGH TENSION/NDS-I (HT/NDS-I)

The tariffs shall be applicable for supply of electricity for non-domestic use defined under 2.0 above including shopping malls, multiplexes and other commercial installations with a minimum contract demand of 80 KVA and maximum contract demand of 5000 KVA on high tension voltage at 11 KV / 22 KV / 33 KV as per the specified voltage wise contract demand.

8.2.2 HIGH TENSION/NDS-II (HT/NDS-II)

The tariffs shall be applicable for supply of electricity for non-domestic (religious and charitable) use defined under 2.0 above with a minimum contract demand of 80 KVA and maximum contract demand of 5000 KVA on high tension voltage at 11 KV / 22 KV / 33 KV as per the specified voltage wise contract demand.

8.3 HIGH TENSION/IAS (HT/IAS)

The tariffs shall be applicable for supply of electricity for irrigation and agricultural use defined under 3.0 above in installations with a minimum contract demand of 80 KVA and maximum contract demand of 5000 KVA on high tension voltage at 11 KV / 22 KV / 33 KV as per the specified voltage wise contract demand.

8.4 HIGH TENSION/INDUSTRIAL (HTIS-I)

The tariffs shall be applicable for supply of electricity for industrial use defined under 4.0 above other than power intensive covered under HTS-IV tariff in installations with a minimum contract demand of 80 KVA and maximum contract demand of 5000 KVA on high tension voltage at 11 KV / 22 KV / 33 KV as per the specified voltage wise contract demand.

8.5 HIGH TENSION/POWER INCENTIVE (HTIS-II)

The tariffs shall be applicable for supply of electricity for power intensive, metal alloy, steel melting, ferroalloy, ferro-metallurgical use in installations with a minimum contract demand of 80 KVA and maximum contract demand of 5000 KVA on high tension voltage at 11 KV / 22 KV / 33 KV as per the specified voltage wise contract demand.

8.6 HIGH TENSION/PWW (HT/PWW)

The tariffs shall be applicable for supply of electricity for public water works use defined under 5.0 above in installations with a minimum contract demand of 80 KVA and maximum contract demand of 5000 KVA on high tension voltage at 11 KV / 22 KV / 33 KV as per the specified voltage wise contract demand.

Tariff Rates

8.0 HIGH TENSION SERVICE-HTS

8.1 HIGH TENSION/DS (HT/DS)

SI.	Category of consumers	Fixed charge (Rs/KVA/ month or part thereof)	Energy charge Rate (Ps/unit)

8.2.1 HIGH TENSION/NDS (HT/NDS-I)

SI.	Category of consumers	Fixed charge (Rs/KVA/ month or part thereof)	Energy charge Rate (Ps/unit)

8.2.2 HIGH TENSION/NDS (HT/NDS-II)

SI.	Category of consumers	Fixed charge	Energy charge
		(Rs/KVA/	Rate (Ps/unit)
		month or part	
		thereof)	

8.3 HIGH TENSION/IAS (HT/IAS)

SI.	Category of consumers	Fixed charge (Rs/KVA/ month or part thereof)	Energy charge Rate (Ps/unit)

8.4 HIGH TENSION/INDUSRIAL (HTIS-I)

SI.	Category of consumers	Fixed charge (Rs/KVA/ month or part thereof)	Energy charge Rate (Ps/unit)

8.5 HIGH TENSION/POWER INCENTIVE (HTIS-II)

SI.	Category of consumers	Fixed charge (Rs/KVA/ month or part thereof)	Energy charge Rate (Ps/unit)

8.6 HIGH TENSION/PWW (HT/PWW)

SI.	Category of consumers	Fixed charge (Rs/KVA/ month or part thereof)	Energy charge Rate (Ps/unit)

PART - C: EXTRA HIGH TENSION (EHT) SUPPLY

System of supply: Extra High Tension – Alternating Current, 50 cycles per second, 3 phase at 66 KV / 110 KV / 132 KV / 220 KV

