TARIFF ORDER

True up of ARR for FY 2011-12,
Review of ARR for FY 2012-13
and
Determination of Aggregate Revenue Requirement
&
Retail Tariff for FY 2013-14

Petition no. 90/2012

For
Electricity Department, Daman & Diu

JOINT ELECTRICITY REGULATORY COMMISSION

For the State of Goa and Union Territories

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22nd March 2013

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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
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
DISCOM/DD	:	Electricity Department, Daman & Diu
D/C	:	Double Circuit
DS	:	Domestic Supply
EA 2003	:	The Electricity Act, 2003
FC	:	Fixed Charges
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 territories
KVA	:	Kilo Volt Ampere
KWh	:	Kilo Watt Hour
LPS	:	Late Payment Surcharge
LT	:	Low Tension
MU	:	Million Unit
MW	:	Mega Watt
MYT	:	Multi Year Tariff
NDS	:	Non Domestic Supply
O/H	:	Over head

Abbreviation		Full Form
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
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)
S. K. Chaturvedi (Member)
Petition No. 90/2012

In the matter of

Truing up of Aggregate Revenue Requirement for FY 2011-12, Review of FY 2012-13 & Aggregate Revenue Requirement (ARR) & Retail Tariff for FY 2013-14 of the Electricity Department, Union Territory of Daman & Diu

And in the matter of

Electricity Department, Union Territory of Daman & Diu…………….……………………………………………………………………………………..Petitioner

ORDER

Date: 22nd 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 Daman and Diu

The Electricity Department, UT of Daman and Diu hereinafter called ED-DD, is responsible for procurement, transmission and distribution of electricity to the various consumer categories in the UT of Daman and Diu.

As submitted by the Petitioner,

Quote

"

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

The present transmission and distribution system of EDDD consists of 25.71 circuit kms of 220 kV Double Circuit (D/C) lines, 80.7 kms of 66kV lines, 342 circuit kms of 11kV and above lines and 890.89 kms of LT lines along with 491 transformers. Presently, there are 78 11 kV feeders in the network of Daman & Diu.

The present power allocation of Daman & Diu is approximately 341 MW from various generating stations including 92 MW from NTPC-SAIL plant located at Bhilai and 38 MW from Ratnagiri Gas and Power Private Limited (RGPPL). At present, EDDD gets power from 220/66 kV Vapi substation through 66 kV D/C line and 220 kV Vapi-Magarwada Central Sector line, and Diu gets power from 66 kV Una substation through 66 kV double circuit line emanating from 220 /66 kV Kansari substation of GETCO.

Earlier in FY 11-12, electricity drawal of EDDD was approximately 220 to 250 MW against the daily scheduled availability of 280 to 290 MW resulting in a surplus of 30 to 40 MW during FY 11-12. The current demand is primarily dependent on the HT and LT Industrial consumers contributing approx. 94% of the total sales in FY 11-12. The demand from the industrial consumers is primarily due to tax holiday benefit extended by the Govt. of India in UT of Daman & Diu which has attracted a large number of industries to set up base in this area.

Considering the increase in demand from the large industries, the demand is likely to reach to 340 MW by FY 2013-14. In view of the huge power demand in future, EDDD had proposed a number of schemes to be implemented during FY 12-13 and FY 13-14 for strengthening and augmentation of the transmission and distribution system in the territory. EDDD is also undertaking efforts to get higher allocation from the Central Generating Stations. The EDDD is undertaking all necessary actions to tie-up for long-term power purchase for meeting the deficit in the UT of Daman and Diu.''

Unquote

1.3 JERC Tariff Regulations

The Commission, in exercise of the powers conferred upon by the Electricity Act, 2003 has notified JERC (Terms and Conditions for determination of Tariff) Regulations, 2009 for determination of tariff (hereinafter referred to as JERC Tariff Regulations).

1.4 Filing of Petition

Electricity Department, UT of Daman & Diu 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-DD has submitted its ARR and Tariff petition for FY 2013-14 vide affidavit dated November 26' 2012 and filed on November 30' 2012.

1.5 Admission of Petition

After initial scrutiny and analysis of the petition, the Commission as per its order dated December 13' 2012 admitted the petition on ARR & tariff determination for FY 2013-14. The Petitioner was directed to publish the summary of the ARR petition and the tariff proposal in leading newspapers of the union territory and upload the petition on the website of the Petitioner. The copy of the admission letter is enclosed as **Annexure 1** to this order.

The Petitioner as per its office letter dated December 13' 2012, received at the Commission's office on December 24' 2012 submitted the copies of the newspaper clippings wherein the public notices were published by the Petitioner for the information of the stakeholders. The copies of 'The Free Press Journal' and 'Vartman Parvah' were enclosed alongwith this letter.

The data as submitted alongwith the petition had data gaps and could not facilitate appropriate calculation of the power purchase cost and other components of the ARR and hence Commission sought additional data vide letter dated December 18' 2012. The Petitioner was asked to submit the data/information by December 24' 2012.

The Commission sought important data like the amount of security deposit held by the Petitioner, frequency wise details of UI over/under-drawl for FY 2011-12, UI bills for FY 2011-12, month-wise power purchase details based on actual for six months of FY 2012-13, amount of power purchase rebate, slab wise details of no. of consumers and load etc.

The Petitioner vide their email dated December 24’ 2012 sought extension of one week for the submission of the queries raised by the Commission. The Commission vide letter dated December 26’ 2012 gave extension of time to the Petitioner and asked the Petitioner to submit their reply latest by January 2’ 2013. The Commission also informed that the technical validation session would be held on January 8’ and January 9’ 2013. The Petitioner was asked to bring all relevant documents alongside for the Technical Validation Session to be held at the Commission’s office.

The additional supporting data as sought by the Commission vide email dated December 18’ 2012 was responded to by the Petitioner vide affidavit dated December 26’ 2012, received at the Commission’s office on January 4’ 2013. On examination of the response, the Commission pointed out the missing bills for FY 2011-12 and other clarifications basis the received data vide email dated January 4’ 2013. The Petitioner was asked to bring the data as sought alongwith the summary sheets of power purchase for FY 2011-12 during the technical validation session.

On January 8’ 2013, the representatives of the Department alongwith the representatives of the Commission conducted the technical validation session at the Commission’s office. The Commission vide email dated January 9’ 2013 sought clarifications/additional data on the issues/discrepancies highlighted during the technical validation session. This included clarifications on the compliance of directives, supporting UI bills, mismatch of certain components claimed with the audited accounts for FY 2011-12, absence of physical verification certificate alongwith the fixed asset register, mismatch in the NSPCL units for FY 2011-12, UI summary sheets for FY 2011-12 and first half of FY 2012-13 etc. The same were responded to by the Petitioner vide email dated January 16’ 2013.

The Commission on analysis of the submissions of the Petitioner vide email January 16’ 2013, issued a reminder mail to the utility vide email dated February 5’ 2013 on the pending clarifications which were delaying the processing of the tariff order. This mainly included clarifications on the mismatch of the NSPCL units for FY 2011-12 as per the REA and the submission of the Petitioner, UI quantum and cost mismatch with the WRPC for FY 2011-12 and deviation in sales and revenue figures from the review figures (based on actual) submitted in true-up for FY 2011-12.

The Petitioner, subsequently, vide its email dated February 20’ 2013 sent its response to the above mentioned clarifications of the Commission. The Petitioner gave justification for non-reconciliation of the NSPCL units from the REA of WRPC for the period April to August 2012; UI quantum and cost was agreed upon by the Petitioner as per the Commission's analysis and the reason for the deviation in the sales and revenue figures in the true-up from the review for FY 2011-12 was furnished.

The Commission has considered the submissions of the Petitioner till February 20' 2013 in its analysis for this tariff order.

1.6 Interaction with the Petitioner

The Petitioner submitted its replies, in response to the queries raised by the Commission's office, which have been considered for the computation of the ARR and the resultant tariff thereof, of the Petitioner.

Table 1.6.1 : Interaction with the Petitioner

S. No.	Date	Action by	Subject
1.	30.11.2012	ED-DD	Petition submission
2.	13.12.2012	Commission	Admission of the petition
3.	18.12.2012	Commission	Data gaps to be submitted for issuance of a complete tariff order; Important data like the amount of security deposit held by the Petitioner, frequency wise details of UI over/under-drawl for FY 2011-12, UI bills, amount of rebate, slab wise details of no. of consumers and load etc. sought
4.	24.12.2012	ED-DD	Extension of time by one week for submission on the data gaps pointed out by Commission sought
5.	26.12.2012	Commission	Commission grants extension and asks to submit latest by 02.01.2013
6.	04.01.2013	ED-DD	Response to the data gaps sought by the Commission vide letter dated December 18' 2012
7.	04.01.2013	Commission	Clarifications sought basis the data submitted on 04.01.2013; Missing power purchase bills for FY 2011-12 intimated, summary sheet of power purchase for FY 2011-12 sought
8.	09.01.2013	Commission	Validation session held; clarifications/supporting data sought as per the discrepancies/issues pointed out during the validation session vide email 09.01.2013
9.	16.01.2013	ED-DD	Petitioner submits the data as asked in email dated 09.01.2013 with some pending queries to be replied shortly
10.	05.02.2013	Commission	Commission issues a reminder mail on the pending issues/clarifications as regards UI quantum and cost for FY 2011-12, power purchase quantum mismatch for FY 2011-12 etc.
11.	20.02.2013	ED-DD	Response of the Petitioner on queries of Commission dated 05.02.2013
12.	06.03.2013	ED-DD	Replies to the objections in respect of the petition for FY 2013-14

1.7 Public hearing process

The 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.

Table 1.7.1 : Details of public notices published by the Petitioner

S. No.	Date of Publication	Language	Name of Newspaper
1.	December 7' 2012	Gujarati	Vartaman Pravah
2.	December 7' 2012	English	The Free Press Journal

The petitioner also uploaded the petition on Electricity Department, DD website (http://www.dded.gov.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 paper cutting of public notice are attached as **Annexure 2** to this order.

1.8 Notice for Public Hearing

The Commission published the notice for public hearing regarding approval of Aggregate Revenue Requirement (ARR) & tariff and uniform terms and conditions of tariff for FY 2013-14 in 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 below mentioned schedule:

Table 1.8.1 : Schedule of Public hearing at Daman and Diu

S. No.	Date & Time	Venue of Hearing	Subject
1.	8th February 2013 10 am onwards for all category of consumers	Swami Vivekananda Auditorium, Govt. College, Nani Daman	True-up of ARR for FY 2011-12, Review of ARR for FY 2012-13 and approval of ARR & Determination of Tariff for FY 2013-14 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 the institution of CGRF
2.	11th February 2013 10 am onwards for all category of consumers	Community Hall, Near Sidhivinayak Temple, Ashok Nagar Colony, Ghoghla, Diu	

Table 1.8.2 : Details of public notices published by Commission

S. No.	Date	Language	Name of Newspaper
1.	January 23' 2013	Hindi	Savera India Times, Daman
2.	January 23' 2013	Gujarati	Divya Bhaskar, Surat
3.	January 23' 2013	Hindi	Asli Azadi, Daman & Diu
4.	January 23' 2013	Hindi	Nishpaksh Jansanchar, Mumbai

Table 1.8.3 : Repeat public notices published by Commission

S. No.	Date	Language	Name of Newspaper
1.	February 5' 2013	Gujarati	Divya Bhaskar, Surat
2.	February 5' 2013	Hindi	Asli Azadi, Daman & Diu
3.	February 5' 2013	Hindi	Nishpaksh Jansanchar, Mumbai

The public notice issued by the Commission highlighted new features of the tariff terms and conditions to be introduced. This included the introduction of fixed charge, demand based tariff, TOD tariff, Seasonal Tariff, Prompt Payment Rebate, Advance Payment Rebate, Cheque return charges etc. Rationalization of tariff slab, voltage-wise contract load/ demand, Temporary Tariff, Excess Demand, PF Surcharge, PF Incentive, Delayed Payment Surcharge etc. were also mentioned in the public notice.

The copies of public notice published by the Commission for intimation of public hearing(s) are attached as **Annexure 3** to this order. The public notices were also published on the website of the Commission (www.jercuts.gov.in).

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 opportunity to express their views. The list of objectors is attached as **Annexure 4** to this order. The issues and concerns expressed by stakeholders have been examined by the Commission. The major issues discussed during the public hearing(s), the comments/replies of the utility and the views of the Commission thereon, have been summarized in Chapter 4 of this order.

The list includes the stakeholders:

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 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 in addition to prior written replies, during the hearing itself. Licensee submitted written reply to all written objections/suggestions of the stakeholders.

2. Summary of True-up for FY 2011-12, Review for FY 2012-13 and ARR & tariff for FY 2013-14 filed by the Petitioner

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.

Electricity Department, UT of Daman and Diu has filed its petition for determination of Aggregate Revenue Requirement and Tariff for FY 2013-14 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. As submitted by the Petitioner, information provided in the True Up for FY 2011-12 is based on the Annual Accounts and principles adopted by the Commission in its previous orders on Interest on Term Loan, Interest on Working Capital and Depreciation.

As discussed at Para 1.5 of Chapter 1, after initial scrutiny & analysis of the ARR and Tariff Petition filed by ED- DD for FY 2013-14, the petition was admitted subject to removal of infirmities to the extent possible. The Commission has taken the petition bearing no. 90/2012 on record.

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

The Petitioner has submitted the truing up for FY 11-12, revised estimates for FY 12-13 and the basis, assumptions and projections of individual elements constituting the determination of ARR for FY 13-14. Based on the estimates and projections for FY 2013-14, the ARR for ED-DD for FY 2013-14 has been proposed at Rs. 972.17 Crores. The brief summary of the proposal is presented below.

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

Sr. No.	Particulars	True-Up FY 2011-12	Revised Estimates FY 2012-13	Estimates FY 2013-14
1	Power Purchase Cost	817.09	817.98	922.73
2	O&M Expense	14.62	15.93	17.35
3	Depreciation	12.41	14.51	16.46
4	Interest Cost on Long-term Capital Loans	1.49	3.32	6.77
5	Interest on Working Capital Loans	10.22	10.25	11.56
6	Return on Equity	0.28	1.21	2.98
7	Provision for Bad Debt	0.00	4.08	4.41
8	Less: Non-Tariff Income	8.33	9.17	10.08
9	**Annual Revenue Requirement**	**847.78**	**858.11**	**972.17**
10	Revenue @ Existing Tariff	704.53	815.83	909.19
11	Revenue from Surplus Power Sale	49.80	23.81	0.00
12	**Total Revenue**	**754.33**	**839.63**	**909.19**
13	**Revenue (Gap) /Surplus at Existing Tariff**	**(93.45)**	**(18.48)**	**(62.99)**
14	Previous year's gap carried over (40% of the projected gap of FY 11-12 & FY 12-13)			(43.87)
15	**Total (Gap)/ Surplus at Existing Tariff**	**(93.45)**	**(18.48)**	**(106.87)**
	Covered by			
16	Additional Revenue @ Proposed Tariff	-	-	106.87
17	**Net (Gap)/ Surplus at Proposed Tariff**	**(93.45)**	**(18.48)**	**0.00**

2.3 Summary of the Tariff Proposal for FY 2013-14

The Petitioner has submitted that the sales to LT industrial and HT/EHT category form approximately 94% of the total sales within the UT of Daman & Diu. Further, the average cost of supply has also increased over the past years due to increase in power purchase cost. Therefore, the Petitioner has submitted that the current two-part Tariff structure is inadequate to compensate for the loss of revenue.

The Petitioner has proposed time of day tariff for HT consumers having sanctioned demand of 900 KVA and above. ED-DD has proposed energy charges of Rs 7.50 per unit for the all consumers having sanctioned demand of 900 kVA and above. Also, during the off peak hours, ED-DD has proposed a rebate of Rs. 0.80 per unit in the energy charges approved by the Commission in the respective category of the consumers having sanctioned demand of 900 kVA and above.

The Petitioner has further submitted that due to TOD tariff, consumers who reduce their consumption during the peak hours will shift 50% (average) of their consumption to other time of the day. It will also help ED-DD in reduction in energy supplied during peak hours through short term sources (costly power).

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

Tariff Structure	Existing (FY 2012-13)		Proposed (FY 2013-14)	
	Energy Charges (Rs/kWh)	Fixed Charges	Energy Charges ((Rs/kWh)	Fixed Charges
Low Income Group		Rs. 10/connection /month		Rs. 10/connection /month
LT-D/Domestic				
Ist 50 Units	1.10		1.10	
51 to 200 Units	1.70		1.70	
201 to 400 Units	2.10		2.10	
401 to 600 Units	2.45		2.45	
LT-C/Commercial				
1st 100 Units	2.50		2.65	
Beyond 100 Units	3.50		3.65	
LT- Ag/ Agriculture				
Upto 10 HP per unit	0.60		0.60	
Beyond 10 HP per unit	0.90		0.90	
LTP Motive Power				
Upto 20 HP of Connected Load	3.55		3.70	
Above 20 HP Connected Load	3.65	Rs. 25/HP	3.80	Rs. 25/HP
LTP Public Water Work				
Upto 20 HP of Connected Load	3.55		3.55	
Above 20 HP Connected Load	3.65	Rs. 25/HP	3.65	Rs. 25/HP
LT-PL/Public Lighting				
Public Lighting	4.00		4.00	
HT				
HTC General Industrial / Motive Power 11KV or 66KV having CMD above 100KVA				
50000 units	4.20	Rs. 100 /KVA	4.77	Rs.100 / KVA
50000 to 5 lakh units	4.35	Rs. 100 /KVA	4.92	Rs.100 /KVA
Beyond 5 lakh units	4.55	Rs. 100/KVA	5.12	Rs. 100 /KVA

Tariff Structure	Existing (FY 2012-13)		Proposed (FY 2013-14)	
	Energy Charges (Rs/kWh)	Fixed Charges	Energy Charges ((Rs/kWh)	Fixed Charges
HT Industrial(Ferro Metallurgical / Steel Melting/ Steel Rerolling Power Intensive)				
First 300 Units per KVA	3.30	Rs. 550/KVA	3.87	Rs. 550/KVA
Next 200 units per KVA	4.00	Rs. 550/KVA	4.57	Rs. 550/KVA
Above 500 units per KVA	4.25	Rs. 550/KVA	4.82	Rs. 550/KVA

2.4 Prayer to the Commission

The Petitioner respectfully prays that the Commission may:

Quote

''

- Admit the Aggregate Revenue Requirement of FY 13-14 and the Tariff Revision Proposal for FY 13-14 as submitted herewith
- Approve the Aggregate Revenue Requirement of FY 13-14 as well as the revised estimates for FY 12-13
- Make the proposed Retail Supply Tariffs applicable from April 1, 2013
- 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, Review for FY 2012-13 and True-up for FY 2011-12

3.1 Introduction

The Petitioner has submitted the ARR & tariff petition for FY 2013-14 comprising of the true up for FY 2011-12, revised estimates for FY 2012-13 and projections for FY 2013-14. The Petitioner has submitted that the audited accounts for FY 2011-12 and the principles adopted by the Commission in its previous order form the basis for the true-up of FY 2011-12. The actual of FY 2011-12, actual available data of FY 2012-13 and revised estimates of FY 2012-13 form the basis of projection for FY 2013-14.

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

The Petitioner has requested for the True-up of FY 2011-12 and review of the ARR for FY 2012-13 which was determined earlier by the Commission in its order for FY 2012-13 dated August 25 ’2012. The True-up of FY 2011-12 and Review of ARR of FY 2012-13 is 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 actual of sale of electricity, income and expenditure for FY 2011-12 and also the revised estimates/actual 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.

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

In the determination of ARR & tariff for FY 2013-14, various provisions of the JERC's Tariff Regulations 2009 pertaining to business of the integrated utility are relevant and the Commission has been guided by the principles contained in Section 61 of the Act among other things 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;

The Commission has also kept in mind the JERC (Procurement of Renewable Energy Regulations) 2010 for meeting the RPO requirements of the utility.

The Commission has considered the figures of income & expenditure submitted by the Petitioner in the audited accounts for FY 2011-12 and revised estimates for FY 2012-13 to form the basis of projection for income and expenditure for FY 2013-14. Further, the Commission has relied on the actual data of FY 2011-12, actual available figures for FY 2012-13 provided by the Petitioner and validated by the Commission during the technical validation session held after the submission of the petition. The detailed analysis & treatment of each component is provided in Chapter 7 (Aggregate Revenue Requirement for FY 2013-14) of this order.

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

The Commission in determining the aggregate revenue requirement and retail supply tariff for the financial year 2013-14 has been guided by the provisions of the Electricity Act, 2003, the Tariff Policy, Regulations on Terms and Conditions of Tariff issued by the Central Electricity Regulatory Commission (CERC) and Regulations on Terms and Conditions of Tariff notified by the JERC under Section 61 of the Act which lays down the broad principles, which shall guide for determination of retail tariff.

Keeping the above in view, the tariff has been designed in such a way so as to bring down the cross subsidies within reasonable and sustainable levels so as to reduce it gradually without giving ‘Tariff

Shock' to any category and retail tariff of different categories of consumers remains within + / - 20% of average cost of supply and that even for BPL category consumers, tariff rates move close to 50% of the average cost of supply. The Commission has determined the tariff so that it progressively reflects the cost of supply of electricity and also reduces cross subsidies within a reasonable period and thereby balancing the interest of the utility and the consumer.

The tariff for various categories is so determined that it is in compliance of the various provisions of the Electricity Act 2003, Tariff Policy, National Electricity Policy and various regulations of the Commission. The tariff may vary in the future tariff orders depending on the impact of open access charges when implemented in the licensee area.

4. Summary of Objections raised, Response from ED - Daman & Diu and Commission's Views

4.1 Public response to the Petition

The Petitioner has published the summary of ARR and Tariff proposal in the newspapers, copies of the petition made available to the general public and the petition posted on the website of the petitioner duly inviting comments/objections from public as per provisions of the JERC (Conduct of Business) regulations 2009.

4.2 Objections/Suggestions, Response from Electricity Department, UT of Daman & Diu and Commission's views

PART 1: General Issues and Comments

4.2.1 Stakeholders Objections/Comments

1. Shri Umesh during the public hearing held at Diu commented that all the consumers of Diu pay the bills on time and therefore, the consumers of Diu should derive some benefit due to the regular payments being done to the department. He further said that the losses in Diu are lower than in Daman but there is no additional benefit to the consumers of Diu. The consumption in Diu is only 7 MW out of the total power consumption of the union territory. He opined that the underground cabling being done by the department is more expensive than the normal wire connection and should be avoided by the Department.

Petitioner's submission:

The Petitioner took note of the objection of the stakeholder and said that appropriate diligence would be exercised in procurement of equipment at reasonable cost. The department would take adequate steps to ensure proper delivery of service to the consumers at reasonable cost.

Commission's views:

The Commission is of the view that early payment benefit is justified but not for payment on time. Advance payment benefit can be given but for timely payment there is no rationale for additional benefit. The Commission has introduced the clause of advance payment and prompt payment rebate in this year's tariff schedule.

As regards the quality of supply, the Commission has notified the JERC (Standards of Performance) Regulation, 2009, wherein the guaranteed and overall standards of performance to assure quality of supply are enshrined. 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 2012-13 within one month from the issuance 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.**

PART 2: Tariff related

4.2.2 General Comments

Stakeholders Objections/Comments:

1. Daman Industries Association (DIA) representing the industrial consumers of LT-P, LT-C, HT-C General and HT-C Ferro has made a combined submission for the ARR & tariff filing FY 2013-14. They have submitted the following suggestions:

i) There is no incentive left for the industries to operate in the territory. They do not want the Commission to raise tariff for FY 2013-14 and if need be tariff should be increased only by 0.5 to 0.10 paisa per unit to give boost to the industries.

ii) They have suggested the introduction of Night Tariff as there is unutilized power with Daman Electricity Department which is not utilized in night time and for which ED-DD is paying money. The stakeholder has submitted that power should be given at night time at Rs 2.00 less than the approved tariff. This will give boost to the industries and reduce the burden on Electricity Department, Daman by utilizing surplus power in night time.

iii) The Industries Association has further submitted that the revision of tariff should not be from retrospective date and should be divided in the remaining period after passing the tariff order so that the industries can add the revised cost of electricity in their costing as industries do not have any mechanism to recover the cost charges from retrospective effect.

iv) Further, the Daman Industries Association has submitted that in Silvassa the tariff is much lower even though both Daman & Silvassa are adjoining areas. The competitiveness of the industries in Daman is impacted due to lower tariff in Silvassa. The DIA requests the Commission to consider these facts and accordingly set the tariff.

2. Shrimp Association of Diu represented by Shri Atul raised the objection that the shrimp farmers are being charged commercial tariff whereas they should be charged agriculture tariff rates. The commercial tariff is much higher than the agriculture tariff and is a huge burden to their practice. He stressed that their practice is agriculture in nature and is not a profit making business enterprise. Due to the higher commercial tariff being charged, the production cost is more. He submitted that total there are 12 shrimp farms where 5-6 people are employed on each farm and a total of 40-50 HP of electricity is used per farm unit.

3. President, Diu District Ice Factory Association and Shri Umesh, Member, Diu District Panchayat suggested that fishing is the mainstay of the economy of Diu. They manufacture ice which is primarily used by the fishermen of the area. The stakeholder submitted that tariff for the ice factories should be lowered and they would pass on the benefit to the fishermen who procure ice from them. This would lower the cost of fishing for the people and provide boost to the fishing industry of the area. He said that approximately 80% of the total expenses incurred in manufacturing of ice are attributable to the cost of power, which is essential to keep the ice plants running.

The stakeholders submitted that ice factories are seasonal in nature and ice produced is used only in fisheries, so the electricity tariff should be at par with agriculture tariff. Fishing population is 80-90% of the total population in Diu. Fishing season starts from 15th August to 15th May. In winter due to less fish available, production of ice is less than 50%. Even for 50% of the ice plant, total plant has to run, which increases the manufacturing cost.

The stakeholders further requested that the FPCA charges of domestic consumers should not be recovered from the ice factories as it is a seasonal business and is resulting in additional burden on the ice factories.

The President further submitted that they are ready to give a written submission that if tariff for the ice factories is lowered the benefit would be passed onto the fishermen who procure ice from them.

Petitioner's submission:

The Petitioner has submitted that it has taken note of the stakeholder's submission. As desired by the Commission, the petitioner has submitted the data that the total consumption of shrimp farming in Diu from April'12 to Sept'12 is 1.7% of the total sale in Diu District.

The Petitioner has submitted that the tariff proposal submitted by it is based on the revenue gap ascertained for FY 2013-14. The Petitioner has submitted that increase in the cost of power purchase and other expenses have been used to arrive at the gap for the year and accordingly the tariff has been proposed. The Commission after due prudence check will come out with the approved tariff for the year.

As regards the categorization of the ice factories, the Petitioner has submitted that ice factory comes under the LT category and the tariff applicable to them is at par with other industries in the region. Levying the agriculture tariff on the ice factory would result in discrimination on part of the other LT industries and may not go down well with the other industrial consumers.

The Petitioner has submitted that the ice factories come under the LT industrial category and the FPPCA charges of the domestic consumers are to be recovered from the HT consumers. Therefore, there is no case of the ice factory paying the FPPCA charges of the domestic consumers.

Commission's views:

The Commission observes that HT/LT mix and average cost of supply in DD and DNH are not comparable. The Commission has determined the consumer tariff based on average cost of supply of the utility and therefore, the consumer tariffs in DD and DNH are bound to be different. The Commission has taken a prudent view to assess the reasonableness of cost projected for ARR of FY 2013-14 as per the tariff regulations and thereafter decided the tariff which has been discussed in detail in relevant sections of this order.

The new tariff is applicable from April 1' 2013 and the apprehension of the stakeholder is not justified. The tariff has not been made applicable retrospectively.

The Commission during the public hearing asked the Diu Ice Factory Association and licensee to give written submission on the amount of electricity units procured by the ice factories in the region and corresponding savings that would incur if tariff for them is lowered. The Commission during the public hearing asked the Ice Factory Association to give a written submission stating that if tariff for them is lowered, it would be ensured that the ice supplied by them would be made cheaper and sold to the fishermen of the area, so that the fishermen can derive benefit of the lower tariff. The Ice Factory Association has given a written submission to this effect. During the public hearing, the Commission had asked the licensee to submit a cost-benefit analysis of lowering the tariff for this consumer class; however, till the issuance of this order the same has not been submitted. The Commission had desired the details of the units procured by the ice factories and the corresponding savings/revenue loss to the consumer/licensee. However since this data has not been received from the licensee, the Commission has maintained the status quo in this year's tariff order and may consider it in the future years based on additional details/further analysis.

As regards the suggestion of implementing night tariff, the licensee has proposed to implement TOD tariff for HT consumers having sanctioned demand of 900 kVA and above as a first step towards better demand side management. The Commission had already taken initiatives and uploaded draft consultation paper which had a proviso for TOD tariff. The Commission agrees with the suggestion of the licensee and directs that TOD tariff for HT consumers having sanctioned demand of 900 kVA and above be introduced within 3 months of the issuance of this tariff order. The Commission also directs that TOD tariff for other consumers be implemented commencing next tariff period. The licensee is directed to take necessary measures and ensure appropriate technical infrastructure for implementation of TOD tariff. The TOD tariff would also take care of the introduction of night tariff as suggested by some of the consumers.

As regards the FPPCA charges of the domestic consumers being recovered from the HT consumers, the Commission notes that no written undertaking to this effect has been received from the Daman Industries Association for FY 2013-14. The Commission has no objection to such an arrangement, if one class of consumer wants to voluntarily subsidize the other class of consumers.

True up of Aggregate Revenue Requirement for FY 2011-12

5. Truing up of Aggregate Revenue Requirement for FY 2011-12

5.1 Preamble

The Petitioner, in their true-up 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 has 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 the reasons for deviation against each component of the ARR along with the true-up for FY 2011-12.

It is to be noted that the Petitioner has submitted the true-up 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. Audit with respect to a government department would essentially require a Proprietary and Commercial audit. However, the Commission feels that the tariff determination process should not be stalled in the absence of CAG audit in the larger interest of the consumer and the utility.

The Commission had asked the utility to furnish fixed asset register physically verified by a third party. The Petitioner has furnished the fixed asset register alongwith the CA certificate stating that the assets have been physically verified by the CA for FY 2009-10, FY 2010-11 and FY 2011-12 on test check basis. The Commission has dealt with the treatment of the same in detail in para 5.10 of this order.

The Commission in last year's order in the analysis of FY 2010-11 had done provisional true-up in absence of the fixed asset and depreciation registers. The Commission had also highlighted the lack of CAG audit. However, this time the Petitioner has submitted the fixed asset register and the audited accounts for FY 2011-12 duly certified by a professional Chartered Accountant. The Commission has taken note of the same and carried out the true-up for FY 2011-12 on the basis of these submissions after due prudence check.

The petitioner is required to file an affidavit before the Commission bringing out any change in the true-up of ARR, as and when the CAG audit is carried out.

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 has carried out the true-up of expenses and revenue after due prudence check.

5.2 Truing 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-actual 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 actual of sale of electricity, power purchase expenses, other income and expenditure for FY 2011-12 as per the audited accounts submitted by the petitioner 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 1771.16 MU for FY 2011-12. The petitioner has stated that there has been an increase in energy sales as compared to the energy sales approved by the Commission in its ARR and tariff order dated August 25' 2012 of 1710.52 MU.

The Petitioner has submitted that the variation in the actual energy sold as compared to the energy sales approved by the Commission is due to the following reasons:

- Sales to the HT/EHT category has increased by more than 40 MU in comparison to the figure approved by the Hon'ble Commission vide its Tariff Order dated 25th August 2012

- Similarly, energy sales to domestic category have increased by around 9 MU

- Sales to other consumer categories such as commercial, agriculture, public lighting, public water works and temporary supply had increase marginally

ED-DD has requested the Commission to approve the actual sales for FY 2011-12 as submitted by the Petitioner.

Commission's analysis

The petitioner had forecasted the energy sales of 1714.90 million units in its ARR and tariff petition for FY 2011-12, and the Commission had approved the sales of 1714.90 MU in the ARR & tariff order for FY 2011-12 dated October 3' 2011. Further, the Commission had approved sales of 1710.52 million units in its ARR and tariff order dated August 25'2012 based on the sales submitted for the review of FY 2011-12. The petitioner has submitted the actual sales at 1771.16 MU for FY 2011-12 in its true-up for the year. The variation in sales from the approved values is majorly on account of increased energy sales to the industrial HT & LT category, which comprise of approximately 94% of the total energy consumption in the UT of ED-DD for FY 2011-12. Also, the sales to the domestic category have increased by around 9 MU.

The Commission in a clarification to the Petitioner during the technical validation session held for the utility, had asked the reason for the deviation in the sales from the review figures which were also based on actual. The Petitioner in its response to the Commission vide email dated February 20' 2013 had replied:

Quote

The EDDD would like to submit that the sales to consumers in a particular division in a few months had not been included in the earlier submission made to the Hon'ble Commission which has now been taken into consideration after the energy audit was conducted in the UT of Daman & Diu. Due to this the actual sales has gone up by 60 MUs in the latest submission made by ED-DD in the true up petition for FY 2011-12.

Unquote

The Commission finds the energy sales to be an uncontrollable factor at the hands of the utility; therefore for the purpose of truing up, the Commission approves the actual sales of 1771.16 million units for FY 2011-12.

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

S. No.	Category	Proposed in petition of FY 2011-12	Approved in T.O. of FY 11-12 dated 03.10.2011	Petitioner's Submission Review FY 2011-12	Approved TO dated 25 August'12	Petitioner's claim in True-up	Approved
1	**Domestic**	66.10	66.10	64.53	64.53	73.85	73.85
2	**Low Income Group**	0.10	0.10	0.10	0.10	0.10	0.10
3	**NRS/Commercial**	29.60	29.60	30.22	30.22	33.83	33.83
4	**Agriculture**	2.50	2.50	2.64	2.64	2.70	2.70
5	**LT Industrial**	141.80	141.80	150.47	150.47	156.84	156.84
6	**Public Lighting**	4.80	4.80	5.02	5.02	5.59	5.59
7	**Public Water Works**	0.90	0.90	0.90	0.90	0.92	0.92
8	**HT/EHT Industry**	1469.10	1469.10	1456.14	1456.14	1496.83	1496.83
9	**Temporary Supply**	-	0.00	0.50	0.50	0.51	0.51
	TOTAL	**1714.90**	**1714.90**	**1710.52**	**1710.52**	**1771.16**	**1771.16**

5.4 Surplus Energy Sale/UI sales

Petitioner's submission

The petitioner has submitted the actual surplus energy sale of 170 million units for FY 2011-12 in its ARR & tariff petition for FY 2013-14. In its additional submission to the Commission on January 16'

2013, the petitioner has shown the UI underdrawal for the year as 147.57 MU. Further, the Commission as per its email dated February 5'2013 sent a reminder mail asking clarification on the UI under-drawal figure as it was not getting reconciled with the WRPC bills. The Petitioner vide its email dated February 20' 2013 agreed with the analysis of the Commission and stated the UI under-drawal figure to be taken as 162.69 MU.

Commission's analysis

The Commission has considered the actual surplus energy sale of 162.69 MU under UI mechanism for FY 2011-12 for the purpose of truing up and the same has been verified from the weekly summary sheets/bills of UI from the WRPC for the period under consideration. The Commission had highlighted during the technical validation session the variation in the analysis of the UI as per the Commission's analysis and that submitted by the Petitioner. The Petitioner vide email dated January 16' 2013 submitted the revised figures of UI over-drawal/under-drawal. As the same was still at variance with the Commission's analysis, the Commission issued a reminder mail to the utility vide email dated February 5' 2013 to clarify and submit the final figures of the UI for the purpose of true-up. The energy audit report submitted by the Petitioner also had a different set of UI over-drawal/under-drawal figure. The Petitioner, subsequently, vide email dated February 20' 2013 submitted that the Commission's analysis of the UI over-drawal/under-drawal figure be taken as final and accordingly, has been considered by the Commission.

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 at 3.61% resulting in inter-state transmission loss of 79.71 million units.

Commission's analysis

The Commission in its ARR & tariff order for FY 2011-12 dated October 3' 2011 had approved the loss level of 4.16%. The petitioner in the review for the year had submitted the average pooled losses for FY 2011-12 of the Western Region at 3.61% as per the submission dated August 9' 2012 and the Commission had accordingly considered the actual figures of regional pool losses of 3.61% in its tariff order dated August 25' 2012. The petitioner has submitted the inter-state transmission losses of 3.61% in the true-up for FY 2011-12.

The Commission in the last tariff order had approved 3.61% inter-state losses 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 inter-state transmission losses based on energy scheduled by the licensee and the energy scheduled at the generation end.

The gross energy purchase, including the UI over-drawal has been 2208.11 MU as analyzed by the Commission and as discussed in para 5.6 of the order. These results in the inter-state transmission loss of 64.57 MU, which is 3.00% inter-state losses of the gross energy purchased excluding the UI over-drawal.

The Commission considers the inter-state loss of 3.00% as reasonable and hence approved.

5.6 Intra-State Transmission and Distribution losses

Petitioner's submission

The petitioner has submitted that the actual loss level achieved in FY 2011-12 is 9.56% as against the loss level of 9.75% approved by the Commission in its ARR and tariff order dated August 25'2012.

Commission's analysis

The Commission in its ARR and tariff order dated August 25' 2012 had approved the targeted T&D loss level of 9.75%. Based on the sales, power purchased units and the inter-state transmission loss, the Commission has estimated from the available data the loss level for FY 2011-12 at 10.59%.

In the review for the year, the Petitioner had submitted the T&D loss level of 9.95% against the target of 9.75% for the year as per the tariff order for FY 2011-12 dated October 3' 2011. The Commission in its analysis of the review for the year had analyzed the T&D loss of 13% based on the available data for the review. Accordingly, the Commission had approved the T&D loss level at 9.75% in order dated August 25' 2012, retaining it at the level approved earlier.

The petitioner has submitted the T&D losses at 9.56% for the true-up. The petitioner in its true up, has mentioned the total units purchased at 2208.14 MU and has also mentioned that the same includes 56.02 MU purchased towards UI. The Commission while looking at the regional energy accounts issued by the WRPC and the bills submitted by the petitioner found anomaly in the quantum of units submitted by the petitioner in the NSPCL units from the period April' 12 to August'12 and the same was highlighted during the technical validation session.

The Petitioner subsequently submitted the clarification on the NSPCL units for the period, which is reproduced below.

Quote

'' The EDDD would like to submit that in response to the query raised by the Hon'ble Commission, EDDD had written a letter to NTPC-SAIL seeking an explanation regarding the mismatch of units between the bills raised by NTPC and those given in the REA for the period April 2011 and August 2011.

NTPC-SAIL in its reply has stated that during the said period, the control area for NSPCL Bhilai Power Plant was under SLDC/Bhilai/Raipur and not under WRLDC/WRPC. Hence the energy value at which billing was done as per sending end scheduled energy was as per the EAs of SLDC Bhilai of the respective months. WRPC was not the control area at that point hence the value mentioned in the REA accounts is not the sending end energy. A copy of the letter and other relevant documents received from NTPC-SAIL is being enclosed along with this reply.''

Unquote

Accordingly, the Commission has considered the NSPCL units from the bills for FY 2011-12 (April'12 to August'12 as per the bills and the remaining months are getting reconciled with the REA) and has tabulated the same below. As part of its prudence check, the Commission has verified the units of the rest of the stations from the REA and recorded the same below.

The UI over-drawal figure has been verified by the Commission from the weekly summary sheets/bills of UI on the WRPC site for the period FY 2011-12. The petitioner was asked a clarification on the UI over-drawal figure, which was at variance with that of the Commission. The Petitioner, subsequently, submitted that the Commission's analysis as per the UI bills on WRPC site be considered as final and the same has been considered by the Commission (Petitioner's email dated February 20' 2013).

Table 5.6.1 : Energy Purchase analyzed by the Commission for FY 2011-12 (in Million Units)

Source	Petitioner's claim in True-up of FY 2011-12	Actual
NTPC Stations	1218.39	1218.39
NSPCL-Bhilai	694.90	694.90
KAPS	58.40	58.40
TAPP 3&4	78.26	78.26
RGPPL	102.17	102.17
UI Purchase	56.02	55.99
Total	**2208.14**	**2208.11**

The Commission has considered the actual drawal at the transmission periphery from the energy audit report furnished by the Petitioner. The energy drawal figure has been reconciled with the UI weekly summary sheets/ bills available on the WRPC site. The energy drawal of 1980.85 MU has been considered by the Commission for FY 2011-12.

The calculation for the same is given in the table below.

Table 5.6.2 : T&D loss analyzed by the Commission for FY 2011-12

Source	S. No.	UoM	Petitioner's Submission	Actual Analyzed
Total allocation from Gen Stations	A	MU	2152.12	2152.12
Purchase through UI	B	MU	56.02	55.99
Gross Purchased Energy	C=A+B	MU	2208.14	2208.11
Pooled Loss	D =C-E	MU	79.71	64.57
Inter-state transmission loss	D/C	%	3.61	3.00 %
Total energy requirement for state	E	MU	2128.43	2143.54
Sale through UI	F	MU	170.00	162.69
Energy requirement at state periphery for sale to retail consumers	G=E-F	MU	1958.43	1980.85
Sales	H	MU	1771.16	1771.16
T&D loss	I=G-H	MU	187.27	209.69
T&D loss	J=I/G*100	%	9.56%	10.59%

Accordingly, the T&D losses based on the approved sales and the interstate losses results to 10.59% (based on the actual analyzed by the Commission).

It may be observed that the achieved T&D losses basis the actual is higher than the target loss of 9.75% for FY 2011-12. The regulation 9 of the JERC tariff regulations, 2009 (reproduced below) deals with the overachievement/ underachievement of the targets laid down.

‘

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.’*

The petitioner has under-achieved the T&D loss set for the FY 2011-12, therefore according to the above mentioned regulation the Commission considers the entire loss on account of such underachievement to be borne by the petitioner.

Therefore, the Commission considers the loss level of 9.75% as approved in the tariff order dated August 25' 2012 as reasonable and considers the same for true up of FY 2011-12.

5.7 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 losses for the year.

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 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 the true-up for FY 2011-12. The Commission while approving the energy balance has considered the T&D loss as approved in the tariff order dated August 25' 2012 as discussed in the preceding section.

Table 5.7.1 : Energy Requirement approved by the Commission for FY 2011-12 (in Million Units)

S. No.	Particulars	Proposed in petition of FY 2011-12	Approved in T.O. of FY 11-12 dated 03.10.2011	Petitioner's Submission Review FY 2011-12	Approved TO dated 25 August'12	Petitioner's claim in True-up	Approved
1	**Energy sales within the State/UT (in MUs)**	1714.90	1714.90	1740.82	1710.52	1771.16	1771.16
2	**Distribution losses**						
I	%	10.50%	9.75%	9.95%	9.75%	9.56%	9.75%
Ii	MU	201.19	185.27	192.35	184.79	187.28	191.34
3	**Energy required at State Periphery for Sale to Retail Consumers**	**1916.09**	**1900.17**	**1933.17**	**1895.31**	**1958.44**	**1962.50**
4	**Add: Sales to common pool consumers/ UI (in Mus)**	**0.00**	**0.00**	**141.19**	**110.16**	**169.99**	**162.69**
5	**Total Energy**	**1916.09**	**1900.17**	**2074.36**	**2005.47**	**2128.43**	**2125.19**

	Requirement for State						
6	**Transmission losses**						
I	%	5.85%	4.16%	3.90%	3.61%	3.61%	3.00%
Ii	MU	119.00	82.48	83.48	75.11	79.71	64.57
7	**Energy required to be purchased**	**2035.09**	**1982.65**	**2157.84**	**2080.58**	**2208.14**	**2189.76**

5.8 Power Purchase Quantum & Cost for FY 2011-12

Petitioner's submission

The petitioner has submitted that the actual power purchase cost for FY 2011-12 is Rs. 817.09 Crores to procure 2208.14 million units energy for FY 2011-12.

Further, the Petitioner has submitted that power purchase cost of Rs. 809.32 Crores was submitted to the Commission at the time of processing the Tariff Order for FY 12-13, against which the Commission had approved the power purchase cost at Rs. 782.67 Crores. Now the ED-DD has claimed power purchase cost of Rs. 817.09 Crores based on the Annual accounts for FY 11-12 and found that there is minor increase in the power purchase cost as compared to the power purchase cost approved by the Commission vide its order dated August 25' 2012.

ED-DD has requested the Commission to allow the UI purchase during FY 11-12 without any penalty as the ED-DD has already incurred that amount. Therefore, ED-DD has included the total UI amount paid in the total power purchase cost for FY 11-12.

ED-DD purchased 56.02 MU during FY 11-12 through UI at the cost of Rs. 24.43 Crores to meet the energy shortfall during the year.

Table 5.8.1 : Power Purchase Quantum and Cost submitted by the Petitioner for FY 2011-12

Source	FY 2011-12 (Approved vide Order - October 3' 2011)			FY 2011-12 (Actual)		
	Units Purchased	All Charges Total	Per Unit Cost	Units Purchased	All Charges Total	Per Unit Cost
NTPC Stations						
KSTPP	377.00	56.97	1.51	340.99	44.91	1.32
KSTPP-III	29.00	4.67	1.61	39.07	9.02	2.31
VSTPP-I	102.00	21.80	2.14	105.08	31.60	3.01
VSTPP-II	76.00	16.65	2.19	76.92	18.17	2.36
VSTPP- III	91.00	23.27	2.56	100.22	27.34	2.73
KAWAS	186.00	46.17	2.48	212.79	105.67	4.97

JGPP	188.00	60.10	3.20	213.63	100.05	4.68
Bhilai Unit-I &II(NTPC)	666.00	166.20	2.50	694.90	269.88	3.88
Sipat-I	84.00	17.22	2.05	119.07	32.46	2.73
Subtotal	**1799.00**	**413.05**	**2.30**	**1902.67**	**639.10**	**3.36**
Eastern Region						
KHSTPP-II	14.00	3.31	2.36	10.62	5.46	5.14
Subtotal	**14.00**	**3.31**	**2.36**	**10.62**	**5.46**	**5.14**
NPCIL						
KAPPS	38.00	8.25	2.17	58.40	12.83	2.20
TAPP 3&4	61.00	16.65		78.26	23.43	
Subtotal	**99.00**	**24.90**	**2.52**	**136.66**	**36.26**	**2.65**
Others						
Ratnagiri	71.00	25.56	3.60	102.17	46.15	4.52
Subtotal	**71.00**	**25.56**	**3.60**	**102.17**	**46.15**	**4.52**
Power purchase from Other Sources						
Power purchase from Indian E. Exchange	0.00	0.00	0.00	0.00	0.00	0.00
UI	0.00	0.00	0.00	56.02	24.43	4.36
RP Obligation	0.00	20.12	0.00	0.00	0.00	0.00
Subtotal	**0.00**	**20.12**	**0.00**	**56.02**	**24.43**	**4.36**
Misc. Arrears		**15.64**	**0.00**		**7.50**	0.00
Gross Power Purchase	**1983.00**	**502.58**		**2208.14**	**758.90**	
External Losses	82.48			79.71		
Total Power Purchase	**1900.52**	**502.58**	**2.64**	**2128.43**	**758.90**	**3.57**
PGCIL Charges		53.64			54.27	
WRLDC		0.66			3.41	
Other		0.00			0.51	
Grand Total of Charges	**1900.52**	**556.88**	**2.93**	**2128.43**	**817.09**	**3.84**

Commission's Analysis

The Commission had approved the power purchase cost including transmission charges of Rs 761.17 Crores (excluding UI) for purchase of 2080.58 million units in its ARR and tariff order dated August 25'2012.