The tariffs shall be applicable for supply of electricity for use in installations with contract demand more than 5000 KVA depending upon the supply voltage for different contract demand as specified below:

SI	Supply Voltage	Contract Demand	
		minimum	Maximum
1	66 kV	5001 kVA	25000 kVA
2	110 kV or 132 kV or 220	Above	
	kV	25000 kVA	

CATEGORY OF SERVICE AND TARIFF RATES

9.0 EXTRA HIGH TENSION

Applicability

The tariffs shall be applicable for supply of electricity for use in installations with a minimum contract demand of 5001 KVA on extra high tension voltage at 66 KV / 110 KV / 132 KV / 220 KV as per the specified voltage wise contract demand.

Note:

- (i) A surcharge @ 5% shall be levied on fixed/demand charge and energy charge if supply is availed at 33 kV HT voltage by existing consumers against specified 66 kV EHT voltage.
- (ii) A surcharge @ 5% shall be levied on fixed/demand charge and energy charge if supply is availed at 66 kV EHT voltage by existing consumers against specified 110 KV / 132 KV / 220 KV EHT voltage.
- (iii) An incentive @ 3% shall be given on demand charge and energy charge if supply voltage is at 110 kV or 132 kV or 220 kV against specified 66 kV.

Tariff Rates

9.0 EXTRA HIGH TENSION SERVICES (EHTS)

SI.	Category of consumers	Fixed charge	Energy charge
		(Rs/KVA/	Rate (Ps/unit)
		month or part	
		thereof)	

TERMS AND CONDITIONS OF HT and EHT TARIFF

- 1. Unless otherwise agreed to, these tariffs are applicable for power supply at one point only.
- **2.** Unless otherwise specifically stated to the contrary, the figures of energy charges relates to paisa per unit for energy consumed during the month.
- **3.** These tariffs are exclusive of statutory levies like electricity duty/cess or any other taxes, duties/cess etc., imposed by the State Government / Central Government or any other competent authority and shall be charged extra.
- **4.** In case, payment is made through cheque and the cheque is dishonoured, an amount of Rs.200/- shall be levied as cheque return charges. The licensee may initiate action u/s 138 of the Negotiable Instrument Act, 1981 in addition to disconnection of the service.

5. The supply voltage for different contract demand as specified below:

SI	Supply Voltage	Contract Demand	
		minimum	maximum
1	11 kV or 22 kV	80 kVA	1500kVA
2	33 kV	1501 kVA	5000 kVA
3	66 kV	5001 kVA	25000 kVA
4	110 kV or 132 kV or 220	Above	
	kV	25000 kVA	

- **6.** Demand charges, wherever applicable, shall be charged on pro-rata basis from the date of release of connection. Demand charges, wherever applicable, shall be double as and when bi-monthly billing is done. Similarly, slabs of energy consumption shall also be doubled in case of bi-monthly billing.
- **7.** The electricity bill shall be rounded off in whole rupees. Amount less than 50 paisa shall be ignored and amount of 50 paisa and above shall be considered as one rupee.
- **8. Advance Payment Rebate:** If payment is made in advance well before commencement of consumption period for which bill is prepared, a rebate @ 1% per month shall be given on the amount (excluding security deposit) which remains with the licensee at the end of the month. Such rebate, after adjusting any amount payable to the licensee, shall be credited to the account of the consumer.
- **9. Prompt Payment Rebate:** If payment is made at least 7 days in advance of the due date of payment a rebate for prompt payment @ 0.25 % of the bill amount shall be given. Those consumers having arrears shall not be entitled for such rebate.
- **10. Delayed payment surcharge:** In case a consumer does not pay energy bills in full by the due date specified in the bill, a delayed payment surcharge of one and half (1.5) percent per month or part thereof on the outstanding arrears shall be levied from the due date for payment until the payment is made in full without prejudice to right of the licensee to disconnect the supply in accordance with Section 56 of the Electricity Act, 2003.