The petitioner in its true-up has submitted the actual power purchase quantum of 2208.14 MU at Rs. 817.09 Crores including transmission costs during FY 2011-12 (including UI). However, on prudence check the quantum of purchase has been found to be 2208.11 MU after verification as discussed at Para 5.6 of this order including UI quantum of 55.99 MU. The petitioner has submitted that it has considered the source-wise power purchase cost including transmission charges as per the audited accounts of FY 2011-12. The Commission has considered the power purchase corresponding to the energy requirement approved for FY 2011-12 in para 5.7 of this order. The loss on account of lower approval of the power purchase is due to the underachievement of the T&D losses which are to be borne by the petitioner.

The summary of power purchase quantum for FY 2011-12 as approved by the Commission after the truing up, is given in the following table:

Table 5.8.2 : Power Purchase Units approved by the Commission for FY 2011-12 (in Million Units)

S. No.	Particulars	Approved in T.O. of FY 11-12 dated 03.10.2011	Approved TO dated 25 August'12	Petitioner's claim True-up	Actual FY 2011-12 basis the units verified	Approved (FY 2011-12)
1	NTPC Stations	1147	1146.85*	1218.39	1218.39	1218.39
2	NSPCL-Bhilai	666	694.90	694.90	694.90	694.90
3	KAPPS	38	58.40	58.40	58.40	58.40
4	TAPP 3&4	61	78.26	78.26	78.26	78.26
5	RGPPL	71	102.17	102.17	102.17	102.17
6	UI Purchase	0		56.02	55.99	55.99
7	Less : Loss due to T&D under achievement					18.35
8	**Total**	**1983.00**	**2080.58****	**2208.14**	**2208.11**	**2189.76**

* - After considering the merit order dispatch principles

** - Net UI underdrawal of 110.16 MU has been considered as approved in tariff order dated August 25’ 2012

Power Purchase from UI and Power Exchanges

The Petitioner in its true-up petition has submitted that they had procured Power from short term source - UI mechanism to meet the peak demand. The Commission has noticed that the Petitioner has procured 56.02 million units through overdrawls under UI mechanism at an average price of Rs. 4.36 per unit (as submitted in the petition). It is observed that the Petitioner has not procured any energy through other short-term sources other than UI and is accordingly not being considered here. UI cost of Rs 24.43 Crores has been claimed as per the audited accounts submitted by the Petitioner.

Table 5.8.3 : Summary of Purchase from UI for FY 2011-12 as submitted by the Petitioner in petition (Rs. Crores)

S. No.	Source	Energy Units (in MUs)	Amount (Rs. in Crores)
1	UI mechanism	56.02	24.43
	Total	**56.02**	**24.43**

As can be observed from the above, the Petitioner has purchased 56.02 MUs of energy at an average rate of Rs. 4.36 per KWh during FY 2011-12. As per the reports generated by WRLDC on UI, it has been found that the Petitioner has overdrawn below 49.5 Hz frequency. 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 2.96 Crores** against the UI overdrawal beyond 49.5 Hz frequency (amended to 49.7 Hz from March 5' 2012) imposed on the utility as per the UI regulations of CERC (as amended from time to time) for overdrawal and it will not be a pass through in the truing 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 purchase of power because it is on account of inadequate management of load by ED-DD. ED-DD is required to forecast their demand more precisely and plan the power purchase in advance. The petitioner in future also, will have to bear the burden of additional UI charges from their own finances and will not be allowed to pass this on to the consumers.

After consideration of the disallowed amount of Rs 2.96 Crores towards penal charges paid for UI overdrawal/underdrawal as discussed above, the approved Purchase from UI and Power exchange for truing up of ARR for FY 2011-12 is given below. The Commission has considered the UI over-drawal as per its analysis and due prudence check from the weekly summary sheets/bills of UI on the WRPC site.

Table 5.8.4 : Approved Purchase from UI for true-up FY 2011-12 (Rs. Crores)

Sr. No.	Source	FY 2011-12 (Approved) Purchase	
		Energy Units (in MUs)	Amount (Rs. in Crores)
1	UI mechanism	55.99	21.87
2	**Total**	**55.99**	**21.87**

Transmission Charges

The transmission charges of Rs. 54.27 Crores as submitted by the petitioner for FY 2011-12 have been considered for the purpose of truing up of ARR of FY 2011-12.

Summary of Power Purchase Quantum and Cost

The power purchase cost for FY 2011-12 has been considered as discussed in the preceding sections after disallowing the UI/penal charges. The power purchase cost has been allowed corresponding to the energy requirement approved at Para 5.7 of this order on pro-rated cost.

The summary of power purchase quantum and costs, including transmission charges for FY 2011-12 as approved by the Commission for the purpose of this order is given in the following Table:

Table 5.8.5 : Summary of Power Purchase expenses approved by the Commission for FY 2011-12 (Rs. Crores)

S. No.	Source	FY 2011-12	
		As submitted in true-up	Approved
1	Power Purchase from Approved Sources including transmission charges	792.66	792.66
2	Power purchase from other short term sources including UI overdrawl	24.43	21.87
3	Less: Losses due to underachievement of T&D loss	-	6.76
4	**Total (Rs. Crores)**	**817.09**	**807.77**

5.9 Operation and Maintenance Expenses

Petitioner's submission

The Operation and Maintenance (O&M) expenses comprise of three components namely:

a) Employee cost
b) Repairs & Maintenance expenses and
c) Administrative and General Expenses

The petitioner has submitted the Operation and Maintenance expenses of Rs. 14.62 Crores for true-up of FY 2011-12 as compared to the Operation and Maintenance expenses of Rs. 9.45 Crores approved by the Commission in its ARR and tariff order dated August 25’ 2012 and Rs 13.61 Crores approved vide ARR & tariff order for FY 2011-12 dated October 3’ 2011.

Commission’s analysis

Employee Expenses

The petitioner has submitted the actual employee expenses for FY 2011-12 as Rs 6.67 Crores as compared to the employee expenses of Rs. 4.89 Crores approved by the Commission in the ARR and tariff order dated August 25’ 2012.

It is observed that the actual employee expenses of Rs 6.67 Crores form approximately only 0.79% of the total ARR approved by the Commission, which is considered reasonable.

As per the sub-regulation 2 (i) of regulation 8 of JERC tariff regulations 2009, **the Commission considers the final figures of employee expenses of Rs 6.67 Crores as per the audited accounts as reasonable and approves the same for truing up of FY 2011-12.**

Administration and General Expenses

The petitioner has submitted that the actual Administration and General expenses for FY 2011-12 have been Rs. 3.01 Crores (as per the revised submission dated January 16’ 2013) as against the Administration and General expenses of Rs. 2.17 Crores approved by the Commission in the ARR and tariff order dated August 25’ 2012.

The actual A&G expenses form approximately 0.36% of the total ARR approved by the Commission, which is considered reasonable.

As per the sub-regulation 2 (i) of regulation 8 of JERC tariff regulations 2009, the **Commission has considered the administration and general expenses of Rs. 3.01 Crores as per the audited accounts as reasonable and approves the same for the purpose of truing up of FY 2011-12.**

Repair and Maintenance Expenses

The petitioner has submitted that the actual Repair and Maintenance expenses for FY 2011-12 have been Rs. 5.12 Crores as against the Repair and Maintenance expenses of Rs. 2.39 Crores approved by the Commission in the ARR and tariff order dated August 25’ 2012.

The Petitioner has not submitted the detailed break-up of the R&M expenses as required as per the regulatory formats and the Commission directs the petitioner to provide the detailed break-up of the R&M for the next true-up. The Commission has approved the actual R&M expense as the same is considered necessary for maintenance of infrastructure and for ensuring proper Standard of Performance of the integrated utility.

As per the sub-regulation 2 (i) of regulation 8 of JERC tariff regulations 2009, the **Commission has considered the repair and maintenance expense of Rs. 5.12 Crores as per the audited accounts as reasonable and approves the same for the purpose of truing up of FY 2011-12.**

<u>Summary of O&M Expenses approved for true-up FY 2011-12</u>

The O&M expenses approved for FY 2011-12 are as below.

Table 5.9.1: Approved O&M expenses for FY 2011-12

S. No.	Particulars	Proposed in petition of FY 2011-12	Approved in T.O. of FY 11-12 dated 03.10.2011	Petitioner's Submission Review FY 2011-12	Approved TO dated 25 August'12	Petitioner's claim True-up	Approved
1	Employee Expenses	5.97	5.18	5.16	4.89	6.67	6.67
2	A&G Expenses	2.20	2.17	2.17	2.17	2.83[1]	3.01
3	R&M Expenses	6.26	6.26	6.51	2.39	5.12	5.12
4	Sub-Total	**14.43**	**13.61**	**13.84**	**9.46**	**14.62**	**14.80**
5	Less: Expenses Capitalized	-	-	-	-	-	-
6	**Total O&M Expenses**	**14.43**	**13.61**	**13.84**	**9.46**	**14.62**	**14.80**

5.10 Capitalization, GFA & Depreciation

Petitioner's submission

The Petitioner has submitted that the actual capital expenditure incurred by EDDD during FY 11-12 was Rs. 18.31 Crores, which is lower than the Rs 28.15 Crores approved by the Commission in its Tariff Order dated August 25' 2012.

[1] The petitioner has revised the A&G expense figure to Rs 3.01 Crores as per the submission dated January 16' 2013 and the same is in accordance with the audited accounts for FY 2011-12 submitted alongside. The erratum in the petition has been rectified by the petitioner after the same was pointed out during the technical validation session.

The petitioner had submitted capitalization of Rs 11.49 Crores; however as the same was not as per the audited accounts as pointed out during the technical validation session, the Petitioner revised the submission to Rs 13.56 Crores as per the audited accounts for the year.

The Petitioner has computed the depreciation at Rs. 12.41 Crores as against the depreciation of Rs. 1.23 Crores approved by the Commission in its ARR and tariff order dated August 25' 2012. The depreciation has been computed on the opening GFA of Rs 260.76 Crores.

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.

Commission's analysis

The Commission had approved the capitalization of Rs. 28.15 Crores for FY 2011-12 for the purpose of Aggregate Revenue Requirement in its order dated August 25'2012.

The Commission had not accepted the opening gross fixed assets as projected by the department for the reasons as mentioned below in its tariff order for FY 2010-11:

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

Regulation 22 (2) of JERC (Terms and Conditions for Determination of Tariff) Regulations, 2009 reads as follows:
"Investments made prior to and upto 31st March immediately preceding the date of the notification of these regulations or date of receipt of a petition of tariff determination whichever is earlier shall be considered on the basis of audited accounts or approvals already granted by the Commission".

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

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

The following observation was made in the ARR & tariff order dated August 25' 2012 -

Quote

'' In compliance to the Commission's directive the petitioner has furnished the audited accounts for FY 2010-11 but has not submitted the fixed asset and the depreciation registers. The accounts of the petitioner provide the value of the fixed assets based on the values provided by the department and the assets are not physically verified. Further, it is difficult to ascertain that the assets shown in the audited accounts are still rendering the services or lying elsewhere. As such the information on the following could not be ascertained from the accounts submitted by the petitioner:

- *Assets in use either for rendering the service or lying as redundant in stores.*
- *Assets not in use.*
- *Assets exist lying as dead stock.*
- *Assets considered as scrap.*
- *Assets if considered as scrap but not traceable.*

The Commission is of the view that in the absence of the Fixed Asset Register, the opening value of assets is driven by assumptions. As such, the opening value of gross block as on 01.04.2010 is not being allowed as a gross block for the purpose of depreciation, interest charges and return on equity.'' **Unquote**

The Petitioner in its submission for FY 2011-12 has furnished the audited accounts and the fixed asset register for FY 2010-11 and FY 2011-12. As pointed out during the technical validation session that the physical verification certificate was missing with the FAR (as per the directive given by the Commission in the last year's tariff order), the Petitioner subsequently submitted the physical verification certificate of the fixed assets of ED-DD for FY 2009-10, FY 2010-11 and FY 2011-12 by the Chartered Accountant on test check basis.

Additionally, the petitioner has also submitted the list of assets which have been kept out of the cost of tariff determination. The Commission has taken note of the submissions and allows the opening GFA from FY 2010-11 to be considered for the purpose of ARR computation.

The opening GFA of Rs 260.76 Crores is being considered allowed for FY 2011-12. The same is in accordance with the Fixed Asset Register and the audited accounts furnished by the petitioner for FY

2011-12. The addition in GFA of Rs. 13.56 Crores is considered admissible for the purpose of truing up of FY 2011-12 and the same is as per the audited accounts for the year. **In view of the above, the Commission considers the depreciation of Rs. 12.74 Crores for the purpose of true up of ARR of FY 2011-12.**

Table 5.10.1: Depreciation for FY 2011-12

Sr. No.	Particulars	Value of assets at the beginning of FY 2011-12	Addition during FY 2011-12	Closing balance at the end of FY 2011-12	Rate of Depreciation	Depreciation for FY 2011-12
1	Plant & Machinery	227.62	13.11	240.73	5.28%	12.36
2	Buildings	8.31	-	8.31	3.34%	0.28
3	Vehicles	0.57	-	0.57	9.50%	0.05
4	Furniture and Fixtures	0.20	0.05	0.25	6.33%	0.01
5	Computers and Others	0.30	0.40	0.71	6.33%	0.03
6	Land	23.75	-	23.75	0.00%	-
7	**Total**	**260.76**	**13.56**[2]	**274.33**		**12.74**

5.11 Interest and Finance Charges

Petitioner's submission

The petitioner for assessing the interest on Loans in FY 11-12 has considered the opening balance of loans for FY 11-12 as approved by the Commission vide its Tariff Order dated 25th August 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 2011-12 which works out to Rs. 8.03 Crores. The capitalization for FY 11-12 was Rs. 11.49[3] Crores.

In line with the approach adopted by the Commission in its Tariff Order dated 25th August 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 of 14.75%. Accordingly, the Petitioner has claimed interest on loan charges of Rs 1.49 Crores for FY 2011-12.

Commission's analysis

The Commission in its ARR and tariff order dated October 3'2011 had not considered any interest charges as the petitioner had not borrowed any loans in the past upto March 31' 2011 and had not

[2] Addition in GFA was revised by the Petitioner to Rs 13.56 Crores as per submission dated January 16' 2013 against the Rs 11.48 Crores mentioned originally in the petition. This is as per the audited accounts for the year.

[3] The same has been revised to Rs 13.56 Crores as per the submission of Petitioner dated January 16' 2013 and is in accordance with the audited accounts for the year.

proposed to borrow any loans to meet the capital expenditure for the FY 2011-12. The interest charges projected by the utility for 2011-12 were on the basis of notional loan without external borrowings.

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

Quote

"23. Debt-Equity Ratio

1) *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:*

2) *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: .*

3) *(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.*

4) *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 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.

In the review for the FY 2011-12, the Commission had considered the normative interest on the assets created during the year FY 2010-11 onward excluding the opening capital base as projected by the petitioner for FY 2010-11 and had accordingly allowed interest on normative loan of Rs 2.08 Crores for FY 2011-12.

The normative interest under the JERC Tariff Regulations has therefore been considered on the assets created during the year FY 2010-11 onwards excluding the opening capital base for FY 2010-11. The Commission had considered an addition of Rs. 9.22 Crores in Gross Fixed Assets for FY 2010-11 which are considered funded through normative debt to the tune of 70% as per the tariff order dated August 25' 2012. The Commission has considered the capitalization of assets as per the audited accounts for the year 2011-12 at Rs 13.56 Crores for the true-up of 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 addition in normative loan at Rs 9.49 Crores for FY 2011-12. The calculation of 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)

Sr. No.	Particulars	Approved (FY 2011-12)
1	Opening Normative Loan	6.45
2	Add: Normative Loan during the year	9.49
3	Less: Normative Repayment	0.64
4	Closing Normative Loan	15.30
5	Average Normative Loan	10.87
6	Rate of Interest (@SBAR rate)	13.00%
7	**Interest on Normative Loan**	**1.41**

The Commission has analyzed the nature of expenses (interest charges on LC, bank charges etc.) amounting to Rs 1.44 Crores as mentioned in the audited accounts as part of the Finance Charges and considering the reasonableness of the expenditure, considers them allowed for the purpose of truing of FY 2011-12. The Commission has observed from the audited accounts that the petitioner had not taken any loan to meet the capital expenditure for FY 2011-12. The Commission has considered the normative interest on the actual capital expenditure incurred during FY 2011-12 and has therefore considered it as an allowable expense as a special case for the purpose of truing up of ARR of FY 2011-12. **The Commission therefore considers Rs. 2.86 Crores on account of Interest and Finance Charges as reasonable and approves the same for truing 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 as Rs. 10.22 Crores as against Rs. 7.22 Crores approved by the Commission in its ARR and tariff order dated August 25' 2012.

The petitioner has submitted that the interest on working capital has been calculated based on the normative principles outlined by the Commission in the JERC (Terms and Conditions for determination of Tariff), Regulations, 2009. ED-DD has computed the interest on working capital at 14.75% as equal to the SBI PLR rate.

Commission's analysis

As per the regulation 29 of JERC tariff regulations

"

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."

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

Further, as the consumer's security deposit amount is available to the petitioner to meet its working capital requirements, the Commission has therefore considered 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 (as on March 31' 2011) and also submitted by the Petitioner vide additional submission dated January 4' 2013. The consumer security deposit is considered to be available with the petitioner for reducing the quantum of working capital to be mobilized. Therefore the Commission has considered security deposit 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 a pass through in the expenses approved, as discussed in para 5.13 of the order.

The SBI Advance Rate of 13.00% as on 1st April 2011 has been considered for the calculation of the interest on working capital. Further, the Commission clarifies that the SBI PLR rate has now been substituted by SBI Advance Rate. The table below shows the interest on working capital approved for FY 2011-12.

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

S. No.	Particulars	Proposed in petition of FY 2011-12	Approved in T.O. of FY 11-12 dated 03.10.2011	Petitioner's Submission Review FY 2011-12	Approved TO dated 25 August'12	Petitioner's claim True-up	Approved
1	Power Purchase Cost for one month	51.94	45.10	56.60	61.00	68.09	63.15
2	Employee Cost for one month	0.50	0.43	0.43	0.41	0.56	0.56
3	A&G Expenses for one month	0.18	0.18	0.18	0.18	0.24	0.25
4	R&M Expenses for one month	0.52	0.52	0.54	0.20	0.43	0.43
5	**Total Working Capital for one month**	**53.14**	**46.23**	**57.75**	**61.79**	**69.31**	**64.38**
6	**Security Deposit**	**-**	**-**	**-**	**6.28**	**-**	**6.28**
7	**Net Working capital after deduction of Security Deposit**	**53.14**	**46.23**	**57.75**	**55.51**	**69.31**	**58.10**
8	SBAR Rate	12.25%	13.00%	14.75%	13.00%	14.75%	13.00%
9	**Interest on Working Capital**	**6.51**	**6.01**	**8.52**	**7.22**	**10.22**	**7.55**

The Commission accordingly approves the interest on working capital at Rs. 7.55 Crores against the Rs. 10.22 Crores claimed by the Petitioner as part of the true-up for 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.

Commission's analysis

Commission has assessed the need and availability of funds to the licensee. Consumer's security deposit is the quantum of consumer's funds available to the licensee and hence deducted from the funds available to meet working capital requirements and the interest on working capital is allowed on the balance amount. The cost of available security deposit of the consumer is allowed as an interest on security deposit to be paid to the consumers as per section 47(4) and regulation 25 of the JERC Tariff Regulations 2009 and the same is allowed as expenditure in the ARR.

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 has observed that the petitioner has not paid any interest to the consumers on the security deposit held during FY 2011-12 even though the Commission had issued a directive on the same in the last year's tariff order. As regards the compliance on the same, the Petitioner has submitted that the present billing system of the department is not having the provision of giving the interest on security deposit to its consumers. Further, the petitioner has submitted that the department is presently upgrading its billing software and also updating the security deposits record and as soon as the two processes are complete it will start paying interest on security deposit to its consumers.

The Commission has assessed the consumer security deposit as available from the audited accounts as on March 31' 2011 of Rs 6.28 Crores to be available with the Petitioner. It is observed that the department is not actually paying interest on the security deposit to the consumers and therefore, the same is not being allowed as a pass through in the ARR for true-up of FY 2011-12. The Commission again directs the Petitioner to deliver its obligation under Section 47(4) of the Electricity Act, 2003 and it must pay the interest on security deposit w.e.f. April 1'2011 at the rate of 6% per annum and should explicitly mention the same as the 'Interest on security deposit for FY 2011-12' on the bills of the consumers. Once the actual payment has been paid, the same would be considered in the ARR of the future year in which the payment has been made.

The Commission considers it appropriate to allow NIL interest on security deposit for the purpose of truing up of ARR of FY 2011-12. The petitioner should confirm payment of this interest to eligible consumers in their next ARR and Tariff filing and would then be considered in the expenses.

5.14 Return on Capital Base/Return on Equity

Petitioner's submission

The petitioner has computed the normative Return on Equity for FY 2011-12 at Rs. 0.28 Crores in the true-up. The petitioner has computed the return at 16% on average equity based upon the opening balance of equity for FY 11-12 and additions during the year as equal to 30% of the capitalization during FY 11-12.

Commission's analysis

ED- DD 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 Commission in its ARR & tariff order dated November 1' 2010 for FY 2010-11 had noticed the following:

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

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

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

Further, the Commission in its ARR & tariff order dated August 25' 2012 had observed that the basic requirement for consideration of either return on capital base or return on equity for historical assets is information in the form of the asset and depreciation registers besides other data and had not considered the gross opening block of assets as the same was based on assumptions and not verified.

However, this time the petitioner has furnished the CA certificate of the physical verification of the fixed assets of ED-DD for FY 2009-10, FY 2010-11 and FY 2011-12 by the CA on test check basis with the Fixed Asset Register besides the audited accounts for FY 2011-12.

Additionally, the petitioner has also submitted the list of assets which have been kept out of the cost of tariff determination. The Commission has taken note of the submissions and has allowed the opening GFA from FY 2010-11 to be considered for the purpose of the ARR computation.

As discussed in para 5.10 of this order, the Commission has 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. 5.41 Crores as a 3% return on net block of approved assets/capitalization at the beginning of the FY 2011-12 of Rs 260.76 Crores.

Table 5.14.1 : Return on capital base approved by the Commission for FY 2011-12 (Rs. Crores)

Sr. No.	Particulars	Approved True-up FY 2011-12
1	Gross block at beginning of the Year/Opening GFA	260.76
2	Less accumulated depreciation	80.55
3	Net block at beginning of the year	180.21
4	Less accumulated consumer contribution	-
5	Net fixed assets at beginning of the year	180.21
6	**Reasonable return @3% of NFA**	**5.41**

The Commission considers the Return on Capital Base of Rs. 5.41 Crores as reasonable and approves the same for the purpose of 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 provision of bad and doubtful debts in true-up for FY 2011-12.

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 ***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.	*Provision made for debts 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 as per the audited accounts submitted alongside. The Commission therefore has not considered any bad and doubtful debts for truing up of FY 2011-12.

The Commission has, therefore, not considered any expenses on account of bad & doubtful debt for truing 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 has claimed Rs. 8.33 Crores as actual non-tariff income as against the approved value of Rs. 9.42 Crores for FY 2011-12 as per ARR & tariff order dated August 25' 2012.

Commission's analysis

As per the sub-regulation 2 (i) of regulation 8 of JERC tariff regulations 2009, **Commission has considered the final figure of non-tariff income of Rs. 8.33 Crores as per the 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 the revenue earned from actual sale of surplus power during FY 2011-12 is Rs. 49.80 Crores as per the audited accounts for the year.