11. Power Factor Surcharge / Incentive

- (a)The monthly average power factor of the supply shall be maintained by the consumer not less than 0.90 (lagging). If the monthly average power factor of a consumer falls below 90% (0.9 lagging), such consumer shall pay a surcharge in addition to his normal tariff @ 1% on billed demand and energy charges for each fall of 0.01 in power factor upto 0.7(lagging)
- (b) In case the monthly average power factor of the consumer is more than 95% (0.95 lagging), a power factor incentive @ 0.5% on demand and energy charges shall be given for each increase of 0.01 in power factor above 0.95 (lagging)
- (c) If the average power factor falls below 0.70 (lagging) consecutively for 3 months, the licensee reserves the right to disconnect the consumer's service connection without prejudice for the levy of the surcharge.
- (d) The power factor shall be rounded off to two decimal places. For example, 0.944 shall be treated as 0.94 and 0.946 shall be treated as 0.95
- **12. Maximum Demand:** The maximum demand of supply of electricity during a month shall be twice the largest number of Kilo-Volt Ampere Hours (KVAH) delivered at the point of supply to the consumers during any consecutive 30 minutes in the month.

- **13. Billing Demand:** The billing shall be on the maximum demand recorded during the month or 75% of contracted demand, whichever is higher. Such billing demand shall be rounded off to next higher digit for the purpose of billing.
- 14. Excess Demand: If in any month, the recorded maximum demand of the consumer exceeds 105% of its contracted demand, the normal tariff shall be applicable upto the 105% of the contract demand and that portion of demand which is in excess of 105% of the contracted demand shall be billed at double the normal rate. If the actual recorded demand of a consumer exceeds 105% of the contracted demand consecutively for three months, the licensee may issue a notice and inform the consumer to get additional contract demand sanctioned or to limit their drawl as per their contract. Otherwise the licensee shall take action as per provisions of the Act/Rules/Regulations.

Illustration: If contract demand is 100 kva whereas maximum demand recorded during the month is 115 kva, then demand for 105 kva (105% of 100 kva) shall be billed at normal rate and demand for 15 kva (120 kva-105 kva) shall be billed at twice the normal rate.

15. Defective / Damaged / Burnt Meter: In case of meter being defective / damaged / burnt, the licensee or the consumer as the case may be shall replace the same within the period specified in "Standards of Performance" Regulations issued by the Commission. Till defective meter is replaced the consumption shall be assessed and billed on an average consumption of last six meter reading cycles or average monthly consumption of corresponding six meter reading cycles of the preceding year whichever is higher from the date of meter being out of order. Such consumption shall be treated as actual consumption for all practical purposes until the meter is replaced/ rectified.

In case a functional check-meter is available then the readings of the check meter shall be used for billing purposes when main meter becomes defective/damaged/burnt.

In case the meter becomes defective immediately after its installation and prior consumption is available, then billing shall be done provisionally on the basis of following load factor subject to adjustment on the average consumption of three meter reading cycles of the replaced meter.

16. FPPCA: The adjustment on account of Fuel and Power Purchase Cost variation shall be calculated in accordance with FPPCA formula notified by the Commission. The value of K-factor shall be applicable to the different consumer categories as per the values approved in this tariff order. Such charges shall be recovered / refunded in accordance with terms & conditions specified in the FPPCA formula.

17. Temporary Supply (HT & EHT)

- (i) Temporary Supply is for connection temporary in nature for a maximum period of two year. The applicability shall be as given in the respective tariff category. Temporary supply cannot be claimed by a prospective consumer as a matter of right but will normally be arranged by the licensee when a requisition is made giving due notice subject to technical feasibility and in accordance with electricity supply code issued by the Commission.
- (ii) The tariff shall be chargeable as applicable to the corresponding appropriate tariff category at the following rates subject to minimum Rs:

SI	Period of Supply	Tariff Rate
1.	Upto 12 months	150% of normal rate of appropriate
		tariff category
2.	More than 12 months and upto 18	175% of normal rate of appropriate
	months	tariff category

3	3.	More than 18 months and upto 24	200% of normal rate of appropriate
		months	tariff category

Demand charges, wherever applicable, shall be charged on pro-rata basis from the date of release of connection.

- (iii) Terms of Supply of Temporary Supply shall be as below:
- a) Temporary supply may be given for a period not exceeding 3 months in the first instance, the duration of which may be extended on quarter to quarter basis subject to maximum total duration of two year.
- b) In addition to the tariff charges, the consumer shall have to deposit the following charges before commencement of the temporary supply:
- (i) Estimated cost of erection of temporary service line and dismantling.
- (ii) Cost of irretrievable materials which cannot be taken back to service.
- (iii) Meter rent for the full period of temporary connection as per appropriate tariff schedule and other miscellaneous charges.
- (iv) Rental on the cost of materials of the licensee as per estimate at the rate of Rs. 15/- per month on every Rs. 100/- or part thereof.
- (v) Ten per cent on the total cost of the estimate for the temporary service connection to cover as security for loss of materials and contingencies. In case such loss is not noticed, the amount will be refunded.
- c) The applicants for temporary supply shall be required to make a deposit in advance of the cost as detailed above including demand charges and the energy consumption charges estimated for full period on the basis of contracted demand. This will however, be adjusted against the final bill that will be rendered on disconnection of supply.
- d) If the consumer intends to extend the temporary supply beyond the period originally applied for, he will have to deposit in advance all applicable charges as detailed above including the estimated electricity consumption charges, for the period to be extended and final bill as well, for the previous period, if any.

18. Seasonal Supply (HT & EHT)

(i) Seasonal supply shall be given to any consumer on written request to the Board subject to the following conditions.

SI	Period of Supply	Tariff Rate
1.	Upto 3 consecutive months in a	Appropriate tariff plus 40 percent
	year	
2.	More than 3 consecutive months	Appropriate tariff plus 30 percent
	and	
	upto 6 consecutive months in a	
	year	
3.	More than 6 consecutive months	Appropriate tariff plus 20 percent
	and	
	upto 9 consecutive months in a	
	year	
4.	More than 9 consecutive months	Appropriate tariff plus 10 percent.
	but	
	less than one year	

- (ii) The meter rent and other charges as provided in the appropriate tariff are applicable to seasonal loads and would be charged extra for the entire period of supply.
- (iii) The supply would be disconnected after the end of the period unless the consumer wants the supply to be continued. Any reconnection charges have to be borne by the consumer.
- (iv) Consumer proposing to avail seasonal supply shall sign an agreement with the licensee to avail power supply for a minimum period of 3 years in the case of HT category of supply.
- (v) The consumers must avail supply in terms of whole calendar month continuously.
- (vi) The consumer is required to apply for seasonal supply and pay initial cost and security deposit as an applicant for normal electricity supply.
- (vii) The consumer shall ensure payment of monthly energy bills within 7 days of its receipt. The supply will be disconnected if payment is not made on due date.

19. Time of Day tariff (ToD)

- (i) Under the Time of Day (ToD) Tariff, electricity consumption and maximum demand in respect of HT/EHT consumers for different periods of the day, i.e. normal period, peak load period and off-peak load period, shall be recorded by installing a ToD meter.
- (ii) The maximum demand and consumption recorded in different periods shall be billed at the following rates on the tariff applicable to the consumer.