Commission's analysis

The Commission has considered the revenue received Rs 47.74 Crores from the UI under-drawal of 162.69 MU from the UI week-wise summary/bills on WRPC site for the purpose of energy balance and discussed at para 5.4 of this order.

Table 5.17.1 : Summary of Sale from UI for FY 2011-12 (in Rs. Crores)

Sr. No.	Source	FY 2011-12 (Approved)	
		Sale	
		Energy Units (in MUs)	Amount (Rs. Crores)
1	UI mechanism	162.69	47.74
2	**Total**	**162.69**	**47.74**

After verification of statements/bills and as per the audited accounts submitted, **the Commission considers the sale of surplus power for the purpose of truing up of FY 2011-12 at Rs. 47.74 Crores for the sale of 162.69 million units as reasonable and approves the same for truing up of FY 2011-12.**

5.18 Revenue at retail tariff for FY 2011-12

Petitioner's submission

The Petitioner has submitted that the actual revenue for FY 2011-12 amounted to Rs. 704.53 Crores (including the amount received on account of PPCA charges) as against Rs. 554.61 Crores and Rs. 674.28 Crores approved vide Tariff Order dated October 3' 2011 and August 25' 2012 respectively by the Commission.

Commission's analysis

As per the sub-regulation 2 (i) of regulation 8 of JERC tariff regulations 2009, **Commission has considered the figures of revenue of Rs. 704.53 Crores from the sale of power within the state as per the audited accounts as reasonable and approves the same for the truing up of FY 2011-12.**

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

Petitioner's submission

The petitioner has submitted the aggregate revenue requirement of Rs. 847.78 Crores for FY 2011-12 and has estimated the revenue gap of Rs. 93.45 Crores during FY 2011-12.

Commission's analysis

The Commission has considered and approved the provisional truing 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 for the true-up of FY 2011-12.

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

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

S. No.	Particulars	Proposed in petition of FY 2011-12	Approved in T.O. of FY 11-12 dated 03.10.2011	Petitioner's Submission Review FY 2011-12	Approved TO dated 25 August'12	Petitioner's claim True-up	Approved
1	Power Purchase Cost	623.24	556.89	679.15*	761.17	817.09	807.77
2	Employee costs	5.97	5.18	5.16	4.89	6.67	6.67
3	A&G Expenses	2.20	2.17	2.17	2.17	2.83[4]	3.01
4	R&M Expense	6.26	6.26	6.51	2.39	5.12	5.12
5	Depreciation	16.34	1.95	15.13	1.23	12.41[5]	12.74
6	Interest and Finance charges	2.33	-	-	2.08	1.49	2.86
7	Interest on working capital	6.51	6.01	8.52	7.22	10.22	7.58
8	Interest on security deposit	NIL	NIL	NIL	0.38	NIL	NIL
9	Return on NFA	1.37	-	-	0.27	0.28	5.41
10	Provision for Bad Debt	6.61	0.40	6.84	2.53	-	-
11	**Total Revenue Requirement**	**670.83**	**578.86**	**723.48**	**784.33**	**856.12**	**851.16**
12	Less: Non Tariff Income	9.41	9.41	9.41	9.41	8.33	8.33
13	**Net Revenue Requirement**	**661.42**	**569.45**	**714.07**	**774.92**	**847.78**	**842.83**

[4] The petitioner has revised the A&G expense figure to Rs 3.01 Crores as per the submission dated January 16' 2013 and the same is in accordance with the audited accounts for FY 2011-12 submitted alongside. The erratum in the petition has been rectified by the petitioner after the same was pointed out during the technical validation session.

[5] Addition in GFA was revised by the Petitioner to Rs 13.56 Crores as per submission dated January 16' 2013 against the Rs 11.48 Crores mentioned originally in the petition. This is as per the audited accounts for the year and consequently the closing GFA increases to Rs 274.32 Crores against Rs 272.24 Crores considered by petitioner. This results in the higher depreciation amount considered by Commission.

*NOTE : The power purchase cost for FY 2011-12 based on the actual had been revised by the Petitioner to Rs 809.32 Crores as per the submission dated August 16' 2012 and the same had accordingly been considered by the Commission in its analysis for the revenue gap for FY 2011-12 in tariff order dated August 25' 2012. The Commission against the submission of Rs 809.32 Crores had approved power purchase cost of Rs 761.17 Crores (excluding UI) in its review of ARR for FY 2011-12 based on merit order principles.

The approved gap has been mentioned in the following table.

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

S. No.	Particulars	Proposed in petition of FY 2011-12	Approved in T.O. of FY 11-12 dated 03.10.2011	Petitioner's Submission Review FY 2011-12	Approved TO dated 25 August'12	Petitioner's claim True-up	Approved
1	**Net Revenue Requirement**	**661.42**	**569.45**	**714.07**	**774.92**	**847.78**	**842.83**
2	Less: Revenue from Retail Sales at Existing Tariff	559.58	554.61	683.99	505.71	704.53	704.53
3	Less: Revenue from Surplus Power Sale/UI	-	-	38.83	29.20	49.80	47.74
4	**Net Gap/(Surplus) (1-2-3)**	**101.84**	**14.84**	**(8.75)**	**240.00**	**93.45**	**90.56**
5	Recovery on account of PPC variations	-	-	-	168.57	-	-
6	**Gap after adjusting PPC variations (4-5)**	**101.84**	**14.84**	**(8.75)**	**71.43**	**93.45**	**90.56**
7	Gap for the previous year	12.26			1.55	-	19.96[6]
8	Carrying Cost	-	-	-	4.84	-	8.48
9	**Total gap (6+7+8)**	**114.10**	**14.84**	**(8.75)***	**77.82**	**93.45**	**119.00**

*The surplus of Rs 8.75 Crores is as per the submission dated November 30' 2011 which is based on the estimates of the various components of the ARR. The petitioner has revised the power purchase cost, sales and revenue for the year based on the actual for FY 2011-12 as per the submission dated August 9' 2012. The PPC has been further revised vide submission dated August 16' 2012 on the basis of which the petitioner is in deficit for FY 2011-12 (analysis of the review of FY 2011-12)

The Commission considers the estimated gap of Rs 119.00 Crores as reasonable and approves the same for the true-up of FY 2011-12. This estimated revenue gap is carried over to the next year and has accordingly been considered in the Review of FY 2012-13.

[6] Revised on account of changes in the true-up of FY 2010-11 due to consideration of opening GFA and discussed at para 5.20 of this order

5.20 Truing up of FY 2010-11

The Commission had done the provisional true-up of FY 2010-11 in the absence of fixed asset and depreciation registers in its order dated August 25' 2012. This time, the Petitioner has submitted the physical verification certificate of the gross fixed assets for FY 2009-10, FY 2010-11 and FY 2011-12. The Commission has allowed the opening GFA for FY 2010-11 to be considered for the true-up of FY 2010-11 and accordingly re-worked the depreciation and the return on capital base. The revised calculations are as below and the revenue gap has been re-worked to be carried forward in FY 2011-12.

The revenue gap has been re-worked due to the consideration of the opening GFA from FY 2010-11 and the revised revenue gap has been addressed in the interest of the health of the licensee due to the furnishing of the Fixed Asset Register. According to the regulations, the true-up of the (n-2) year is not allowed to be taken up, yet the Commission has considered the same in its analysis this year in the interest of the financial health of the licensee and avoiding of the accumulation of the revenue gap of the previous years.

GFA and Depreciation

As discussed in para 5.10 of this order, Commission has allowed the opening GFA for FY 2010-11. The opening GFA for FY 2010-11 has been considered as per the Fixed Asset Register submitted by Petitioner and the same is in accordance with the audited accounts for the year. The addition during FY 2010-11 has been considered at Rs 9.21 Crores, as per the audited accounts for the year.

The depreciation has accordingly been re-worked and the revised depreciation for FY 2010-11 is as shown in the table below.

Table 5.20.1 : GFA and Depreciation approved by the Commission for FY 2010-11 (Rs. Crores)

Sr. No.	Particulars	Value of assets at the beginning of FY 2010-11	Addition during FY 2010-11	Closing balance at the end of FY 2010-11	Rate of Depreciation	Depreciation for FY 2010-11
1	Plant & Machinery	218.59	9.03	227.62	5.28%	11.78
2	Buildings	8.31	-	8.31	3.34%	0.28
3	Vehicles	0.57	-	0.57	9.50%	0.05
4	Furniture and Fixtures	0.16	0.04	0.20	6.33%	0.01
5	Computers and Others	0.16	0.14	0.30	6.33%	0.01
6	Land	23.75	-	23.75	0.00%	-
7	**Total**	**251.55**	**9.21**	**260.76**		**12.14**

The Commission allows the depreciation of Rs 12.14 Crores for FY 2010-11 against the earlier approved depreciation of Rs 0.24 Crores in the provisional true-up of FY 2010-11 as per the order dated August 25’ 2012.

Return on Capital Base

As discussed in para 5.10 and para 5.14 of this order, return on capital base has been considered on the opening capital base. The revised calculation of the return on capital base is as shown below.

Table 5.20.2 : Return on capital base approved by the Commission for FY 2010-11 (Rs. Crores)

Sr. No.	Particulars	Approved FY 2010-11
1	Gross block at beginning of the Year/Opening GFA	251.55
2	Less accumulated depreciation	68.41[7]
3	Net block at beginning of the year	183.14
4	Less accumulated consumer contribution	-
5	Net fixed assets at beginning of the year	183.14
6	**Reasonable return @3% of NFA**	**5.49**

The Commission allows the return on capital base of Rs 5.49 Crores for FY 2010-11 against the earlier approved nil value for the provisional true-up of FY 2010-11 as per the order dated August 25’ 2012.

Due to increase in the depreciation and the return on capital base figures, the revenue gap for the year works out to be Rs 18.85 Crores. The comparison with the earlier approved figures is as below.

Table 5.20.3 : Aggregate Revenue Requirement approved by the Commission for FY 2010-11 (Rs. Crores)

Sr. No.	Particulars	Proposed in petition of FY 2010-11	Approved in T.O. of FY 10-11 dated 01.11.2010	Petitioner's claim in True-up petition of FY 2010-11	Approved TO dated 25 August'12	Approved
1	Power Purchase Cost	535.44	541.22	570.94	561.85	561.85
2	Employee costs	5.09	5.09	4.50	4.50	4.50
3	A&G Expenses	3.68	2.00	0.25	0.25	0.25
4	R&M Expenses	2.20	2.20	3.86	2.20	2.20
5	Depreciation	15.76	0.34	12.12	0.24	12.14
6	Interest and Finance charges	16.91	-	21.07	1.13	1.13
7	Interest on working capital	5.35	5.39	5.67	4.46	4.46

[7] The accumulated depreciation upto FY 2009-10 has been considered from the audited accounts submitted for FY 2010-11

Sr. No.	Particulars	Proposed in petition of FY 2010-11	Approved in T.O. of FY 10-11 dated 01.11.2010	Petitioner's claim in True-up petition of FY 2010-11	Approved TO dated 25 August'12	Approved
8	Interest on security deposit	NIL	NIL	NIL	0.34	0.34
9	Return on NFA	23.14	-	12.30	-	5.49
10	Provision for Bad Debt	6.08	0.18	0.49	-	-
11	**Total Revenue Requirement**	**613.65**	**556.42**	**631.20**	**574.97**	**592.36**
12	Less: Non Tariff Income	5.25	11.22	8.72	8.72	8.72
13	**Net Revenue Requirement**	**608.40**	**545.20**	**622.48**	**566.25**	**583.64**

Table 5.20.4 : Revenue (Surplus)/Gap approved by the Commission for FY 2010-11 (Rs. Crores)

Sr. No.	Particulars	Proposed in petition of FY 2010-11	Approved in T.O. of FY 10-11 dated 01.11.2010	Petitioner's claim in True-up petition of FY 2010-11	Approved TO dated 25 August'12	Approved
1	**Net Revenue Requirement**	**608.40**	**545.20**	**622.48**	**566.25**	**583.64**
2	Less: Revenue from Retail Sales at Existing Tariff	458.35	495.75	518.36	518.36	518.36
3	Less: Revenue from Surplus Power Sale/UI			46.43	46.43	46.43
4	**Net Gap/(Surplus)**	**150.05**	**49.45**	**57.69**	**1.46**	**18.85**
5	Carrying Cost	-	-	-	0.09	1.11
6	**Total gap (4+5)**	**150.05**	**49.45**	**57.69**	**1.55**	**19.96**

The revenue gap for FY 2010-11 works out at Rs 18.85 Crores; including the carrying cost the total gap for FY 2010-11 works out at Rs 19.96 Crores.

The Commission in the order dated August 25' 2012 had carried forward the gap of Rs 1.55 Crores for FY 2011-12 in the regulatory asset created for the utility. The revised gap of Rs 19.96 Crores has now been carried forward in the revenue gap for FY 2011-12.

The Commission considers the estimated gap of Rs 19.96 Crores as reasonable and approves the same for inclusion in the true-up of FY 2010-11. This estimated revenue gap is carried over to the next year and has accordingly been considered in the true-up of FY 2011-12.

Review of Aggregate Revenue Requirement (ARR) for FY 2012-13

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 August 25'2012 as per the provisions of the JERC tariff regulations 2009. The petitioner has 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 includes the actual of six month/five month of FY 2012-13 and estimates of the balance year as per the Regulation 8 of JERC Tariff Regulations 2009, in the ARR and tariff petition for FY 2013-14.

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

a. Actual Performance in FY 2010-11 as approved in the order dated August 25' 2012

b. Actual Performance in FY 2011-12 (audited figures)

c. Sales , power purchase and revenue figures based on actual first half of FY 2012-13

d. Revised estimates of O&M expenses, capital expenditure, non-tariff income for FY 2012-13

e. Depreciation, Interest and Finance Charges, Interest on Working Capital, Interest on Security Deposit, and Return on Net Fixed Assets have been computed as per the JERC tariff regulations 2009.

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. As regards the 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 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

6.3 Consumers, Connected Load and Energy Sales

Petitioner's Submission

The petitioner has submitted that the energy sold to various consumer categories over the past 5 years has grown at approximately 9% per annum. This is mainly because of increase in energy demand from the HT/EHT industries. The energy sales for FY 12-13 have been determined based on past years CAGR and actual energy sales in various consumer categories for the first five months of FY 12-13. 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.

For FY 12-13, the actual five months energy sales has been analyzed and the energy sales for the remaining seven months has been arrived at by considering the five months actual sale as well as the past years growth trend in each consumer category. The petitioner has submitted energy sales for FY 2012-13 of 1867 MU. The number of consumers as on April 1' 2012 is 58797.

Commission's Analysis

The petitioner's submission had not provided the category wise and slab wise connected load and the no. of consumer's details alongwith the regulatory formats submitted. The Commission had called for the information of the slab-wise details of the no. of consumers and connected load from the Petitioner, which was responded by the Petitioner vide additional submission dated January 4' 2013 and further on January 16' 2013. The petitioner has further submitted that the slab-wise breakup of the no. of consumers for the HT and LT industrial category is being compiled as the software for the same is being upgraded and will be submitted to the Commission shortly.

The energy sales for FY 2012-13 have been approved keeping the past growth trend of the energy sales and the first half actual sales of FY 2012-13. The petitioner has submitted the first half energy sales for FY 2012-13 as 910.10 MU as per the additional submission of petitioner dated January 4' 2013. In view of the first half energy sales already achieved, the overall sales for FY 2012-13 of 1867 MU are considered reasonable and hence approved.

The no. of consumers and connected load for FY 2012-13 are considered reasonable as submitted by the Petitioner and hence approved.

The approved sales, connected load and number of consumers for 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)

S. No.	Consumer Category	FY 2012-13			
		Proposed in petition-FY 13	Approved in T.O. of FY 12-13 dated 25.08.2012	Revised Estimates	Approved (Review)
1	**Domestic**	70.40	72.96	75.39	75.39
2	**Low Income Group**	0.10	0.10	0.06	0.06
3	**NRS/Commercial**	32.46	32.58	34.64	34.64
4	**Agriculture**	2.82	2.82	3.59	3.59
5	**LT Industrial**	157.19	152.64	164.92	164.92
6	**Public Lighting**	4.84	5.02	4.10	4.10
7	**Public Water Works**	0.92	0.97	0.88	0.88
8	**HT/EHT Industry**	1595.18	1562.41	1583.03	1583.03

S. No.	Consumer Category	FY 2012-13			
		Proposed in petition-FY 13	Approved in T.O. of FY 12-13 dated 25.08.2012	Revised Estimates	Approved (Review)
1	Domestic	70.40	72.96	75.39	75.39
9	Temporary Supply	0.78	0.78	0.40	0.40
10	TOTAL	1864.69	1830.28	1867.00	1867.00

Table 6.3.2 : Category wise Connected Load approved by the Commission for FY 2012-13

S. No.	Consumer Category	FY 2012-13	
		Revised Estimates	Approved (Review)
1	Domestic	56365	56365
2	Low Income Group*	-	-
3	NRS/Commercial	35494	35494
4	Agriculture	5132	5132
5	LT Industrial	173544	173544
6	Public Lighting	1659	1659
7	Public Water Works	681	681
8	HT Industrial	384110	384110
9	TOTAL	656984	656984

* Details not submitted by the Petitioner

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

S. No.	Consumer Category	FY 2012-13			
		Proposed in petition-FY 13	Approved in T.O. of FY 12-13 dated 25.08.2012	Revised Estimates	Approved (Review)
1	Domestic	47215	47214	46271	46271
2	Low Income Group				
3	NRS/Commercial	9514	9436	9033	9033
4	Agriculture	1745	1753	1664	1664
5	LT Industrial	3777	3763	1663	1663
6	Public Lighting	854	194	208	208
7	Public Water Works	77	77	78	78
8	HT/EHT Industry	854	843	798	798
9	TOTAL	64036	63282	59716	59716

6.4 Intra-State Transmission & Distribution Loss

Petitioner's Submission

The petitioner has considered the T&D loss level of 9.50% for FY 2012-13 as against the target of 9.25% set by the Commission. The petitioner has submitted that reduction of T&D below 10% involves significant amount of capital expenditure and it is ED-DD's endeavor to bring the T&D loss level further down in the subsequent years.

Commission's Analysis

The Commission in its ARR and tariff order for FY 2012-13 had approved the targeted T&D loss level of 9.25%.

The Commission while examining the T&D losses for the year 2012-13 in the order dated August 25' 2012 had observed –

''The petitioner has not submitted the loss reduction trajectory based on the energy audit studies. The stakeholders during the public hearing process had pointed out that the T&D losses should be reduced to the levels of similarly placed utilities like Dadra and Nagar Haveli, which are at the levels of less than 7%. The Commission would also like to highlight that consumers of the petitioner are predominantly connected consumer mix constitutes of majority of high voltage level consumers, and about 94% of industrial consumer where the losses are much lower. Moreover similarly placed utility of Dadra and Nagar Haveli are placed much lower in terms of the T&D loss of 6.25%. Therefore considering the approval of the FY 2011-12 of 9.75%, capital expenditure proposed by the petitioner the consumer mix a 0.5% reduction over the targeted loss levels of FY 2011-12 is achievable.''

The Commission observes that the actual T&D loss levels for FY 2009-10 and FY 2010-11 (basis the actual) have been 11.77% and 12.40% respectively. It is noted that the petitioner has not been able to achieve the targeted loss levels for FY 2011-12 also. The regulation 9 of the JERC tariff regulations, 2009 deals with the overachievement/ underachievement of the targets laid down. As per the estimates of the Commission the petitioner has not achieved the targeted T&D losses for FY 2012-13, therefore the entire cost of underachievement would be borne by the petitioner.

The petitioner has not given any reason for the underachievement. Accordingly, the Commission for this review has retained the losses approved in the tariff order for FY 2012-13 dated August 25' 2012 of 9.25% and approves the same for review of FY 2012-13 as it is considered as a reasonable target to be achieved.

6.5 Inter-State Transmission Loss

Petitioner's Submission

The petitioner has considered the loss level of 3.56% for FY 2012-13 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 inter-state 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 Requirement

Petitioner's Submission

The petitioner has submitted that the sales are estimated to increase by 5.40% during FY 2012-13. The overall energy requirement at the state periphery for FY 2012-13 is projected to be 2063 MU and the total power purchase is going to be 2218.51 MU.

Commission's Analysis

The Commission has approved the sales as explained above at 1867 MU, and approved the T&D loss of 9.25% resulting in a net energy requirement of 2057.30 MU for the territory.

The Commission has allowed the sales outside the state/UI sales at 25.31 MU (under-drawl for first half of FY 2012-13 as per Commission's prudence check from WRPC site from the weekly summary sheets/bills of UI) resulting in the net energy requirement at the periphery of 2082.61 MU. The sales outside the state have been allowed corresponding to the first half actual in FY 2012-13. Merit order principles have been adopted for estimating the energy requirement for H2 of FY 2012-13 and accordingly only that much power purchase has been estimated as required to meet the requirement within the territory. Therefore, no surplus sale of power has been considered for H2 of FY 2012-13.

Assuming the external losses of 3.56% to be reasonable, the gross energy purchase approved by the Commission is 2159.37 MU. This includes the UI over-drawal figure of 3.27 MU as per the weekly summary sheets/bills of UI from the WRPC site for the first half of FY 2012-13.

Table 6.6.1 : Energy Requirement approved for FY 2012-13

Sr. No.	Particulars	Proposed in petition-FY 13	Approved in T.O. of FY 12-13 dated 25.08.2012	Revised Estimates	Approved (Review)
1	**Energy sales within the State/UT (in Mus)**	1864.69	1830.28	1867.00	1867.00
2	**Distribution losses**				
i	%	9.70%	9.25%	9.50%	9.25%
ii	MU	200.30	186.56	195.98	190.30
3	**Energy required at State Periphery for Sale to Retail Consumers**	**2064.99**	**2016.84**	**2062.99**	**2057.30**
4	**Add: Sales to common pool consumers/ UI (in Mus)**	**99.85**	**0.00**	**76.55**	**25.31**
i	Sales outside state/UT : UI/Under drawal (in Mus)	99.85	0.00	76.55	25.31
ii	Sales (in Mus)	-	0.00	0.00	0.00
	a) To electricity traders (in Mus)				
	b) Through PX (in Mus)				
iii	Sales to other distribution licensees	-	0.00	0.00	0.00
	a) Bilateral Trade (in Mus)				
	b) Banking Arrangement (in Mus)				
5	**Total Energy Requirement for State**	**2164.84**	**2016.84**	**2139.53**	**2082.61**
6	**Transmission losses**				
i	%	3.90%	3.56%	3.56%	3.56%
ii	MU	87.85	74.46	78.98	76.76
7	**Energy required to be purchased (at Generator end)**	**2252.69**	**2091.29**	**2218.51**	**2159.37**

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

Sr. No.	Particulars	Approved in T.O. of FY 12-13 dated 25.08.2012	Approval as part of the review for FY 2012-13	Difference
A)	**ENERGY REQUIREMENT** (in Mus)			
1	Energy sales within the State/UT (in Mus)	1830.28	1867.00	(36.72)
2	Distribution losses	186.56	190.30	(3.74)
3	Sales outside state/UT : UI/Under drawl (in Mus)	0.00	25.31	(25.31)
4	**Total Energy Requirement for UT**	**2016.84**	**2082.61**	**(65.78)**
3	**Gross power purchase (in MUs)**	**2091.29**	**2159.37**	**(68.08)**
4	Inter-State Transmission Losses	74.46	76.76	(2.31)
5	**Net Energy Availability**	**2016.84**	**2082.61**	**(65.78)**

The difference between the total power purchase quantum approved in the tariff order for FY 2012-13 vis-à-vis review in this order is increase of 68.08 MU (in monetary terms, Rs 18.21 Crores). The Commission admits the revised expense in the review, subject to true-up.