Time of use	Demand Charges	Energy Charges
Normal period (6:00 a.m. to 6:00 p.m)	Normal Rate	Normal rate of energy charges
Evening peak load period (6:00 p.m to 10.00 p.m)	Normal Rate	120% of normal rate of energy charges
Off-peak load period (10:00 p.m to 6:00 a.m)	Normal Rate	90% of normal rate of energy charges

- (iii) Applicability and Terms and Conditions of TOD tariff:
- (a) TOD tariff shall be optional unless otherwise specifically stated to the contrary in the tariff order.
- (b) The facility of aforesaid TOD tariff shall not be available to HT/EHT consumers having captive power plants and/or availing supply from other sources through wheeling of power.
- (c) The HT/EHT industrial consumers who have installed standby generating plants shall also be eligible for the aforesaid TOD tariff.
- (d) In the event of applicability of TOD tariff to a consumer, all other terms and conditions of the applicable tariff shall continue to apply.
- **20.** Schedule of Tariff and Other charges approved in this Tariff Order shall be as approved in the tariff order.

<u>PART - D: MISCELLANEOUS AND GENERAL CHARGES (FOR ALL CATEGORIES OF CONSUMERS)</u> 1 METER RENT:

i) BPL

ii) LT Single Phase except BPL

iii) LT Three Phase Upto 100 Amps

iv) LT meter with CT

v) HT meter with CTPT combined unit

vi) EHT meter with CTPT combined unit

2 APPLICATION FEE FOR NEW CONNECTION / REDUCTION OF CONTRACTED LOAD OR DEMAND / ENHANCEMENT OF CONTRACTED LOAD OR DEMAND/REQUEST FOR PERMANENT DISCONNECTION:

(i) BPL

(ii) LT Single phase except BPL

(iii) LT Three phase

(iv) HTS

(v) EHTS

3 TESTING / INSPECTION OF CONSUMER'S INSTALLATION:

(i) Initial Test / Inspection Free of cost

(ii) Subsequent test and inspection Rs. 100.00 for single phase necessitated by fault in installation or by not complying with terms and conditions of supply connection

a) for three phase LT connection

b) for HT connection.

4 METER TESTING FEE:

(i) LT Single Phase meter

(ii) LT Three Phase meter

(iii) LT Three Phase meter with CT

(iv) LT Tri-vector meter

(v) HT Tri-vector meter

(vi) EHT Tri-vector meter

(vii) LT CT set

(viii) HT metering equipment

(ix) EHT metering equipment

Note: If the meter is tested at third party testing laboratory at the request of the consumer then the fees charged by the testing laboratory will be payable by the consumer.

5 REMOVING / RE-FIXING / CHANGING OF METER / METER BOARD AT CONSUMER'S REQUEST:

(i) BPL

(ii) LT Single Phase meter

- (iii) LT Three Phase meter
- (iv) LT Three Phase meter with CT
- (v) LT Tri-vector meter with CT
- (vi) HT Tri-vector meter with metering equipment
- (vii) EHT Tri-vector meter with metering equipment

Note: Cost of material, as required, will be borne by the consumer

6 RECONNECTION CHARGE:

- (i) BPL
- (ii) LT Single Phase supply
- (iii) LT Three Phase supply
- (iv) HT supply
- (v) EHT supply

7 SUPERVISION, LABOUR AND ESTABLISHMENT CHARGE FOR SERVICE CONNECTION:

- (i) BPL
- (ii) LT Single Phase
- (iii) LT Three Phase
- (iv) HT As per approved estimate
- (v) EHT As per approved estimate

11. Conclusion of Commission's Order

The Commission has considered the petitions submitted by Electricity Department of Dadra and Nagar Haveli for Truing-up of Aggregate Revenue Requirement of FY 2011-12, Annual Performance Review of FY 2012-13 and approval of Aggregate Revenue Requirement (ARR) and determination of retail tariffs for supply of energy for FY 2013-14 bearing petition no. 92/2012, the Commission approves the Aggregate Revenue Requirement (ARR) and the tariff structure for FY 2013-14.

1. The break-up of the Aggregate Revenue Requirement approved for Electricity Department of Dadra and Nagar Haveli for FY 2013-14 is given below.

Sr. No.	Particulars	Approved (FY 2013-14) (in Rs. Crores)
1	2	3
1	Cost of fuel	-
2	Cost of power purchase for full year	2,057.71
3	Employee costs	5.63
4	Administration and General Expenses	2.32
5	Repair and Maintenance Expenses	6.08
6	Depreciation	17.97
7	Interest and Finance charges	9.65
8	Interest on working capital & Interest on Security Deposit	23.92
9	Return on NFA /Equity	10.83
10	Provision for Bad Debt	10.39
11	Advance against Depreciation	-
12	Total Revenue Requirement	2,144.50
13	Less: Non-Tariff Income	11.29
14	Less: Revenue from Surplus Power Sale/UI	
15	Less: Revenue from Short term sale	-
16	Net Revenue Requirement (12-13-14-15)	2,133.21
17	Revenue from Retail Sales at Existing Tariff	2,078.93
18	Net Gap (16-17)	54.28
19	Gap/(Surplus) for the previous year	(57.13)
20	Net Gap /(Surplus) (19-18)	(2.84)

2. The approved retail tariff (as given below) for FY 2013-14 shall be as under:

		Approved Tariff for FY 2013-14 (Rs.)			
S.No.	Category/Consumption Slab	Demand Charges (Rs./KVA/Month or Rs. per consumer/ month) or (Rs./HP/month)	Variable Charges (Rs./KWh)	Average tariff (Rs./Unit)	K Factor ³⁸ for FPPCA formula for FY 2013-14
Α	Domestic		/KWh	/KWh	
1	0-50 units		1.10	1.10	0.28
2	51-200 units		1.70	1.70	0.45
3	201 - 400 units		2.20	2.20	0.57
4	401 and 600		2.50	2.50	0.64
5	Low Income Group (LIG)	5.00 ³⁹		0.34	N.A.
В	Commercial				
1	1- 100 units		2.25	2.25	0.57
2	101 and above units		3.00	3.00	0.76
С	Industrial (LT)				
1	Up to 20 HP	0.00	3.00	3.00	0.77
2	Above 20 HP	20.00	3.00	3.15	0.81
D	Agriculture & Poultry				
1	Connected Load upto 10 HP		0.65	0.65	N.A.
2	Connected Load above 10 HP to 99 HP		0.95	0.95	N.A.
E	Public Lighting (lamp)		1.60	1.60	0.42
F	High Tension Supply				
НТА	Industrial & Motive power- 11KV or 66KV having CMD above 100 KVA				
1	Up to 50000 units	75.00	3.70	3.89	0.98
2	50001-500000 units	75.00	3.80	3.99	1.00
3	Above 500000 units	75.00	3.85	4.04	1.02

³⁸ FPPCA is not applicable for the consumer categories including BPL, agriculture and temporary supply. Therefore, the K factor against these categories is shown as zero.

Rs. per consumer per month

		Approved Tariff for FY 2013-14 (Rs.)			
S.No.	Category/Consumption Slab	Demand Charges (Rs./KVA/Month or Rs. per consumer/ month) or (Rs./HP/month)	Variable Charges (Rs./KWh)	Average tariff (Rs./Unit)	K Factor ³⁸ for FPPCA formula for FY 2013-14
НТВ	Ferro Metallurgical/Steel Melting/ Steel Rolling/Power Intensive				
1	First - 300 units/KVA	500.00	2.70	3.80	0.94
2	301-500 units/KVA	500.00	3.40	4.50	1.11
3	Above 500 units/KVA	500.00	3.70	4.80	1.19

- 3. The approved tariff of FY 2013-14 shall come in force with effect from 1st April 2013 and shall remain valid till March 31'2014. The licensee shall publish the revised tariff structure and the salient features of tariff within one week in three daily newspapers in the respective local languages of the region, besides English, having wide circulation in their respective areas of supply.
- 4. The licensee will compute fuel and power procurement cost variations and adjustments shall be made in the consumer bills based on the Fuel & Power Purchase Cost Adjustment (FPPCA) formula notified by the Commission. The approved per unit cost of power purchase (R_{approved}) for use in the FPPCA formula (paisa per unit) is 325 paisa per unit for FY 2013-14.
- 5. Copy of this order may be sent to Petitioner, CEA and Administration of UT of Dadra and Nagar Haveli. It shall be placed on the website of the Commission.