6.7 Power Purchase Quantum and Cost

Petitioner's Submission

<u>Power Purchase Quantum</u>

ED-DD for the purpose of estimation of the power availability during FY 12-13 has considered the following sources of power:

- NTPC Western Region Generating Stations;
- NTPC Eastern Region Generating Stations;
- NSPCL (NTPC-SAIL Power Company Ltd);
- Nuclear Power Corporation of India Limited;
- Private sector power generating entities;
- Renewable energy sources (solar and non-solar); and
- Other Arrangements, in case of un-scheduled deficit of power

For projecting the energy availability for FY 12-13, actual power purchase for the first six months of FY 12-13 has been considered. The power availability for remaining six months i.e. October 2012 to March 2013 has been estimated based on the revised allocation issued by the Western Region Power Committee (WRPC) dated 24 May 2012.

Actual power purchase in first six months of FY 12-13 and revised power allocation of 92 MW from NTPC-SAIL Bhilai power plant has been considered while estimating the power availability from this plant during FY 12-13. Actual power purchase in first six months of FY 12-13 from Ratnagiri Gas Power Plant and revised power allocation of 38 MW has been considered while estimating the power purchase during FY 2012-13 from this plant.

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 estimating the gross generation from coal and gas based generating stations respectively.

For FY 12-13, EDDD has considered power purchase of 4 MU and 20 MU from solar and non-solar renewable energy sources respectively as per the JERC's Procurement of Renewable Energy Regulations, 2010 as well as approved by the Commission in the Tariff order for FY 12-13.

The recent 52 week moving average of regional losses was found to be 3.56%. Transmission losses for the FY 11-12 were recorded as 3.61%. For computing the power availability at the periphery, 3.56% weighted average external transmission losses have been applied on the gross power purchase for FY 12-13 and FY 2013-14.

Power Purchase Cost

The Petitioner has submitted that the cost of power purchase for FY 12-13 are based on actual power purchase bills, received by the ED-DD during the first six months of FY 12-13. Each element of the power purchase cost i.e. fixed, variable and other cost have been estimated for each generating station by considering 6 months (April 12 to September 12) actual cost incurred by the ED-DD. The projection for remaining six months has been done on pro-rata basis by considering the actual power purchase cost of the first six months of FY 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. The actual average variable cost (NTPC, NPCIL & KHSTPP II) for FY 11-12 was Rs. 2.09 per unit as against Rs. 2.07 per unit for the first six months of FY 12-13.

For NTPC-SAIL Bhilai unit 1 & 2, fixed, variable and other charges have been projected for the entire FY 12-13 based on the actual cost for first six months of FY 12-13. For power purchase from renewable energy sources, Commission's approved tariff for solar and non-solar power in the Tariff Order has been taken into account for the remaining six months of FY 12-13 and for the entire period of FY 13-14.

During FY 12-13, though ED-DD had excess power, ED-DD had to overdraw power from the grid during the peak hours for meeting the demand of the consumers. ED-DD has purchased energy under UI in the first six months at the rate of Rs. 4.52 per unit.

ED-DD had surplus power during FY 12-13 on account of additional allocation of 38MW of power from RGPPL and revised allocation of 92 MW from NTPC-SAIL generating station.

The Petitioner has projected the gross power purchase of 2218.51 MU and the total cost of power purchase at Rs 756.02 Crores. Transmission losses of 78.98 MU have been considered, resulting in the net power purchase of 2139.53 MU (Energy availability at the periphery).

The same is summarized below.

Table 6.7.1 : Power Purchase Quantum and Cost submitted by the petitioner for FY 2012-13 (in MU and Rs Crores)

Sr. No.	Source	Units Purchased (MU)	Fixed Charges	Variable Charges	Other Charges	Total Charges	Per unit cost (Rs/kWh)
1	**NTPC Stations**						
	KSTPP	367.36	21.41	35.04	4.73	61.18	1.67
	KSTPP-III	39.46	7.15	3.71	0.76	11.62	2.95
	VSTPP-I	97.67	5.97	14.59	5.28	25.84	2.65
	VSTPP-II	73.96	5.51	10.38	2.32	18.21	2.46
	VSTPP- III	93.14	10.30	13.08	4.81	28.18	3.03
	KAWAS	162.10	22.58	39.08	(1.80)	59.87	3.69
	JGPP	185.67	27.27	43.13	(0.49)	69.91	3.77

	Bhilai Unit-I &II(NTPC)	663.83	111.78	171.97	4.06	287.82	4.34
	Sipat-I	117.77	15.44	16.55	1.55	33.54	2.85
	Sipat-II	81.56	10.27	9.61	(0.02)	19.86	2.44
	Subtotal	**1882.52**	**237.68**	**357.15**	**21.20**	**616.03**	**3.27**
2	**Eastern Region**						
	KHSTPP-II	9.31	1.50	2.15	(0.07)	3.57	**3.84**
	Subtotal	**9.31**	**1.50**	**2.15**	**(0.07)**	**3.57**	**3.84**
3	**NPCIL**						
	KAPPS	45.47	0.00	10.42	0.31	10.72	2.36
	TAPP 3&4	81.92	0.00	22.81	0.00	22.81	2.78
	Subtotal	**127.40**	**0.00**	**33.23**	**0.31**	**33.53**	**2.63**
4	**Others**						
	Ratnagiri	172.66	31.34	53.75	0.00	85.09	4.93
	Subtotal	**172.66**	**31.34**	**53.75**	**0.00**	**85.09**	**4.93**
5	**Power purchase from Other Sources**						
	Power purchase from Indian E. Exchange	0.00	0.00	0.00	0.00	0.00	0.00
	UI	2.63	0.00	1.19	0.00	1.19	4.52
	Solar	4.00	0.00	3.60	0.00	3.60	9.00
	Non Solar	20.00	0.00	8.00	0.00	8.00	4.00
	Subtotal	**26.63**	**0.00**	**12.79**	**0.00**	**12.79**	**4.80**
6	**Misc. Arrears**					5.00	
7	**Gross Power Purchase**	**2218.51**	**270.52**	**459.06**	**21.44**	**756.02**	**3.41**
	External Losses	**78.98**					
	Total Power Purchase	**2139.53**	**270.52**	**459.06**	**21.44**	**756.02**	**3.53**

Transmission and Other Charges

Transmission charges payable to PGCIL are based on the total capacity allocation in the transmission network. ED-DD has a mix of firm and infirm capacity allocations from various Central Generating Stations which is revised by the Ministry of Power at regular intervals. Therefore, considering the changing capacity allocation, ED-DD has estimated the transmission charges for FY 12-13 based on the actual transmission charges for six months of FY 12-13 and pro-rata allocation of the same for remaining six months.

Table 6.7.2 : Total Power Purchase Cost submitted by the petitioner for FY 2012-13

Sr. No.	Particulars	Energy available at the DD periphery (MU)	Total Cost (Rs Crores)	Per unit cost (Rs/kWh)
1	Power Purchase Cost	2139.53	756.02	3.53
2	PGCIL Charges		57.95	
3	WRLDC		0.54	

4	MSTCL		3.48	
5	Total Power Purchase Cost (including Transmission Cost)	**2139.53**	**817.98**	**3.82**

Commission's Analysis

As discussed in the section on energy balance in para 7.6, the power purchase quantum approved for FY 2012-13 is 2156.10 MU.

The Commission has considered the submission of the Petitioner for actual H1 FY 2012-13 dated January 16' 2013. The Petitioner had initially submitted power purchase quantum and cost of 1093.12 MU and Rs 400.74 Crores respectively vide submission dated January 4' 2013 in response to the additional data requirements pointed out by the Commission.

The Commission as part of prudence check verified the station-wise Power purchase bills submitted by the petitioner for first six months of FY 2012-13 and pointed out discrepancies in the figures considered by the Petitioner and those as per the bills during the technical validation session. The Petitioner subsequently revised the submission vide email dated January 16' 2013 and submitted power purchase quantum and cost for H1 FY 2012-13 at 1093.12 MU and Rs 398.35 Crores respectively, including transmission charges. This included the UI over-drawal quantum of 2.63 MU and cost incurred towards over-drawal of Rs 1.19 Crores as per the Petitioner.

The Commission has considered the quantum of 1090.49 MU and cost of Rs. 397.16 Crores for H1 FY 2012-13 excluding UI as per the revised submission of Petitioner. The Commission has considered the UI over-drawal of 3.27 MU and cost incurred of Rs 2.12 Crores as per its prudence check from the weekly summary sheets/bills of UI on WRPC site for the first half of FY 2012-13.

The approved power purchase cost by the Commission as part of the review exercise does not include the additional/penal charges paid towards overdrawls/ below allowable frequency under the UI mechanism. As per the CERC (Unscheduled Interchange charges and related matters) Principle Regulations and its amendments thereof and Press Notification issued by Ministry of Power on 23rd July 2009 and after verification of the data submitted by the Petitioner, the Commission is mandated to disallow the additional UI charges of **Rs. 0.51 Crores** against the UI over-drawl/under-drawl beyond the allowed frequency from April 2012 to March 2013, imposed on the utility under the UI regulations of CERC (as amended from time to time) and it will not be a pass through in the aggregate revenue requirement of the Petitioner for FY 2012-13.

Therefore, the UI over-drawal cost has been considered at Rs 1.61 Crores for the first half of FY 2012-13.

For estimating the energy requirement for H2 FY 2012-13, merit order principles have been considered. While full fixed (capacity) charges have been considered but the variable charges corresponding to the costliest source of power have not been considered, in respect of energy not considered for purchase (according to the merit order dispatch principles).

Following assumptions have been considered for projecting the requirement and cost for H2 of FY 2012-13.

- 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 August 1' 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.
- The third unit of SIPAT STPS -I, Unit# 3 has attained COD, therefore, the availability from this station has been considered on pro-rata basis from the date of COD. The Commission has considered the PLF at 85% equivalent to the Normative Availability specified in the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009.
- **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, 2009-14. The Annual Fixed Charges for each station have been taken as per the latest tariff orders for the respective stations.
- **Variable Charges:** The Commission has considered the average variable cost for the period July 2012 to September 2012 (as per actual) for consideration of the per unit variable charges for H2 of FY 2012-13.
- The Commission has considered the nuclear plants as must run and has not subjected them to merit order dispatch.

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 31.11.2012 applicable from October 2012 to March 2013 for approving the Transmission charges for H2 of FY 2012-13. Accordingly, the transmission charges for usage of the PGCIL network are approved at Rs 38.54 Crores for H2 FY 2012-13.

The petitioner also utilizes the network of OPTCL for wheeling of power scheduled from different stations. The Commission therefore approves the petitioner's estimates of **Rs 1.74 Crores** as OPTCL - Wheeling Charges, WRPC, WRTM, Congestion charges, reactive charges, reactive charges (GETCO), others, misc. incentives for H2 of FY 2012-13.

Further, the Commission also allows the petitioner's claim of other charges including SLDC Charges, WRLDC charges amounting to **Rs 0.27 Crores** for H2 of FY 2012-13.

Accordingly the total Transmission charges approved for H2 of FY 2012-13 are Rs. 40.55 Crores.

The Commission has approved power purchase quantum of 1065.61 MU and cost of Rs 389.53 Crores for H2 of FY 2012-13, including the transmission charges of Rs 40.55 Crores.

As per the merit order principles adopted by the Commission for estimating the energy requirement for H2 of FY 2012-13, no surplus sale of power has been considered for H2 of FY 2012-13 and power purchase corresponding to meet the requirement within the territory has been estimated.

Renewable Purchase Obligations

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 had to purchase 3% of total power purchase from renewable sources for FY 2012-13 consisting 0.40% from Solar and 2.60% from Non-Solar sources. The Commission has observed that as per the actual power purchase cost and quantum furnished by the Petitioner for the first half actual FY 2012-13, it has not procured power from renewable sources of energy and hence not meeting its RPO obligations. Further, the Petitioner has not procured power from renewable sources in FY 2011-12 as per the actual for the year. The Commission has estimated the RPO purchase for H2 of FY 2012-13 and included the same in the power purchase cost.

Therefore, the Petitioner is directed to meet their quarterly & yearly RPO targets as specified by the Commission. In case the Petitioner buys Renewable Energy certificates to meet their RPO targets, "*The Commission directs the Petitioner to minimize bulk purchase of RE certificates at high cost at the end of the year; instead it should stagger the purchase & send a quarterly report of the same".*

Based on the above, the total Power purchase quantum and cost from various sources (excluding underdrawl/overdrawl of Power under UI mechanism) as approved for review of FY 2012-13 is mentioned below:

Table 6.7.3: Power purchase quantum and cost approved for H2 FY 2012-13 (merit order principles)

Sr. No.	Source	Units Purchased (MU)	Fixed Charges (Rs Crores)	Variable Charge (Ps/kWh) Average of July, Aug, Sept 2012	Variable Charges (Rs Crores)	Total Charges (Rs Crores)
1	**NPCIL**					
	KAPPS	30.39	-	230.11	6.99	6.99
	TAPP 3&4	42.50	-	283.90	12.07	12.07
	Sub-total	**72.89**	-		**19.06**	**19.06**
2	KORBA - III (KSTPS - VII)	22.30	3.24	106.27	2.37	5.61
	KSTPS	183.99	9.99	106.46	19.59	29.58
	SIPAT Stage 2	42.33	5.48	139.42	5.90	11.38
	VSTPS - II	39.75	3.05	143.82	5.72	8.76
	VSTPS -III	47.62	5.41	144.79	6.89	12.31
	VSTPS - I	54.09	3.42	153.46	8.30	11.73
	SIPAT - Stage I	89.84	10.09	155.54	13.97	24.07
	KHSTPP - II	5.44	0.72	235.67	1.28	2.00
	GGPP	93.79	13.67	237.11	22.24	35.91
	Bhilai	333.83	50.74	243.29	81.22	131.96
	KGPP	51.02	11.09	246.14	12.56	23.65
	RGPPL*		19.59	273.92	-	19.59
	Sub-total	**964.01**	**136.49**		**180.04**	**316.53**
3	**Other Sources**					
	UI	-	-		-	-
	Non-Solar	24.88	-	400	9.95	9.95
	Solar	3.83	-	900	3.44	3.44
	Sub-total	**28.71**	**-**		**13.40**	**13.40**
4	**Other Charges**					
	PGCIL CHARGES					**38.54**
	WRLDC					**0.27**
	MSTCL					**1.74**
5	**Total**	**1065.61**	**136.49**		**212.50**	**389.53**

**RGPPL falls out of the merit order*

Table 6.7.4: Power purchase quantum and cost approved for H1 FY 2012-13 as per actual (including UI)

Sr. No.	Source	Units Purchased (MU)	Variable Charge (Ps/kWh)	Fixed Charges (Rs Crores)	Variable Charges (Rs Crores)	Other Charges (Rs Crores)	Total Charges (Rs Crores)
1	**NTPC Stations**						
	KSTPP	183.45	95	10.71	17.50	2.36	30.57
	KSTPP-III	24.66	94	3.54	2.32	0.38	6.24
	VSTPP-I	47.82	149	2.99	7.14	2.90	13.03
	VSTPP-II	35.69	140	2.75	5.01	1.16	8.92
	VSTPP- III	46.04	140	5.15	6.47	2.40	14.02
	KAWAS	82.40	241	11.29	19.86	(0.90)	30.26
	JGPP	96.99	232	13.63	22.53	(0.24)	35.92
	Bhilai Unit-I &II(NTPC)	335.60	259	55.89	86.87	(0.40)	142.36
	Sipat-I	55.69	141	7.72	7.83	0.77	16.32
	Sipat-II	41.84	118	5.14	4.93	(0.01)	10.05
	Subtotal	**950.18**	**190**	**118.80**	**180.46**	**8.43**	**307.69**
2	**Eastern Region**						
	KHSTPP-II	5.78	231	0.75	1.33	(0.04)	2.04
	Subtotal	**5.78**	**231**	**0.75**	**1.33**	**(0.04)**	**2.04**
3	**NPCIL**						
	KAPPS	28.27	229	0.00	6.47	0.15	6.62
	TAPP 3&4	46.23	284	0.00	13.12	0.00	13.12
	Subtotal	**74.50**	**263**	**0.00**	**19.59**	**0.15**	**19.74**
4	**Others**						
	Ratnagiri	60.03	267	15.67	16.03	0.00	31.70
	Subtotal	**60.03**	**267**	**15.67**	**16.03**	**0.00**	**31.70**
5	**Power purchase from Other Sources**						
	Solar	0.00	0.00	0.00	0.00	0.00	0.00
	Non Solar	0.00	0.00	0.00	0.00	0.00	0.00
	UI over-drawal	3.27	0.00	0.00	0.00	0.00	1.61
	Sub-total	**3.27**	0.00	0.00	0.00	0.00	1.61
6	**Misc. Arrears**						5.00
7	**Power Purchase Cost**	**1093.76**		**135.22**	**218.60**	**8.54**	**367.78**
	Other Charges						
	PGCIL CHARGES						28.97
	WRLDC						0.27
	MSTCL						1.74
8	**Grand Total of Charges**	**1093.76**					**398.77**

Table 6.7.5: Summary of power purchase quantum and cost approved for FY 2012-13

Sr. No.	Particulars	Units Purchased (MU)	Total Cost (Rs Crores)
1	Power Purchase for H1 FY 2012-13	1093.76	398.77
2	Power Purchase for H2 FY 2012-13	1065.61	389.53
3	**Total Power Purchase**	**2159.37**	**788.30**

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.

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

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

Year	O&M Expenses
	Actual
FY 07-08	6.47
FY 08-09	8.47
FY 09-10	9.35
FY 10-11	9.46
FY 11-12	14.62

The total Operation & Maintenance expense for FY 2011-12 as per the latest actual submitted by Petitioner is Rs 14.62 Crores against the Rs 9.46 Crores in FY 2010-11, an increase of Rs 5.16 Crores.

The increase in operation and maintenance cost in FY 11-12 is primarily on account of increase in R&M expenses during FY 11-12.

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 cost booked during six months of FY 12-13, ED-DD has estimated the total employee cost for full year of FY 12-13 at Rs. 7.34 Crores.

Commission's Analysis

As per the regulation 27 of JERC tariff regulations 2009 -

"

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.

As may be seen from para 5.8.1, the Commission has considered Employee cost as Rs. 6.67 Crores for true-up of ARR for FY 2011-12 for reasons explained therein. The Commission has analyzed the past trends, the employee expenses of Rs. 5.32 Crores approved in the tariff order dated August 25' 2012 for FY 2012-13 and revised estimates for the year submitted by the Petitioner.

Taking Rs. 6.67 Crores for FY 2011-12 and applying the escalation of 8.94%[8], the employee cost for FY 2012-13 works out to Rs. 7.27 Crores. The WPI index till March 2012 has been used as available on the website of Economic Advisor, Ministry of Commerce and Industry for estimation of the increase in the employee expenses from FY 2011-12 to FY 2012-13. This results in the employee expenses of Rs 7.27 Crores. The Commission will consider the actual employee expenses at the time of true-up once the audited accounts are furnished, subject to prudence check.

The Commission considers the employee cost of Rs. 7.27 Crores as reasonable and approves the same for Review of ARR of FY 2012-13, subject to true-up of FY 2012-13.

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

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.

The actual R&M expense as submitted by the Petitioner for FY 2011-12 is Rs 5.12 Crores. For FY 12-13, ED-DD has considered the R&M expense of Rs. 5.58 Crores and has projected an 8.94% increase in the R&M expense for FY 13-14.

ED-DD has requested the 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. Also, the price of most of the basic commodities like iron, copper, zinc and cement used in the repairs and maintenance has increased tremendously over the last 5 years.

Commission's Analysis

As discussed in the Para 5.8.2 of this order, the Commission has approved the repair and maintenance expenses at Rs 5.12 Crores for true-up of ARR for FY 2011-12. The Commission has analyzed the past trends, the repair and maintenance expenses of Rs. 2.60 Crores approved in the tariff order dated August 25' 2012 for FY 2012-13 and revised estimates for the year submitted by the Petitioner.

The Commission is of the view that adequate R&M expenses are necessary for maintenance of infrastructure and for ensuring proper Standard of Performance of the integrated utility.

The Commission has applied the escalation factor of 8.94%[9] per annum for estimation of the increase in the R&M expenses from approved figures of FY 2011-12, for the approval of R&M expenses for FY 2012-13. This results in the R&M expenses of Rs 5.58 Crores.

Therefore, the Commission considers the Repair and Maintenance expenses of Rs. 5.58 Crores as reasonable and approves the same for Review of ARR of FY 2012-13. The petitioner is directed to submit complete details and proper justification of actual R&M expenses at the time of true-up to enable the Commission to take a view in this regard.

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

Administration and General Expenses

Petitioner's Submission

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

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

The actual A&G expense for FY 11-12 is Rs. 2.83 Crores. For FY 12-13, ED-DD has considered the A&G expense of Rs. 3.08 Crores and has projected an 8.94% increase in the A&G expense for FY 13-14.

Commission's Analysis

As discussed in the Para 5.8.3 of this order, the Commission has approved the A&G expenses at Rs 3.01 Crores for true-up of ARR for FY 2011-12. The Commission has analyzed the past trends, the A&G expenses of Rs. 2.36 Crores approved in the tariff order dated August 25' 2012 for FY 2012-13 and revised estimates for the year submitted by the Petitioner.

The Commission has applied the escalation factor of 8.94%[10] per annum for estimation of the increase in the A&G expenses from approved figures of FY 2011-12, for the approval of A&G expenses for FY 2012-13. This results in the A&G expenses of Rs 3.28 Crores.

The Commission therefore considers the Administration and General Expenses of Rs. 3.28 Crores as reasonable and approves the same for Review of ARR of FY 2012-13.

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

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(s) for FY 2012-13 is as given below:

Table 6.8.4: Summary of Operation & Maintenance Expenses for FY 2012-13 (Rs. Crores)

Sr. No.	Particulars	Proposed in petition of FY 2012-13	Approved TO dated 25 August'12 FY 2012-13	Petitioner Review FY 2012-13	Approved Review FY 2012-13
1	Employee Expenses	5.50	5.32	7.27	7.27
2	A&G Expenses	2.39	2.36	3.08[11]	3.28
3	R&M Expenses	6.84	2.60	5.58	5.58
4	**Sub-Total**	**14.73**	**10.28**	**15.93**	**16.13**
5	Less: Expenses Capitalized	-	-	-	-
6	**Total O&M Expenses**	**14.73**	**10.28**	**15.93**	**16.13**

6.9 Capital Expenditure and Capitalization

Petitioner's submission

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

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. 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 proposed the capital expenditure of Rs. 58.00 Crores, out of which the petitioner has projected the addition of Rs. 27.30 Crores in the Gross Fixed Assets during FY 2012-13.

11 Rs 3.08 Crores has been calculated by Petitioner on the FY 2011-12 originally submitted figure of Rs 2.83 Crores. The A&G for FY 2011-12 was revised to Rs 3.01 Crores as per audited accounts and applying escalation of 8.94%, it turns out to be Rs 3.28 Crores as per the petitioner's approach for estimation of A&G for FY 2012-13

Commission's analysis

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

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 Commission has noticed that the petitioner had not submitted the capital investment plan as per the regulations. However, for the purpose of this ARR computation, **the Commission provisionally approves the capital expenditure of Rs 58.00 Crores and capitalization of Rs. 27.30 Crores as 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 has submitted that EDDD had Rs. 272.24 Crores of Opening Gross Fixed Assets (GFA) in FY 12-13. ED-DD has further proposed capital expenditure of Rs. 58.00 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. 27.30 Crores have been estimated to be added in the GFA during FY 12-13.

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. Based on the CERC norms, ED-DD 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 12-13 is determined by applying aforesaid category-wise assets depreciation rates on the opening balance of Gross Fixed assets and addition during the year projected for FY 12-13, thereby arriving at the average GFA for the asset categories.

ED-DD has further submitted that the depreciation has been computed based on the closing value of GFA for FY 2011-12 as given in the fixed asset register and the estimated capitalization for FY 2012-13.

The Petitioner has claimed a depreciation amount of Rs 14.51 Crores on the average GFA of Rs 285.88 Crores for FY 2012-13.