Sd/-(Sh. S K Chaturvedi) (Dr. V K Garg) Member Chairman

Place: Gurgaon

Date: March 25' 2013

Certified Copy

(R. K. Malik) Secretary

Sd/-

12. 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 4000 KVA (including licensee common feeders and express feeders/dedicated feeders) shall generally be at 11 KV and for more than 4000 KVA up to 25000 KVA at 66 KV. The consumer who requires load more than 25000 KVA load, the supply voltage shall be at 220 KV level. (Reference discussion in para 4.3.2 of this order). However, wherever the existing feeders are required to be augmented, the Electricity Department shall carry out such augmentation by 30th September, 2013. This satisfies the grievances of 97% of the total consumers having connected load above 1500 kVA.
- 4) 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.

Provided that

- a) If a portion of the domestic premises limited to only one room is used for running small household business having connection under domestic category, such connection shall be billed under domestic category provided that the total monthly consumption of the consumer (including consumption for above mentioned small household business) does not exceed 150 kWh.
- b) If either more than one room or only one room having monthly consumption exceeding 150 kWh for consecutive three months is detected in the domestic premises being used for mixed purposes having domestic connection, such connection shall further be billed under commercial category until a separate connection of appropriate tariff is taken for that portion used for non-domestic purpose.
- 5) If connected load of a domestic category is found to be at variance from the sanctioned/contracted load as a result of increase of load or due to replacement of lamps, fans, fuses, switches, low voltage domestic appliances, fittings, etc it shall neither fall under

- unauthorized use of electricity (Section 126 of EA 2003) nor under theft of electricity (Section 135 of EA 2003).
- 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 at 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 paisa per unit (kWh) charge for energy consumed during the month.
- 10) Delayed payment surcharge shall be applicable to all categories 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) Advance Payment Rebate: If payment is made in advance well before commencement of consumption period for which bill is prepared, a rebate @ 1% per month shall be given on the

amount (excluding security deposit) which remains with the licensee at the end of the month. Such rebate, after adjusting any amount payable to the licensee, shall be credited to the account of the consumer.

- 12) **Prompt Payment Rebate:** If payment is made at least 7 days in advance of the due date of payment a rebate for prompt payment @ 0.25 % of the bill amount shall be given. Those consumers having arrears shall not be entitled for such rebate.
- 13) 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.
- 14) 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.
- 15) Schedule of other charges approved in this Tariff Order will remain in force till March 31' 2014.

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.

I. 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. 5.00/- per service connection per month**. For any unauthorized increase in the load beyond 2x40 watts, penal charges at the rate of Rs. 10.00 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.

I. Energy Charges

Usage (Units/Month)	Energy charge (Ps./Unit)
1-100 units	225
101 units and above	300

III. INDUSTRIAL - LT

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

I. Energy Charges

Usage (Units/Month)	Energy charge (Ps./Unit)
For all units	300

II. Fixed Charges

Usage (Units/Month)	Tariff (Rs./HP/month) part thereof	
Up to 20 HP	Nil	
For loads above 20 HP	Rs. 20/- per HP or part thereof	

III. 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 the 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-DD 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.

i. Fixed Charges (Demand Charges)

For Billing Demand	Charges (Rs./KVA/month) or part thereof
Up to Contract Demand	Rs. 75/-
In Excess of Contract Demand	Rs 150/-

ii. Energy Charges

Usage (Units/Month)	Tariff (Ps./Unit)
1 - 50,000 units	370
50001 – 500000 Units	380
500001 and above	385

iii. 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.

iv. **Power Factor Charges**

- a. The monthly average power factor of the supply shall be maintained by the consumer not less than 0.90 (lagging). If the monthly average power factor of a consumer falls below 90% (0.9 lagging), such consumer shall pay a surcharge in addition to his normal tariff @ 1% on billed demand and energy charges for each fall of 0.01 in power factor upto 0.7(lagging).
- b. In case the monthly average power factor of the consumer is more than 95% (0.95 lagging), a power factor incentive @ 0.5% on demand and energy charges shall be given for each increase of 0.01 in power factor above 0.95 (lagging).
- c. If the average power factor falls below 0.70 (lagging) consecutively for 3 months, the licensee reserves the right to disconnect the consumer's service connection without prejudice for the levy of the surcharge.
- d. The power factor shall be rounded off to two decimal places. For example, 0.944 shall be treated as 0.94 and 0.946 shall be treated as 0.95.

v. Billing Demand

Billing demand will be the highest among the following:

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

B. HT Industrial (Ferro Metallurgical/ Steel Melting/ Steel Rerolling Power Intensive)

i. Fixed Charges (Demand Charges)

For Billing Demand	Charges (Rs./KVA/month) or part thereof
Up to Contract Demand	Rs. 500/-
In Excess of Contract Demand	Rs 1000/-

ii. Energy Charges

Usage	Tariff (Ps./Unit)
First 300 units / kVA	270
Next 200 units / kVA	340
Above 500 units / kVA and above	370

iii. **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.

iv. **Power Factor Charges**

- a. The monthly average power factor of the supply shall be maintained by the consumer not less than 0.90 (lagging). If the monthly average power factor of a consumer falls below 90% (0.9 lagging), such consumer shall pay a surcharge in addition to his normal tariff @ 1% on billed demand and energy charges for each fall of 0.01 in power factor upto 0.7(lagging).
- b. In case the monthly average power factor of the consumer is more than 95% (0.95 lagging), a power factor incentive @ 0.5% on demand and energy charges shall be given for each increase of 0.01 in power factor above 0.95 (lagging).
- c. If the average power factor falls below 0.70 (lagging) consecutively for 3 months, the licensee reserves the right to disconnect the consumer's service connection without prejudice for the levy of the surcharge.
- d. The power factor shall be rounded off to two decimal places. For example, 0.944 shall be treated as 0.94 and 0.946 shall be treated as 0.95.

V. AGRICULTURE AND POULTRY

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

i. Energy Charges

Usage	Tariff (Ps./Unit)
For connected load up to 10 HP	65
Beyond 10 HP and upto 99 HP connected load	85

VI. PUBLIC LIGHTING

i. Energy Charges

Usage	Tariff (Ps./Unit)
For all units	160

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	10
2	Three Phase	25
3	LT Meter with MD indicator	200
4	Tri- vector Meter	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.)
1	Single Phase	50
2	Three Phase	100
3	HT	1000

c. Service Connection Charges

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

d. Extra Length Charge

S.No.	Connection Type	Tariff / Meter (in Rs.)
1	Single Phase	25
2	Three Phase	50

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 for FY 2013-14

S.No.	Type 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	500
	LT Consumer	
4	Three Phase Tri-vector Meter (0.5 Class)	500
	11 KV HT Consumer	
5	Three Phase Tri-vector Meter (0.2 Class) 66KV	1000
	EHT Consumers	
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 Metering Equipment	Fee Per Unit (in Rs.)
1	Single Phase Lighting / Domestic	10
2	Three Phase Lighting /Domestic	25
3	Single Lighting / Domestic	50
4	Three Phase Lighting / Domestic	100
5	Three Phase LT Industries	250
6	Single Phase / Three phase Agriculture	50
	/Streetlight / Public Lighting & other	
7	HT Industries up to 500 KVA	1000
8	HT Industries up to 2500 KVA	5000
9	HT Industries above 2500 KVA	10000