Commission's Analysis

As discussed in para 5.10 of this order 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. As discussed at para 5.10 of this order, the Commission has allowed the opening GFA for FY 2010-11 at Rs 251.55 Crores and allowed the additions in the subsequent years. The opening GFA for FY 2012-13 has been considered at Rs 274.33 Crores, which is the closing GFA considered by the Commission in its true-up for FY 2011-12. The Commission as discussed at Para 6.10 of this order has allowed the capitalization for FY 2012-13 at Rs 27.30 Crores, to arrive at the closing GFA of Rs 301.62 Crores for 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 FY 2012-13 has been worked out at Rs. 13.82 Crores.

Table 6.10.2 : GFA & Depreciation approved for FY 2012-13 (Rs. Crores)

Sr. No.	Particulars	Proposed in petition of FY 2012-13	Approved TO dated 25 August'12 FY 2012-13	Petitioner Review FY 2012-13	Approved Review FY 2012-13
1	Opening Value of Assets at the beginning of the year	316.66	37.37	272.24[12]	274.33
2	Additions during the year	33.46	33.46	27.30	27.30
3	Gross Fixed Assets at the end of year	350.12	70.83	299.53	301.62
4	**Average Assets**	**333.39**	**54.10**	**285.88**	**287.97**
5	**Depreciation for the year**	**16.76**	**2.86**	**14.51**	**13.82**

Table 6.10.3 : Calculation of Depreciation for FY 2012-13 (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 FY 2012-13	Rate of Depreciation	Depreciation
1	Plant & Machinery	240.73	27.30	268.03	5.28%	13.43
2	Buildings	8.31	-	8.31	3.34%	0.28
3	Vehicles	0.57	-	0.57	9.50%	0.05
4	Furniture and Fixtures	0.25	-	0.25	6.33%	0.02
5	Computers and Others	0.71	-	0.71	6.33%	0.04
6	Land	23.75	-	23.75	0.00%	-
7	**Total**	**274.33**	**27.30**	**301.62**		**13.82**

The Commission considers the depreciation of Rs. 13.82 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 has submitted that the entire capital expenditure of ED-DD since its inception has been funded by the Central Government through Budgetary supports each year. Therefore, the department does not have any loan liabilities.

However, ED-DD 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

[12] Petitioner had inadvertently considered the addition in GFA for FY 2011-12 at Rs 11.48 Crores, which was revised to Rs 13.56 Crores and accordingly the closing GFA would be revised to Rs 274.32 Crores in the petition

has been assumed that ED-DD would work as a separate commercial utility and therefore would be utilizing the debt facilities in the coming years.

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.

The Petitioner has claimed interest on long term loans of Rs 3.32 Crores on the closing loan amount of Rs 31.22 Crores for FY 2012-13. The opening loan amount for FY 2012-13 has been taken as Rs 13.76 Crores i.e. the closing loan amount claimed by the Petitioner for FY 2011-12.

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***

ED-DD 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 as the utility is not restructured and corporatized till date. Considering this as an integrated utility, 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 interest on loans is 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 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 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 onwards excluding the opening capital base. The Commission has accordingly considered the opening normative loan of Rs. 15.30 Crores and normative debt amounting to 70% of the addition to GFA of Rs. 19.11 Crores during FY 2012-13 and has calculated the normative interest as per the regulations which amount to Rs 3.55 Crores. The calculation is as given below.

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

Sr. No.	Particulars	Proposed in petition of FY 2012-13	Approved TO dated 25 August'12 FY 2012-13	Petitioner Review FY 2012-13	Approved Review FY 2012-13
1	Opening Normative Loan	-	25.51	13.76	15.30
2	Add: Normative Loan during the year	23.42	23.42	19.11	19.11

Sr. No.	Particulars	Proposed in petition of FY 2012-13	Approved TO dated 25 August'12 FY 2012-13	Petitioner Review FY 2012-13	Approved Review FY 2012-13
3	Less: Normative Repayment	1.17	2.62	1.64	1.59
4	Closing Normative Loan	**22.55**	**46.32**	**31.22**	**32.82**
5	Average Normative Loan	11.12	35.92	22.49	24.06
6	Rate of Interest (@SBAR rate)	14.75%	14.75%	14.75%	14.75%
7	**Interest on Normative Loan**	**1.64**	**5.30**	**3.32**	**3.55**

Accordingly, the Commission has considered the Normative Interest on loans at Rs 3.55 Crores as reasonable and approves the same for review of ARR 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.

The working capital requirement has been computed based on the following parameters:

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

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

The normative interest on working capital for FY 12-13 has been claimed at Rs. 10.25 Crores.

Commission's analysis

The Commission has considered the approved power purchase expenses of FY 2012-13 and approved O&M expenses to work out the normative working capital required for FY 2012-13 in line with Regulation 29 of the JERC Tariff Regulations 2009.

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 investments 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 consumers as an expense in this order. The 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 2012-13. Further, Commission clarifies that SBI PLR rate has now been substituted as SBI Advance Rate. The Commission has considered the SBI advance rate of 14.75%[13] as on 1st April 2012 for review of ARR of FY 2012-13. The detailed calculation of the interest on working capital is as mentioned below:

Table 6.12.1 : Interest on working capital approved for FY 2012-13 (in Rs. Crores)

Sr. No.	Particulars	Proposed in petition of FY 2012-13	Approved TO dated 25 August'12 FY 2012-13	Petitioner Review FY 2012-13	Approved Review FY 2012-13
1	Power Purchase Cost for one month	65.48	64.17	68.17	65.11
2	Employee Cost for one month	0.46	0.44	0.61	0.61
3	A&G Expenses for one month	0.20	0.20	0.26	0.27
4	R&M Expenses for one month	0.57	0.22	0.46	0.46
5	**Total Working Capital for one month**	**66.71**	**65.03**	**69.49**	**66.45**
6	**Security Deposit**	**-**	**4.36**	**-**	**8.03**
7	**Net Working Capital required after deduction of Security Deposit**	**-**	**60.67**	-	**58.42**
8	SBAR Rate	14.75%	14.75%	14.75%	14.75%
9	**Interest on Working Capital**	**9.84**	**8.95**	**10.25**	**8.62**

13 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%; 13.08.2011 – 14.75%; 27.09.12 – 14.50%

The Commission considers Rs 8.62 Crores as Interest on Working Capital as reasonable and approves the same for Review of ARR of FY 2012-13.

6.13 Interest on Security Deposit

Petitioner's submission

The petitioner has not claimed interest on security deposit.

Commission's analysis

Commission has assessed the need and availability of funds to the licensee. Consumer's security deposit is the quantum of consumer's funds available to the licensee and hence deducted from the funds available to meet working capital requirements and the interest on working capital is allowed on the balance amount. The cost of available security deposit of the consumer is allowed as an interest on security deposit to be paid to the consumer as per section 47(4) and regulation 25 of the JERC Tariff Regulations 2009 and the same is allowed as expenditure in the ARR.

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 has observed that the petitioner has not paid any interest to the consumers on the security deposit held during FY 2012-13. 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. The Commission has considered the security deposit from consumers available with the petitioner as on March 31'2012 for calculation of the interest on security deposit (as per the audited accounts of FY 2011-12). The security deposit amount of Rs 8.03 Crores has been considered for the calculation of the interest on security deposit for FY 2012-13.

Table 6.13.1 : Interest on Security Deposit approved for FY 2012-13 (in Rs. Crores)

Sr. No.	Particulars	Proposed in petition of FY 2012-13	Approved TO dated 25 August'12 FY 2012-13	Petitioner Review FY 2012-13	Approved Review FY 2012-13
1	Opening Security Deposit	NIL	4.36	NIL	8.03
2	Add: Deposits during the Year				
3	Less: Deposits refunded				
4	Closing Security Deposit				
5	Bank Rate		**9.50%**		**9.50%**
6	**Interest on Security Deposit**		**0.41**		**0.76**

In view of the above, the Commission has allowed Rs. 0.76 Crores as interest on security deposit as expenditure in the ARR in the Review for FY 2012-13. This should be paid to the eligible consumers and actual expenditure be shown at the time of true up.

6.14 Return on Capital Base

Petitioner's submission

Return on equity has been computed based on 30% normative equity for capitalization during FY 12-13 in line with the JERC (Terms and Conditions for Determination of Tariff) Regulations, 2009. Considering that the other State Electricity Regulatory Commissions in India are allowing a RoE of 16% for distribution business, ED-DD has claimed RoE of 16% for FY 12-13.

The Petitioner has claimed return on equity of Rs 1.21 Crores for FY 2012-13.

Commission's analysis

ED- DD 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.

As discussed in para 5.10 and para 5.14 of this order, the Commission has 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. 5.43 Crores as a 3% return on net block of approved assets at the beginning of FY 2012-13.

Table 6.14.1 : Return on Capital Base approved for FY 2012-13 (Rs. Crores)

Sr. No.	Particulars	Proposed in petition of FY 2012-13	Approved TO dated 25 August'12 FY 2012-13	Petitioner Review FY 2012-13	Approved Review FY 2012-13
1	Gross block at beginning of the Year/Opening GFA	RoE @ 16% on average equity amount of Rs 5.02 Cr	37.37	RoE @ 16% on average equity amount of Rs 7.54 Cr	274.33[14]
2	Less accumulated depreciation		1.48		93.29
3	**Net block at beginning of the year**		**35.89**		**181.03**
4	Less accumulated consumer contribution		-		-
5	**Net fixed assets at beginning of the year**		**35.89**		**181.03**
6	**Reasonable return @3% of NFA**	**0.80**	**1.08**	**1.21**	**5.43**

The Commission considers the Return on Capital Base of Rs. 5.43 Crores as reasonable and approves the same for review of ARR of FY 2012-13.

6.15 Provision for Bad and Doubtful debts

Petitioner's submission

The petitioner has considered the provision of 0.50% of the receivables in the revenue requirement for FY 2012-13.

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

Provision for Bad & Doubtful Debts (Rs. Crores)	FY 12-13
	Revised Estimate
Provision for Bad &Doubtful Debts as 1% of Receivables	0.50%
Provision for Bad & Doubtful Debts	**4.08**

Commission's analysis

As can be observed from the audited accounts, there was no bad & doubtful debt written off in FY 2010-11 and FY 2011-12. Further as specified in the regulation no. 28 of JERC Tariff regulations read with the format is explained below.

[14] The opening GFA has been considered from FY 2010-11 and accordingly the gross block at the beginning of FY 2012-13 is higher than allowed in last tariff order dated August 25' 2012

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.	*Provision made for debts in ARR*	

Unquote

The petitioner has not actually written off Bad & Doubtful debts in the past. The Commission has, therefore considered the provision of 0.5% (regulations provide up to 1%) of the receivables towards bad and doubtful debts subject to availability (at the time of true up) of audited accounts & auditor's certificate of actual write off of bad & doubtful debts.

Commission has considered the provision of 0.5% of the receivables for FY 2012-13 as bad and doubtful debt at Rs. 4.21 Crores as reasonable and approves the same as per the regulations for Review of ARR for FY 2012-13 subject to final adjustment in true-up when audited accounts become available.

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.

For estimating the non-tariff income for FY 12-13, an increase of 10% p.a. has been considered over the actual FY 11-12 non-tariff income of Rs 8.33 Crores. The Petitioner has claimed an amount of Rs 9.17 Crores as non-tariff income for FY 2012-13.

Commission's analysis

The Commission observes that the non tariff income approved in the tariff order for FY 2012-13 dated August 25' 2012 was Rs 9.88 Crores, by applying an escalation of 5% on the approved figures for FY 2011-12. The Commission following the same approach approves the non-tariff income for FY 2012-13 at Rs 8.75 Crores by applying an escalation of 5% on the actual non-tariff income for FY 2011-12 as approved in the true-up for FY 2011-12 in this order.

6.17 Revenue from Sale of Surplus Power

Petitioner's submission

The petitioner has submitted the following:

Quote

'' During FY 12-13, EDDD has estimated a surplus of 77 MU based on the energy available and sale to various consumer categories. EDDD has sold surplus power during the first 6 months of FY 12-13 at an average rate of Rs. 3.11 per unit. Revenue from surplus power available for sale during the remaining six months of FY 12-13 has been computed at the same rate.''

Unquote

The petitioner has estimated an amount of Rs. 23.81 Crores towards the revenue from sale of surplus power as per the petition submitted to the Commission on November 30'2012.

Commission's Analysis

The petitioner as per the latest submission dated January 16' 2012 has submitted the transactions under UI mechanism for first six months of FY 2012-13. The Petitioner has submitted UI under-drawal of 23.94 MU and revenue of Rs 6.05 Crores for the first six months.

The Commission has considered the submissions made by the petitioner and after a prudence check of UI transactions as per the weekly summary sheets/bills on WRPC, has noticed the under-drawl of 25.31 million units and revenue earned of Rs. 7.02 Crores.

Thus, the Commission considers the under-drawal for FY 2012-13 at Rs. 7.02 Crores for sale of 25.31 million units as reasonable and approves the same for Review of ARR for FY 2012-13; subject to true-up.

6.18 Revenue at existing tariff for FY 2012-13

Petitioner's submission

The petitioner has submitted that the Revenue from sale of power for FY 12-13 has been determined based on the energy sales estimated and category wise tariff prevalent in the UT of Daman & Diu.

The revenue from sale of power at existing tariff is estimated to be Rs. 815.83 Crores (inclusive of fuel price surcharge) in FY 12-13. The estimated revenue for FY 12-13 is based on the first four months actual revenue from sale of power at the earlier tariff structure and one month actual revenue in the month of August 2012 raised through the sale of power on account of the new tariff as per the retail tariff notified by the Commission vide tariff Order for FY 12-13 dated August'25 2012.

The fuel purchase adjustment surcharge approved by the Commission is also being levied to all the consumer categories except the Domestic and Agriculture consumers during the period April 2012 to August 2012 and has also been estimated for the remaining seven months of revenue estimation for FY 12-13.

Commission's analysis

The Commission has considered the actual revenue submitted by the Petitioner for first six months of FY 2012-13 on the basis of actual energy sales during the period. The Commission has noticed that the actual revenue of FY 2012-13 for the first six months includes the additional charge on account of FPPCA from the consumers of DD. The petitioner has provided the total amount at Rs 390.80 Crores as revenue for the first six months of FY 2012-13, including FPPCA charges of Rs 84.23 Crores.

For the remaining six months of FY 2012-13, Commission has considered the estimated sales of H2 FY 2012-13 for estimation of the revenue for the second half of the year. This results in the revenue of Rs. 451.90 Crores during the second half of FY 2012-13.

This together with the actual first half of FY 2012-13, results in the revenue of Rs 842.70 Crores from existing tariff for whole year.

Accordingly, the Commission considers the revenue of Rs 842.70 Crores including Rs 84.23 Crores (FPPCA billed during first half of FY 2012-13) as revenue from existing tariff for the purpose of this review.

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 sections and the same has been summarized in the table below.

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

Sr. No.	Particulars	Proposed in petition of FY 2012-13	Approved TO dated 25 August'12 FY 2012-13	Petitioner Review FY 2012-13	Approved Review FY 2012-13
1	Power Purchase Cost	785.76	770.09	817.98	788.30
2	Employee costs	5.50	5.32	7.27	7.27
3	Administration and General Expenses	2.39	2.36	3.08	3.28
4	Repair and Maintenance Expenses	6.84	2.60	5.58	5.58
5	Depreciation	16.76	2.86	14.51	13.82
6	Interest and Finance charges	1.64	5.30	3.32	3.55
7	Interest on working capital	9.84	8.95	10.25	8.62
8	Interest on security deposit	NIL	0.41	NIL	0.76
9	Return on NFA	0.80	1.08	1.21	5.43
10	Provision for Bad Debt	5.81	3.00	4.08	4.21
11	**Total Revenue Requirement**	**835.34**	**801.98**	**867.28**	**840.82**
12	Less: Non Tariff Income	9.88	9.88	9.17	8.75
13	**Net Revenue Requirement (11-12)**	**825.46**	**792.10**	**858.11**	**832.07**

The estimated gap has been mentioned in the following table:

Table 6.19.2 : Estimation of Deficit considered for review of FY 2012-13 (Rs. Crores)

Sr. No.	Particulars	Proposed in petition of FY 2012-13	Approved TO dated 25 August'12 FY 2012-13	Petitioner Review FY 2012-13	Approved Review FY 2012-13
1	**Net Revenue Requirement**	**825.46**	**792.10**	**858.11**	**832.07**
2	Less: Revenue from Retail Sales at Existing Tariff	580.79	600.54	815.83	842.70
3	Less: Revenue from Surplus Power Sale/UI	27.46	-[15]	23.81	7.02
4	**Net Gap/(Surplus) (1-2-3)**	**217.22**	**191.55**	**18.48**	**(17.64)**
5	Gap for the previous year/ (Surplus)	(8.75)*	77.82	93.45	119.00
6	Past Arrears/Refunds to Consumers	-	-	-	-
7	**Total gap (4+5+6)**	**208.47**	**269.38**	**111.93**	**101.35**

[15] As per merit order principles, no surplus sale of power was envisaged for FY 2012-13 in tariff order dated August 25' 2012

* The surplus of Rs 8.75 Crores shown is as per the submission of the Petitioner dated November 30’ 2011 and as per the latest power purchase cost, sales and revenue for FY 2011-12 submitted by the Petitioner on August 9’ 2012 and August 16’ 2012, the Petitioner is in deficit.

A net surplus of Rs 17.64 Crores not considering the previous year gap has been considered; further; considering the gap of previous years, the estimated revenue gap of Rs. 101.35 Crores is considered to be reasonable and approved for Review of FY 2012-13.

Aggregate Revenue Requirement (ARR) of FY 2013-14

7. Aggregate Revenue Requirement (ARR) for FY 2013-14

7.1 Background

The Petitioner has submitted the ARR & Tariff Petition for FY 2013-14 broadly on the basis of the principles outlined in Tariff Regulations notified by JERC. The Petitioner in its petition 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-DD based on the provisions mentioned in the regulations, audited figures of FY 2011-12 and revised estimates/actual of FY 2012-13 submitted by the petitioner. The Commission has taken into consideration the following:

1. Performance in FY 2010-11 (Audited[16] figures);
2. Performance in FY 2011-12 (Audited figures)
3. Revised estimates of FY 2012-13 submitted with the petition for FY 2013-14 dated November 30' 2012
4. Actual first half performance of FY 2012-13 in respect of sales, power purchase and revenue

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/actual 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
  - iv. Power Purchase Sources
- Assessment of the Aggregate Revenue Requirement
  - i. Power Purchase Costs & Transmission Charges;

16 Audited Accounts of FY 2010-11 provided by the Petitioner.

ii. 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,
"

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. "

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 84%. Energy sold to various consumer categories over the past 5 years has grown at approximately 9% p.a., mainly contributed by increase in the energy demand from the HT/EHT industries.

The petitioner has further submitted that it 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 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.

As submitted by the petitioner in its petition -

Quote

''

The energy sales for FY 12-13 & FY 13-14 have been determined based on past years CAGR and actual energy sales in various consumer categories for the first five months of FY 12-13. 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.

For FY 12-13, the actual five months energy sales has been analyzed and the energy sales for the remaining seven months has been arrived at by considering the five months actual sale as well as the past years growth trend in each consumer category. ED-DD would like to highlight that for estimating energy sales to various consumer categories for FY 12-13 & FY 13-14, previous years CAGRs have been considered as well as the new connections that are likely to be released by the EDDD in the remaining period of FY 12-13 and FY 13-14.

For the domestic consumers, the EDDD has projected the energy sales for FY 13-14 by applying four years (FY 07-08 to FY 11-12) Compounded Annual Growth Rate (CAGR) on the estimated sales for FY 12-13. Whereas, a five-year (FY 07-08 to FY 11-12) CAGR has been considered for estimation of sales in the commercial category.

For the agriculture and LT industry, the ED-DD has projected the energy sales for FY 13-14 by applying three years (FY 08-09 to FY 11-12) CAGR on the estimated sales for FY 12-13.

For the HT/EHT category, variations have been seen in the growth on a year-to-year basis with variations in sale ranging from 2.90% to 12.50%. A CAGR of 9.17% is observed in the growth in energy consumption of HT/EHT category over the past four years. Therefore, for FY 13-14, a growth rate of 9.17% has been considered for projecting the sales HT/EHT consumers in view of load enhancement of existing consumers as well as addition of new HT consumers. ''

Unquote

The petitioner has considered the compounded annual growth rate (CAGR) for Energy Sales (MUs) as mentioned in the following table.

Table 7.3.1 : CAGR (%) for estimation of Sales for FY 2013-14 considered by petitioner

Sales	Adjusted CAGR
Domestic	9.56%
LIGH	18.95%
Commercial	10.28%
Agriculture	3.05%
LT Industry	5.15%
HT/EHT Industry	9.17%
Public Lighting	8.90%
Public Water Works	8.11%
Temp. Supply	5.39%

Source: Table 15 of Petition for FY 2013-14 submitted by ED-DD

Table 7.3.2 : Category wise Energy Sales projected for FY 2013-14 (in MUs)

S. No.	Consumer Category	FY 2013-14 (Petitioner's submission)
A	Domestic	82.59
B	LIGH	0.07
C	Commercial	38.21
D	Agriculture	3.70
E	LT Industry	173.40
F	HT/EHT Industry	1728.19
G	Public Lighting	4.46
H	Public Water Works	0.96
I	Temporary Supply	0.42
Total		**2032.00**

Source: Table 15 of Petition for FY 2013-14 submitted by ED-DD

The petitioner has submitted the actual sales of FY 2010-11 and actual sales of FY 2011-12 for consideration of the Commission.

Actual sales of 1771.16 MU have been considered for FY 2011-12 and estimated sales of 1867 MU for FY 2012-13.

Further, the Petitioner has submitted the total number of consumers as 58797 as on April 1'2012.

Commission's Analysis

The modified CAGR (%) of three years (from FY 2008-09 to FY 2011-12) has been applied by the Commission on the revised estimates of FY 2012-13 (as submitted by the petitioner) to assess the Energy Sales for FY 2013-14 for the consumer categories – Domestic, Commercial, LT industrial and Public Lighting categories. For the estimation of the energy sales for the low income group, agriculture and temporary category, aberrations are seen in the past year trends, where the submission of the

Petitioner has been considered reasonable and hence approved. The modified CAGR of five years (from FY 2006-07 to FY 2011-12) has been considered reasonable for the estimation of sales of the Public Water Works and the HT/EHT category as the three year CAGR showed a negative growth for the public water works and the three year CAGR showed too high a growth for the HT/EHT category.

For estimation of the number of consumers, modified three years CAGR (from FY 2008-09 to FY 2011-12) has been used to assess the number of consumers for FY 2013-14. The modified three year CAGR has been applied on the revised estimates considered approved by the Commission for FY 2012-13. No separate number of consumers for the LIG category has been furnished by the Petitioner and the same have been clubbed alongwith the Domestic category for the approval for FY 2013-14. For estimation of the connected load, the modified three year CAGR (from FY 2008-09 to FY 2011-12) has been used on the revised estimates of FY 2012-13 as approved by the Commission to assess the connected load for FY 2013-14 except for the HT/EHT Industry category, where the submission of the Petitioner is considered to be reasonable in view of the large variation in the past trends and hence considered approved.

Table 7.3.3 : Modified CAGR (%) considered by the Commission for estimation of Sales, Consumer Base and Connected load for FY 2013-14

<table>
<tr><th>S. No.</th><th>Consumer Category</th><th>Sales</th><th>Consumers</th><th>Connected Load</th></tr>
<tr><td>1</td><td>Domestic</td><td>9.38%</td><td rowspan="2">1.95%</td><td>2.07%</td></tr>
<tr><td>2</td><td>Low Income Group</td><td>-</td><td>-</td></tr>
<tr><td>3</td><td>NRS/Commercial</td><td>8.57%</td><td>0.88%</td><td>0.73%</td></tr>
<tr><td>4</td><td>Agriculture</td><td>-</td><td>1.04%</td><td>1.41%</td></tr>
<tr><td>5</td><td>LT Industrial</td><td>5.15%</td><td>0.00%</td><td>1.49%</td></tr>
<tr><td>6</td><td>Public Lighting</td><td>8.90%</td><td>5.04%</td><td>2.37%</td></tr>
<tr><td>7</td><td>Public Water Works</td><td>8.11%</td><td>0.00%</td><td>0.55%</td></tr>
<tr><td>8</td><td>HT/EHT Industry</td><td>7.89%</td><td>0.00%</td><td>-</td></tr>
</table>

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

<table>
<tr><th rowspan="2">S. No.</th><th rowspan="2">Consumer Category</th><th>FY 2013-14</th><th>FY 2013-14</th></tr>
<tr><th>Submission</th><th>Approved</th></tr>
<tr><td>1</td><td>Domestic</td><td rowspan="2">47030</td><td rowspan="2">47173</td></tr>
<tr><td>2</td><td>Low Income Group</td></tr>
<tr><td>3</td><td>NRS/Commercial</td><td>9105</td><td>9113</td></tr>
<tr><td>4</td><td>Agriculture</td><td>1688</td><td>1681</td></tr>
<tr><td>5</td><td>LT Industrial</td><td>1692</td><td>1663</td></tr>
<tr><td>6</td><td>Public Lighting</td><td>213</td><td>219</td></tr>
<tr><td>7</td><td>Public Water Works</td><td>78</td><td>78</td></tr>
<tr><td>8</td><td>HT/EHT Industry</td><td>828</td><td>798</td></tr>
<tr><td>9</td><td>TOTAL</td><td>60634</td><td>60724</td></tr>
</table>

Table 7.3.5 : Connected Load approved by the Commission for FY 2013-14

S. No.	Consumer Category	FY 2013-14 Approved
1	Domestic	57533
2	Low Income Group	
3	NRS/Commercial	35752
4	Agriculture	5204
5	LT Industrial	176131
6	Public Lighting	1698
7	Public Water Works	684
8	HT/EHT Industry	398534
9	**TOTAL**	**675538**

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

S. No.	Consumer Category	FY 2013-14 Submission	FY 2013-14 Approved
1	**LT-D/Domestic**		
	Up to 50 units	0.14	0.14
	51-200 units	10.98	10.96
	201-400 units	11.13	11.10
	401 units and above	60.40	60.26
	Total Domestic	**82.59**	**82.46**
2	**Low Income Group**	**0.07**	**0.07**
3	**LT-C/Commercial**		
	0-100 units	15.28	15.05
	Beyond 100 units	22.92	22.57
	Total Commercial	**38.21**	**37.61**
4	**LT- Ag/Agriculture**		
	Upto 10 HP per unit	2.57	2.57
	Beyond 10 HP per unit	1.13	1.13
	Total Agriculture	**3.70**	**3.70**
5	**LTP Motive Power**		
	Upto 20 HP of connected load	171.58	171.58
	Above 20 HP of connected load	1.83	1.83
	Total	**173.40**	**173.40**
6	**LT-PL/Public Lighting**	**4.46**	**4.46**
7	**LT-Public Water Works**		
	Upto 20 HP of connected load	0.40	0.42
	Above 20 HP of connected load	0.60	0.63
	Total Public Water Works	**0.96**	**0.96**
8	**HT Industrial**		
	HT (A) General		

S. No.	Consumer Category	FY 2013-14 Submission	FY 2013-14 Approved
	0-50000	408.29	403.51
	50000-5 lakh	851.57	841.59
	Above 5 lakh	329.91	326.05
	HT (B) Furnace		
	0-300 units per kVA	88.30	87.27
	301-500 units per kVA	41.97	41.48
	Above 500 units per kVA	7.98	7.88
	Total HT Industrial	**1728.19**	**1707.94**
9	**Temporary Supply**	**0.42**	**0.42**
	TOTAL	**2032.00**	**2011.02**

7.4 Intra-State Transmission & Distribution Loss

Petitioner's submission

The petitioner has submitted that the system improvement works executed every year under the plan schemes as well as increase in energy sales quantum to the HT consumers have resulted in the reduction of T & D losses.

The petitioner has submitted that the reduction of T&D below 10% involves significant amount of capital expenditure and the utility endeavors to bring the T&D loss level further down in the subsequent years. The petitioner proposes to reduce the T&D losses to 9.25% for FY 2013-14.

Considering the proposed capital expenditure in transmission and distribution network during FY 13-14, the petitioner expects to reduce the losses by approximately 0.25% in FY 2013-14. The petitioner has brought to the notice of the Commission that the T&D loss of Daman & Diu is one of the lowest in the country and it's quite difficult to reduce losses by more than 0.25% p.a., due to low base loss level of 9.25% estimated for FY 12-13. Moreover, the petitioner has submitted that 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 had approved the T&D loss of 9.25% for FY 2012-13 in its order dated August 25' 2012. The Petitioner has submitted that system improvement works are going on and it expects to reduce the losses by approximately 0.25% in FY 2013-14 from the level submitted for FY 2012-13 i.e. from 9.50% to 9.25%. The petitioner has submitted the actual T&D loss of 9.56% for FY 2011-12.

Further, the petitioner has submitted that due to the low base level, it is difficult to reduce losses by more than 0.25% per annum.

As per the regulation 15 of JERC Tariff regulations, 2009

"*15. AT& C Losses*

1. *The licensee shall give information of total AT&C losses in Previous Year and Current Year and the basis on which such losses have been worked out.*

2. *The licensee shall also propose a loss reduction programme for the Ensuing Year as well as for the next three years giving details of the measures proposed to be taken for achieving the same.*

3. *Based on the information furnished and field studies carried out and the loss reduction program proposed by the licensee, the Commission shall fix separate targets for reduction of Transmission and Distribution losses and for commercial efficiency for the period specified by the Commission:*

   Provided further that in the event of unbundling of the integrated utility, the Commission may fix separate transmission and distribution loss targets and commercial efficiency targets, as the case may be, for each successor licensee taking into account its area of operation, its consumer mix, state of the network, level of metering, metering initiatives planned, etc.

4. *The licensee shall conduct regular energy audit to substantiate its estimation of T&D losses. The licensee shall also furnish six monthly energy audit reports to the Commission.*

   The energy audit report for the first six months of the year shall be provided by November end of the same year. Similarly energy audit report for the last six months of the year shall be provided by May end of the next year.

5. *In the absence of energy audit, the Commission may not accept the claim of the licensee and may proceed to fix the loss levels on the basis of any other information available and its own judgment.*

The Commission while examining the T&D losses for FY 2012-13 in the order dated August 25, 2012 had considered the following:

Quote

"The petitioner has not submitted the loss reduction trajectory based on the energy audit studies. The stakeholders during the public hearing process had pointed out that the T&D losses should be reduced to the levels of similarly placed utilities like Dadra and Nagar Haveli, which are at the levels of less than 7%. The Commission would also like to highlight that consumers of the petitioner are predominantly connected consumer mix constitutes of majority of high voltage level consumers, and about 94% of industrial consumer where the losses are much lower. Moreover similarly placed utility of Dadra and Nagar Haveli are placed much lower in terms of the T&D loss

of 6.25%. Therefore considering the approval of the FY 2011-12 of 9.75%, capital expenditure proposed by the petitioner the consumer mix a 0.5% reduction over the targeted loss levels of FY 2011-12 is achievable. The Commission therefore considers the T&D loss at 9.25% as reasonable and approves the same for FY 2012-13.''

Unquote

It is observed that the petitioner has not been able to achieve the targeted loss level for FY 2011-12 and FY 2012-13. The actual T&D loss level for FY 2011-12 as analyzed by the Commission is 10.59% as against the approved value of 9.75% (order dated August 25' 2012). The actual T&D loss for FY 2010-11 basis the actual has been 12.40% as against the approved loss level of 11.00% in the true-up for the year as per the order dated August 25' 2012.

Further, the petitioner has submitted the revised estimates for FY 2012-13 at 9.50% against the target of 9.25%. As can be seen, the petitioner has not been able to achieve the loss reduction trajectory set forth by the Commission; the Commission considers the T&D loss of 9.25% as reasonable and hence approved for FY 2013-14.

7.5 Inter-State Transmission Loss

Petitioner's submission

The petitioner has submitted that the recent 52 week moving average of regional losses has been 3.56%. Transmission losses for FY 11-12 were recorded as 3.61%. For computing the power availability at the periphery, 3.56% weighted average external transmission losses have been applied on the gross power purchase for FY 2012-13 and FY 2013-14.

Commission's analysis

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 overall energy requirement at ED-DD's periphery is estimated to be 2239 MU in FY 2013-14. The increase in energy requirement as compared to FY 2012-13 is on account of higher sales but has been partially offset due to the reduction of proposed T&D losses.

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 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 as shown in the table below.

Table 7.6.1 : Energy Requirement approved by the Commission for FY 2013-14 (Million Units)

Sr. No.	Particulars	Petitioner Submission (FY 2013-14)	Approved (FY 2013-14)
1	**Energy sales within the State/UT (Mus)**	2032.00	2011.02
2	**Distribution losses**		
i	%	9.25%	9.25%
ii	MU	207.12	204.98
3	**Energy required at State Periphery for Sale to Retail Consumers**	**2239.12**	**2216.00**
4	**Add: Sales to common pool consumers/ UI (in Mus)**	**0.00**	**0.00**
i	Sales outside state/UT : UI/Under drawal (in Mus)	0.00	0.00
ii	Sales (in Mus)	0.00	0.00
	a) To electricity traders (in Mus)		
	b) Through PX (in Mus)		
iii	Sales to other distribution licensees	0.00	0.00
	a) Bilateral Trade (in Mus)		
	b) Banking Arrangement (in Mus)		
5	**Total Energy Requirement for State**	**2239.12**	**2216.00**
6	**Transmission losses**		
i	%	3.56%	3.55%
ii	MU	83.86	81.63
	ENERGY REQUIRED AT GENERATOR END	**2322.97**	**2297.64**

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.

Commission's analysis

Based on the Energy requirement, Energy availability and Transmission & Distribution Losses for FY 2013-14 as approved in the earlier paras, 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

Sr. No.	Particulars	Petitioner Submission (FY 2013-14)	Approved (FY 2013-14)
1	**Energy sales within the State/UT (in Mus)**	2032.00	2011.02
2	**Distribution losses**		
i	%	9.25%	9.25%
ii	MU	207.12	204.98
3	**Energy required at State Periphery for Sale to Retail Consumers**	**2239.12**	**2216.00**
4	**Add: Sales to common pool consumers/ UI (in Mus)**	**0.00**	**0.00**
i	Sales outside state/UT : UI/Under drawal (in Mus)	0.00	0.00
ii	Sales (in Mus)	0.00	0.00
	a) To electricity traders (in Mus)		
	b) Through PX (in Mus)		
iii	Sales to other distribution licensees	0.00	0.00
	a) Bilateral Trade (in Mus)		
	b) Banking Arrangement (in Mus)		
5	**Total Energy Requirement for State**	**2239.12**	**2216.00**
6	**Transmission losses**		
i	%	3.56%	3.55%
ii	MU	83.86	81.63
7	**Energy required to be purchased (at Generator end)**	**2322.97**	**2297.64**
B)	**ENERGY AVAILABILITY**		
1	**Net Generation (Share from CGS) (in MUs)**		
A	NTPC	1215.28	1329.38
2	**Power Purchased from (Other Sources) (in Mus)**		

Sr. No.	Particulars	Petitioner Submission (FY 2013-14)	Approved (FY 2013-14)
A	NSPCL	656.46	667.67
B	NPCIL	102.71	145.78
C	RGPPL	242.34	94.48
D	Renewable Energy Sources	56.00	60.33
E	Short term arrangement	50.18	0.00
3	**Net power purchase after considering MOD principles (in MUs)**	**2322.97**	**2297.64**

7.8 Power Purchase Quantum and Cost

Petitioner's submission

<u>Power Purchase Quantum</u>

The petitioner has submitted that Daman & Diu has no generating stations of its own and relies on the firm and infirm allocations of power from Central Generating Stations like Korba, Vindyachal, Kahalgaon, Kawas, Tarapur and Kakrapar atomic power stations of NPCIL etc. to meet its energy requirement.

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
- Private Sector Power Generating Companies
- Renewable energy sources – Solar and Non-Solar
- Other arrangements, in case of unscheduled deficit of power

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 the short term arrangement of power.

Daman & Diu has firm and infirm[17] allocations in Central Sector Generating Stations of NTPC, Nuclear Power Corporation of India Ltd (NPCIL), NTPC Sail Power Company Ltd (NSPCL) and Ratnagiri Gas and Power Private Limited (RGPPL).

For projecting the power availability for FY 13-14, EDDD has considered average allocation of firm and infirm power from the western region generation stations (NTPC and NPCIL) as per the allocation specified in the notification no's. WRPC/Comml-I/6/Alloc/2012/684 dated 24 May 2012 of Western Regional Power Committee. For projecting the power purchase from eastern region NTPC generating stations, an allocation of 1.30 MW from KHSTPP has been taken into account.

Additionally, EDDD has 92 MW allocations from NSPCL Bhilai power stations. Energy availability from NSPCL Bhilai power stations for full year has been considered for projecting power purchase during FY 13-14.

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

	FY 2012-13	
	DD Allocation (MW)	Avg DD Allocation (%)
Western Region		
KSTPP	53	2.50%
KSTPP-III	6	1.25%
VSTPP-I	14	1.13%
VSTPP-II	11	1.06%
VSTPP- III	13	1.27%
KAWAS	31	4.72%
JGPP	31	4.76%
NSPCL – Bhilai	91.50	18.30%
Sipat I	18	1.33%
Sipat II	12	1.17%
Subtotal	**279**	
Eastern Region		
KHSTPP-II	1.30	0.13%
Subtotal	**2.00**	
NPCIL		
KAPPS	8.30	1.89%
TAPP 3&4	13.40	1.24%
Subtotal	**22**	
Others		
Ratnagiri	38	1.93%
Subtotal	**38**	
Grand Total	**341**	

[17] As per the Commission's analysis the Petitioner by infirm power means the unallocated share from the generating stations.

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.

For FY 12-13, EDDD has considered power purchase of 4 MU and 20 MU from solar and non-solar renewable energy sources respectively as per the JERC's Procurement of Renewable Energy Regulations, 2010 as well as approved by the Commission in the Tariff order for FY 12-13. Further, EDDD has made the provision of power purchase from the renewable sources (solar and non solar) in FY 13-14 as well.

The Petitioner has submitted that though the availability of power shall increase due to additions in allocation of power from various resources, ED-DD will have to procure power from market and other sources to meet its energy requirement during the deficit period in a year. For the FY 13-14, short-term procurement of power of 50 MU has been considered to meet the demand of the consumers throughout the year.

The recent 52 week moving average of regional losses was found to be 3.56%. Transmission losses for FY 11-12 were recorded as 3.61%. For computing the power availability at the periphery, 3.56% weighted average external transmission losses have been applied on the gross power purchase for FY 12-13 and FY 2013-14.

The table below lists down station wise estimated power purchase for FY 13-14.

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

Source (MUs)	FY 13-14 Projected
Western Region	
KSTPP	367.82
VSTPP-I	99.69
VSTPP-II	76.54

Source (MUs)	FY 13-14 Projected
VSTPP- III	94.19
KAWAS	159.40
JGPP	177.36
NTPC-SAIL Bhilai	656.46
KSTPP-III	29.60
Sipat I	124.15
Sipat II	79.44
Subtotal	**1864.67**
Eastern Region	
KHSTPP-II	7.07
Subtotal	**7.07**
NPCIL	
KAPPS	31.33
TAPP 3&4	71.38
Subtotal	**102.71**
Others	
Ratnagiri	242.34
Subtotal	**242.34**
Power purchase - Other Sources	
Power purchase from Indian E. Exchange	0.00
UI	50.18
Solar	8.00
Non Solar	48.00
Subtotal	**106.18**
Gross Power Purchase	**2322.97**
External losses	83.86
Net Power Purchase	**2239.11**

Power Purchase Cost

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

- The cost of power purchase for FY 12-13 are based on actual power purchase bills, received by the ED-DD during the first six months of FY 12-13. Each element of the power purchase cost i.e. fixed, variable and other cost have been estimated for each generating station by considering 6 months (April 12 to September 12) actual cost incurred by the ED-DD. The projection for remaining six months has been done on pro-rata basis by considering the actual power purchase cost of the first six months of FY 12-13.

- Fixed cost for FY 13-14 has been projected considering an 8% escalation over the estimated fixed cost for various stations for FY 12-13. The escalation has been considered based on the impact of new Tariff Regulations for FY 2009-14 issued by CERC for computation of tariff for Central Generating Stations.
- Variable cost for each NTPC generating stations for FY 13-14 has been projected based on the increase in 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 actual average variable cost (NTPC, NPCIL & KHSTPP II) for FY 11-12 was Rs. 2.09 per unit as against Rs. 2.07 per unit for the first six months of FY 12-13.
- The EDDD has projected other charges (tax, incentives, etc) for FY 13-14 at similar level as estimated for full year of FY 12-13.
- For nuclear plants i.e. KAPP single part tariff with 4% escalation on the actual per unit charges for FY 12-13 have been considered for FY 13-14 and for TAPP Units 3 & 4, no escalation has been considered for FY 13-14.
- For NTPC-SAIL Bhilai unit 1 & 2, fixed, variable and other charges have been projected for the entire FY 12-13 based on the actual cost for first six months of FY 12-13. An escalation of 15% for increase in fuel cost has been taken into consideration for projecting the power purchase cost from the said plant for FY 2013-14
- For power purchase from renewable energy sources, Commission's approved tariff for solar and non-solar power in the Tariff Order has been taken into account for the remaining six months of FY 12-13 and for the entire period of FY 13-14.
- During FY 12-13, though EDDD had excess power, EDDD had to overdraw power from the grid during the peak hours for meeting the demand of the consumers. EDDD has purchased energy under UI in the first six months at the rate of Rs. 4.52 per unit.
- EDDD had surplus power during FY 12-13 on account of additional allocation of 38MW of power from RGPPL and revised allocation of 92 MW from NTPC-SAIL generating station

The total power purchase cost from the various sources for FY 13-14 as projected by the Petitioner is summarized in the table below:

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

Source	Units (MU)	Fixed Charges	Variable Charges	Other Charges	Total	Per Unit Cost (Rs/kWh)
Western Region						
KSTPP	367.82	22.70	37.62	4.73	65.04	1.77
VSTPP-I	99.69	6.33	14.59	5.28	26.20	2.63
VSTPP-II	76.54	5.84	10.38	2.32	18.54	2.42
VSTPP- III	94.19	10.92	13.08	4.81	28.80	3.06
KAWAS	159.40	23.94	39.08	0.00	63.02	3.95
JGPP	177.36	28.91	43.13	0.00	72.03	4.06
NTPC-SAIL Bhilai	656.46	118.49	198.62	4.06	321.18	4.89
KSTPP-III	29.60	7.58	4.08	0.76	12.42	4.20
Sipat I	124.15	16.36	19.86	1.55	37.77	3.04
Sipat II	79.44	10.89	9.61	0.00	20.49	2.58
Subtotal	**1864.67**	**251.95**	**390.05**	**23.50**	**665.50**	**3.57**
Eastern Region						
KHSTPP-II	7.07	1.59	2.15	0.00	3.73	5.28
Subtotal	**7.07**	**1.59**	**2.15**	**0.00**	**3.73**	**5.28**
NPCIL						
KAPPS	31.33	0.00	10.87	0.31	11.17	3.57
TAPP 3&4	71.38	0.00	22.81	0.00	22.81	3.19
Subtotal	**102.71**	**0.00**	**33.67**	**0.31**	**33.98**	**3.31**
Others						
Ratnagiri	242.34	46.63	65.13	0.00	111.76	4.61
Subtotal	**242.34**	**46.63**	**65.13**	**0.00**	**111.76**	**4.61**
Power purchase from Indian E. Exchange	0.00	0.00	0.00	0.00	0.00	0.00
Short term arrangement	50.00	0.00	15.05	0.00	15.05	3.00
Solar	8.00	0.00	7.20	0.00	7.20	9.00
Non Solar	48.00	0.00	19.20	0.00	19.20	4.00
Subtotal	**106.18**	**0.00**	**41.45**	**0.00**	**41.45**	**3.90**
Misc Arrears						
Gross Power Purchase	**2322.97**	**300.16**	**532.46**	**23.81**	**856.43**	**3.69**
(-) External Losses	84					
Net Power Purchase	**2239.11**	**300.16**	**532.46**	**23.81**	**856.43**	**3.82**

Transmission and Other Charges

The Petitioner has submitted that the transmission charges payable to PGCIL are based on the total capacity allocation in the transmission network. ED-DD 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, the petitioner has estimated the transmission charges for FY 12-13 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 2013-14, 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-DD has taken into account the additional capacity share in the new stations while estimating the inter-state transmission charges for the ensuing year.

Table7.8.4: Total Power Purchase Cost for FY 2013-14 as submitted by the Petitioner (Rs. Crores)

Particulars	FY 2013-14 (Projected)		
	Energy available at DD Periphery (MUs)	Total Cost (Rs. Cr)	Per Unit Cost (Rs/kWh)
Gross Power Purchase	2239.11	856.43	3.82
PGCIL charges		62.00	
Open access charges		0.58	
Other charges		3.72	
Total Power Purchase Cost (including Transmission Cost)	**2239.11**	**922.73**	**4.12**

Commission's Analysis of Power Purchase Quantum and Cost

<u>Power Purchase Quantum and Cost for FY 2013-14</u>

- **Central Generating Stations – National Thermal Power Corporation and Ratnagiri**

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
- 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)

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 August 1’ 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 2010-11 and FY 2011-12). 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 third unit of SIPAT STPS -I, Unit# 3 has attained COD, therefore the availability from this station has been considered on pro-rata basis from the date of COD. The Commission has considered the PLF at 85% 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, 2009-14. The Annual Fixed Charges for each station have been taken as per the latest tariff orders for the respective stations.
- **Variable Charges:** The Commission has considered the average variable cost for the period July 2012 to September 2012 (as per actual) for consideration of the per unit variable charges for FY 2013-14. Accordingly, the Commission approves the following procurement from the NTPC stations based on the merit order dispatch principles.

Table 7.8.5: Approved power purchase quantum from CGS stations under merit order dispatch

Sr. No.	Source	Capacity (MW)	Average PLF	Weighted Average		Gross Generation (MUs)	Auxiliary Consumption (%)	Purchase (MUs)	PGCIL Loss (MUs)	Energy Available at Periphery (MUs)
				%	MW					
1	2	3	4	5	6	7	8	9	10	11
A	**Central Sector Power Stations**									
	KORBA - III (KSTPS - VII)	*500*	87.27	1.25%	6.24	3,822.57	6.50%	44.60	*1.58*	43.02
	KSTPS	*2,100*	87.27	2.51%	52.61	16,054.80	8.50%	367.99	*13.07*	354.91
	SIPAT Stage 2	*1,000*	88.37	1.17%	11.70	7,740.92	6.50%	84.66	*3.01*	81.65
	VSTPS - II	*1,000*	91.58	1.06%	10.60	8,022.12	6.50%	79.49	*2.82*	76.67
	VSTPS -III	*1,000*	91.58	1.27%	12.70	8,022.12	6.50%	95.23	*3.38*	91.85
	VSTPS - I	*1,260*	91.58	1.14%	14.42	10,107.87	6.50%	108.18	*3.84*	104.34
	SIPAT - Stage I	*1,980*	85.00	1.33%	26.38	13,733.28	8.50%	167.38	*5.95*	161.43
	KHSTPP - II	*1,500*	68.13	0.13%	1.95	8,952.72	6.50%	10.88	*0.39*	10.50
	GGPP	*657*	70.51	4.76%	31.31	4,060.44	3.00%	187.59	*6.66*	180.92
	KGPP	*656*	69.63	4.72%	30.99	4,002.54	3.00%	183.35	*6.51*	176.84
	RGPPL	*1,967*	92.14	2.00%	39.34	15,876.00	3.00%	94.48	*3.36*	91.13

*RGPPL partial procurement because of merit order

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

Table 7.8.6: Approved Power Purchase Cost from CGS stations for FY 2013-14

Sr. No.	Source	Purchase (MUs)	Fixed Charges (Rs Crores)	Variable Charges (Ps/kWh) - Average of July, Aug and Sept 2012	Variable Charges (Rs Crores)	Total Cost (Rs Crores)
1	2	3	4	5	6	7
	KORBA - III (KSTPS - VII)	44.60	6.66	106.27	4.74	11.40
	KSTPS	367.99	20.68	106.46	39.18	59.86
	SIPAT Stage 2	84.66	10.96	139.42	11.80	22.76
	VSTPS - II	79.49	5.33	143.82	11.43	16.76
	VSTPS -III	95.23	10.89	144.79	13.79	24.68
	VSTPS - I	108.18	7.08	153.46	16.60	23.68
	SIPAT - Stage I	167.38	20.75	155.54	26.03	46.79
	KHSTPP - II	10.88	1.48	235.67	2.56	4.04
	GGPP	187.59	28.03	237.11	44.48	72.51
	KGPP	183.35	23.72	246.14	45.13	68.85
	RGPPL	94.48	38.39	273.92	25.88	64.27
	Sub-Total	**1423.83**	**173.97**		**241.62**	**415.6**

- **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 assumptions:

- **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 August 1' 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 2010-11 and FY 2011-12) as recorded by CEA in its monthly generation reports. The net energy sent out is considered after reducing the 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 for consideration of the per unit variable charges for FY 2013-14.
- **Merit order Dispatch**: The Commission has considered the nuclear plants as must run and has not subjected them to merit order dispatch.

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

Table7.8.7: Approved power purchase quantum from NPCIL stations under merit order dispatch

S. No.	Source	Capacity (MW)	Average PLF	Weighted Average		Gross Generation (MUs)	Auxiliary Consumption (%)	Net Generation (MUs)	Purchase (MUs)	PGCIL Losses (MUs)	Energy Available at Periphery (MUs)
				%	MW						
	NPCIL										
1	KAPS	440	92.92	1.89%	8.30	3,581.51	10%	3,223.36	60.78	2.16	58.62
2	TAPS	1,080	80.49	1.24%	13.40	7,615.00	10%	6,853.50	85.00	3.02	81.98

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

Table 7.8.8: Approved power purchase cost for NPCIL Stations

Sr. No.	Source	Purchase (MUs)	Fixed Charges (Rs. Crores)	Variable Charges (Ps/kWh) - Average of July, Aug and Sept 2012	Variable Charges (Rs. Crores)	Total Cost (Rs. Crores)
1	2	3	4	5	6	7
A	**Central Sector Power Stations**					
	NPCIL	**145.78**	**0.00**		**38.12**	**38.12**
	KAPS	60.78	0.00	230.11	13.99	13.99
	TAPS	85.00	0.00	283.90	24.13	24.13

- **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 FY 2013-14 from the NSPCL stations:

- **Fixed Charges:** The fixed charges are considered as per the petitioner's submission
- **Variable Charges:** The Commission has considered the average variable cost for the period July 2012 to September 2012 based on actual 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.

Table 7.8.9: Approved power purchase quantum and cost from NSPCL-Bhilai

Sr. No.	Source	Capacity (MW)	Average PLF	Weighted Average		Gross Generation (MUs)	Auxiliary Consumption (%)	Net Generation (MUs)	Purchase (MUs)	PGCIL Losses (MUs)	Energy Available at Periphery (MUs)
				%	MW						
1	NSPCL-Bhilai	500	91.54	18.30%	91.50	4,009.31	9.00%	3,648.47	667.67	*23.72*	643.95

Table 7.8.10: Approved power purchase cost from NSPCL-Bhilai

Sr. No.	Source	Purchase (MUs)	Fixed Charges (Rs. Crores)	Variable Charges (Ps/kWh) - Average of July, Aug and Sept 2012	Variable Charges (Rs. Crores)	Total Cost (Rs. Crores)
1	2	3	4	5	6	7
	NSPCL - Bhilai	667.67	101.48	243.29	162.44	**263.92**

➢ 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 JERC (Procurement of Renewable Energy) Regulations 2010 clause 1 sub clause (2) reads as –

The RPO specified in the financial year 2012-13 shall be continued beyond 2012-13 till any revision is effected by the Commission in this regard.

RPO specified for FY 2012-13 as per the regulations is 3%, including 0.40% for Solar and 2.60% for Non-Solar. Accordingly, the same has been considered as the RPO obligation for FY 2013-14.

The Petitioner has to purchase 3% of total energy purchase for sale to the consumers in its area as power purchase from renewable sources for FY 2013-14 including 0.40% for Solar and 2.60% for Non-Solar. The petitioner in its petition has submitted that it is considering procuring renewable energy to meet its renewable energy obligation.

The Commission has therefore considered the renewable energy purchase at Rs 4.00 and Rs 9.00 per unit for non-solar and solar respectively.

Table 7.8.11: Approved Power purchase quantum and cost from Renewable Energy Sources

Sr. No.	Source	Purchase (MUs)	Variable Charges (Rs Crores)	Total Cost (Rs Crores)
D	**Renewable Energy Sources**	**60.33**	**28.15**	**28.15**
	(2.60% for - Non Solar)	52.29	20.91	20.91
	(0.40% for Solar)	8.04	7.24	7.24

- **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 31.11.2012 applicable from October 2012 to March 2013 for approving the Transmission charges for FY 2013-14. Accordingly, the transmission charges for usage of the PGCIL network are approved at Rs 77.07 Crores.

The petitioner also utilizes the network of OPTCL for wheeling of power scheduled from different stations. The Commission therefore approves the petitioner's estimates of **Rs 3.72 Crores** as OPTCL - Wheeling Charges, WRPC, WRTM, Congestion charges, reactive charges, reactive charges (GETCO), others, misc. incentives.

Further, the Commission also allows the petitioner's claim of other charges for FY 2013-14 including SLDC Charges, WRLDC charges amounting to **Rs 0.58 Crores**.

Accordingly the total Transmission charges approved for the FY 2013-14 is Rs. 81.37 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 7.8.12: Power Purchase cost approved for FY 2013-14 after considering MOD principles

Sr. No.	Source	Energy Purchase (MUs)	Fixed Charges (Rs. Crores)	Variable Charges (Ps/kWh) - Average of July, Aug and Sept 2012	Variable Charges (Rs. Crores)	Total Cost (Rs. Crores)
1	2	3	4	5	6	7 = 4+6
A	**Renewable Energy Sources**	**60.33**			**28.15**	**28.15**
	(2.60% for - Non Solar)	52.29		400	20.91	20.91
	(0.40% for Solar)	8.04		900	7.24	7.24
B	**NPCIL**	**145.78**			**38.12**	**38.12**
	KAPS	60.78		230.11	13.99	13.99
	TAPS	85.00		283.90	24.13	24.13
C	**Central Sector Power Stations and NSPCL- Bhilai**					
	KORBA - III (KSTPS - VII)	44.60	6.66	106.27	4.74	11.40
	KSTPS	367.99	20.68	106.46	39.18	59.86
	SIPAT Stage 2	84.66	10.96	139.42	11.80	22.76
	VSTPS - II	79.49	5.33	143.82	11.43	16.76
	VSTPS -III	95.23	10.89	144.79	13.79	24.68
	VSTPS - I	108.18	7.08	153.46	16.60	23.68
	SIPAT - Stage I	167.38	20.75	155.54	26.03	46.79
	KHSTPP - II	10.88	1.48	235.67	2.56	4.04
	GGPP	187.59	28.03	237.11	44.48	72.51
	Bhilai	667.67	101.48	243.29	162.44	263.92
	KGPP	183.35	23.72	246.14	45.13	68.85
	*RGPPL**	94.48	38.39	273.92	25.88	64.27
	Sub-Total	**2,091.52**	**275.45**		**404.07**	**679.52**
D	**OTHER CHARGES**					
	PGCIL Transmission Charges (POC Charges WR + ER)					77.07
	SLDC Charges, WRLDC charges					0.58
	OPTCL - Wheeling Charges, WRPC, WRTM, Congestion charges, reactive charges, reactive charges (GETCO), others, misc. incentives					3.72
E	**Total**	**2,297.64**	**275.45**		**470.34**	**827.17**

* Partial availability is considered because of merit order

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 licensee shall 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 as per the Regulation. 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 371 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 five year operation and maintenance expense is summarized in the table below:

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

Year	O&M Expenses
	Actual
FY 07-08	6.47
FY 08-09	8.47
FY 09-10	9.35
FY 10-11	9.46
FY 11-12	14.62

The total O&M expense for FY 11-12 is Rs. 14.62 Crores as compared to Rs. 9.46 Crores in FY 2010-11, an increase of over Rs. 5.16 Crores. The increase in operation and maintenance cost in FY 11-12 is primarily on account of increase in R&M expenses during FY 11-12.

Commission's Analysis

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

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-DD has estimated the total employee cost for full year of FY 12-13 as Rs. 7.34 Crores. 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. Total employee cost of ED-DD for FY 13-14 is estimated at Rs. 7.89 Crores.

ED-DD has requested the Commission to approve the employee costs as projected.

Commission's Analysis

As per the regulation 27 of JERC tariff regulations 2009 -

"

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.*

As may be seen from para 6.8.1, Commission has considered Employee cost as Rs. 7.27 Crores for Review of ARR for FY 2012-13 for reasons explained therein. Taking Rs 7.27 Crores for FY 2012-13 and applying the escalation of 8.94% (as per the WPI available till March 2012; and considering the increase in WPI of FY 2011-12 over FY 2010-11) employee Cost for FY 2013-14 works out to Rs. 7.92 Crores. **The Commission considers the employee cost of Rs 7.92 Crores as reasonable and approves the same for FY 2013-14.**

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.

The actual R&M expense for FY 2011-12 is Rs. 5.12 Crores. For FY 12-13, ED-DD has considered the R&M expense of Rs. 5.58 Crores and has projected an 8.94% increase in the R&M expense for FY 13-14.

The Petitioner has claimed R&M expense of Rs 6.08 Crores for FY 2013-14.

ED-DD has requested the 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. Also, the price of most of the basic commodities like iron, copper, zinc and cement used in the repairs and maintenance has increased tremendously over the last 5 years.

Commission's Analysis

As may be seen from para 6.8.2, the Commission has considered R&M expenses as Rs 5.58 Crores for Review of ARR for FY 2012-13 for reasons explained therein. In line with the JERC Tariff Regulations 2009, taking Rs. 5.58 Crores for FY 2012-13 and applying escalation of 8.94%[18] (for reasons explained above in section of employee expenses), the R&M expense works out at 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.

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

Administration and General Expenses

Petitioner's Submission

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

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

The actual A&G expense for FY 11-12 is Rs. 2.83 Crores. For FY 12-13, EDDD has considered the A&G expense of Rs. 3.08 Crores and has projected an 8.94% increase in the A&G expense for FY 13-14 which includes regulatory, consultancy, energy auditing and consumer indexing fees.

The Regulatory & Consultancy expenses for the FY 13-14 has been projected as per the existing agreements, contracts with the consultants and the best estimates for the future regulatory and consultancy works. For FY 13-14 total A&G expenses has been projected at Rs. 3.36 Crores.

ED-DD requests the Commission to approve the A&G costs without any disallowance.

Commission's Analysis

As may be seen from para 6.8.3, Commission has considered A&G expenses as Rs. 3.28 Crores for Review of ARR for FY 2012-13 for reasons explained therein. Taking Rs 3.28 Crores for FY 2012-13 and applying escalation of 8.94%[19], the A&G expense works out to Rs 3.57 Crores for FY 2013-14.

The Commission considers the A&G expenses of Rs 3.57 Crores as reasonable and approves the same for ARR of FY 2013-14.

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

Summary of Operation and Maintenance Expenses for FY 2013-14

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:

Table 7.9.2: Summary of Operation & Maintenance Expenses (Rs. Crores)

Sr. No.	Particulars	Petitioner Submission (FY 2013-14)	Approved (FY 2013-14)
1	Employee Expenses	7.92	7.92
2	A&G Expenses	3.36[20]	3.57
3	R&M Expenses	6.08	6.08
4	**Sub-Total**	**17.35**	**17.57**
5	Less: Expenses Capitalized	-	-
6	**Total O&M Expenses**	**17.35**	**17.57**

7.10 Capital Expenditure and Capitalization

Petitioner's submission

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

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. For FY 13-14, the EDDD has proposed a capital expenditure of Rs. 60 Crores under various existing and new schemes. The draft Annual Plan is being prepared and will be submitted to the Commission shortly.

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

[20] The Petitioner in its calculation of A&G has considered a lower base of Rs 2.83 Crores for FY 2011-12 in its petition. The A&G for FY 2011-12 has been revised to Rs 3.01 Crores and accordingly applying an escalation of 8.94%, FY 2013-14 estimates turn out to be Rs 3.57 Crores as Petitioner's estimation approach.

proposed the capital expenditure of Rs. 60.00 Crores for FY 2013-14, out of which the petitioner has projected the addition of Rs. 46.52 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 2013-14 is required to maintain the reliable supply for the consumers of UT of Daman & Diu.

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 has 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 5.10 of this order, for the purpose of this ARR computation, the **Commission provisionally approves the capital expenditure of Rs. 60.00 Crores and corresponding capitalization of Rs 46.52 Crores as proposed by the petitioner for ARR of 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 and meeting the loss reduction targets.

7.11 GFA and Depreciation

Petitioner's submission

The petitioner has submitted that they had Rs. 272.24 Crores of Opening Gross Fixed Assets (GFA) in FY 12-13. ED-DD has further proposed capital expenditure of Rs. 58.00 Crores for FY 2012-13.

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. 27.30 Crores have been estimated to be added in the GFA during FY 12-13.

For FY 13-14, ED-DD has proposed a capital expenditure of Rs. 60 Crores of which Rs. 46.52 Crores assets (including CWIP) have been estimated to be capitalized.

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-DD has applied the following depreciation rates as specified by CERC in the Tariff Regulations for FY 2009-14.

Table 7.11.1: 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 current year and FY 13-14 is determined by applying aforesaid category-wise assets depreciation rates on the opening balance of Gross Fixed assets and addition during the year projected for FY 12-13 and FY 13-14. ED-DD has submitted to the Commission that it has computed the depreciation based on the closing value of GFA for FY 2011-12 as given in the fixed asset register and the estimated capitalization for FY 2012-13 and FY 2013-14.

Depreciation of Rs. 16.46 Crores for FY 13-14 has been claimed by applying aforesaid category-wise assets depreciation rates on the average Gross Fixed Assets projected for FY 13-14.

Commission's Analysis

As discussed in para 5.10 of this order 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. The Commission as discussed at Para 7.10 of this order has allowed the capitalization for FY 2013-14 at Rs 46.52 Crores.

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 the CERC vide Appendix-III (Depreciation schedule of CERC (Terms and Conditions of Tariff) Regulations, 2009) have been used to calculate the depreciation. The depreciation for FY 2013-14 has been worked out at Rs. 15.77 Crores.

Table 7.11.2 : GFA & Depreciation approved for FY 2013-14 (Rs. Crores)

Sr. No.	Particulars	Petitioner Submission (FY 2013-14)	Approved (FY 2013-14)
1	Opening Value of Assets at the beginning of the year	299.53	301.62
2	Additions during the year	46.52	46.52
3	Gross Fixed Assets at the end of year	346.05	348.14
4	Average Assets	322.79	324.88
5	**Depreciation for the year**	**16.46**	**15.77**

Table 7.11.3 : Calculation for working out the Depreciation for FY 2013-14 (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 FY 2013-14	Rate of Depreciation	Depreciation for FY 2013-14
1	Plant & Machinery	268.03	46.52	314.55	5.28%	15.38
2	Buildings	8.31	-	8.31	3.34%	0.28
3	Vehicles	0.57	-	0.57	9.50%	0.05
4	Furniture and Fixtures	0.25	-	0.25	6.33%	0.02
5	Computers and Others	0.71	-	0.71	6.33%	0.04
6	Land	23.75	-	23.75	0.00%	-
7	**Total**	**301.62**	**46.52**	**348.14**		**15.77**

The Commission considers the depreciation of Rs. 15.77 Crores as reasonable and approves the same for ARR of FY 2013-14.

7.12 Interest on Loan

Petitioner's submission

The petitioner has submitted that the entire capital expenditure of ED-DD since its inception has been funded by the Central Government through budgetary supports each year. Therefore, the department does not have any loan liabilities.

However, ED-DD is now migrating from a Government owned utility to a commercial utility under the Electricity Act, 2003 and it has come under the direction of the Joint Electricity Regulatory Commission. The petitioner has further submitted that it has been assumed that ED-DD would work as a separate commercial utility and therefore would be utilizing the debt facilities in the coming years.

Assets capitalized during FY 12-13 and FY 13-14 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. The Petitioner has claimed interest amount of Rs 3.32 Crores and Rs 6.77 Crores for FY 2012-13 and FY 2013-14 respectively.

Commission's analysis

As per 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".*

ED-DD 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 as the utility is not restructured and corporatized till date. Considering this as an integrated utility, 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 interest on loans is 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 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 in accordance with the JERC Tariff Regulation. The Commission has also perused the audited accounts certified by a chartered accountant submitted by the petitioner. It has been observed that the petitioner does not have any opening loan portfolio.

As discussed in para 5.11 of this order, the normative interest under the JERC Tariff Regulations have therefore been considered on the assets created during the year FY 2010-11 onwards. The Commission has accordingly considered the opening normative loan of Rs 32.81 Crores and normative debt of 70% of addition to GFA amounting to Rs 32.56 Crores during FY 2013-14 and has calculated the normative interest as per the regulations which amount to Rs 6.84 Crores. Further, the Commission clarifies that the SBI PLR rate has now been substituted as SBI Advance Rate. The Commission has considered the SBI advance rate of 14.45%[21] for ARR of FY 2013-14.

Accordingly, the **Commission has considered the normative interest on loans at Rs 6.84 Crores as reasonable and approves the same for ARR of FY 2013-14.** The calculation is as given below.

Table 7.12.1 : Normative Interest on Loan approved in the ARR for FY 2013-14 (Rs. Crores)

Sr. No.	Particulars	Petitioner Submission (FY 2013-14)	Approved (FY 2013-14)
1	Opening Normative Loan	31.22	32.81
2	Add: Normative Loan during the year	32.56	32.56
3	Less: Normative Repayment	3.19	3.51
4	Closing Normative Loan	60.60	61.87
5	Average Normative Loan	45.91	47.34

21 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%; 13.08.2011 – 14.75%; 27.09.2012- 14.50% 04.02.2013 – 14.45%; No further revision has been notified

6	Rate of Interest (@SBAR rate)	14.75%	14.45%
7	**Interest on Normative Loan**	**6.77**	**6.84**

7.13 Interest on Working Capital

Petitioner's submission

The petitioner has computed the Interest on Working Capital for FY 12-13 and FY 13-14 based on normative basis as per the JERC (Terms and Conditions for Determination of Tariff) Regulations, 2009.

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

The normative interest on working capital for FY 13-14 has been claimed at Rs. 11.56 Crores.

Commission's analysis

The 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
"

29. WORKING CAPITAL AND INTEREST RATE ON WORKING CAPITAL

For generation and transmission business, the working capital shall be as per the 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."

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 an expense in this order. The Commission has considered the security deposit available with the Petitioner as a source to meet working capital requirement and has deducted this amount from the working capital requirement considered for FY 2013-14. The Petitioner in response to the data requirements pointed out by the Commission submitted the security deposit amount of Rs 9.79 Crores held by the Petitioner as on November 30' 2012 vide affidavit dated December 26' 2012 (received at Commission's office on January 4' 2013) and the same has been considered by the Commission as the opening security deposit amount for FY 2013-14.

Further, the Commission clarifies that the SBI PLR rate has now been substituted as SBI Advance Rate. The Commission has considered the SBI advance rate of 14.45%[22] for ARR of FY 2013-14. The detailed calculation of the interest on working capital is as mentioned below.

22 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%; 13.08.2011 – 14.75%; 27.09.2012- 14.50%; 04.02.2013 -14.45% ;No further revision has been notified

Table 7.13.1 : Interest on working capital approved in ARR of FY 2013-14 (in Rs. Crores)

S. No.	Particulars	Petitioner Submission (FY 2013-14)	Approved (FY 2013-14)
1	Power Purchase Cost for one month	76.89	68.93
2	Employee Cost for one month	0.66	0.66
3	A&G Expenses for one month	0.28	0.30
4	R&M Expenses for one month	0.51	0.51
5	**Total Working Capital for one month**	**78.34**	**70.39**
6	Less: Consumer Security Deposit	-	9.79
7	**Total WC after deduction of Security Deposit from Working Capital Requirement**	**78.34**	**60.60**
8	SBAR Rate	14.75%	14.45%
9	**Interest on Working Capital**	**11.56**	**8.76**

The Commission considers Rs. 8.76 Crores as Interest on Working Capital as reasonable and approves the same for ARR of FY 2013-14.

7.14 Interest on Security Deposit

Petitioner's submission

The petitioner has not claimed interest on security deposit for FY 2013-14.

Commission's analysis

Commission has assessed the need and availability of funds to the licensee. Consumer's security deposit is the quantum of consumer's funds available to the licensee and hence deducted from the funds available to meet working capital requirements and the interest on working capital is allowed on the balance amount. The cost of available security deposit of the consumer is allowed as an interest on security deposit to be paid to the consumer as per section 47(4) and regulation 25 of the JERC Tariff Regulations 2009 and the same is allowed as expenditure in the ARR.

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 vide affidavit dated December 26' 2012 has submitted the amount of consumer security deposit held by the Petitioner as on November 30' 2012 of Rs 9.79 Crores. This security deposit amount has been considered for the computation of the interest on security deposit for FY 2013-14.

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, the Commission directs the petitioner to pay the interest on consumer security deposit for FY 2013-14 at the applicable bank rate with effect from April 1' 2013 to the consumers on their security deposit irrespective of the 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.**

The Commission has considered the bank rate of 8.75%[23] as revised on January 29' 2013 for the calculation of the interest on security deposit for FY 2013-14.

On account of provisions mentioned in the Act and regulation, the Commission directs the Petitioner to pay the interest on security deposit collected from the consumers with effect from April 1' 2013 irrespective of the constraints.

Table 7.14.1 : Interest on Security Deposit approved in ARR of FY 2013-14 (Rs. Crores)

S. No.	Particulars	Petitioner Submission FY 2013-14	Approved FY 2013-14
1	Opening Security Deposit	NIL	9.79
2	Add: Deposits during the Year		-
3	Less: Deposits refunded		-
4	Closing Security Deposit		-
5	Bank Rate		8.75%
6	**Interest on Security Deposit**	**NIL**	**0.86**

In view of the above, the Commission allows Rs. 0.86 Crores as the interest on security deposit and considered as expenditure in the ARR for FY 2013-14.

[23] As per RBI Circular: RBI/2012-13/402 Ref: DBOD.No.Ret.BC. 77/12.01.001/2012-13 dated January 29' 2013, the bank rate stands revised to 8.75% from 9.00% with effect from January 29' 2013

7.15 Return on Capital Base

Petitioner's submission

As per the JERC (Terms and Conditions for Determination of Tariff) Regulations, 2009, ED-DD 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-DD has submitted 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-DD 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-DD has claimed RoE of 16% for FY 12-13 and FY 13-14.

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.

Return on equity for ED-DD has been claimed at Rs 1.21 Crores and Rs. 2.98 Crores for FY 12-13 and FY 13-14 respectively.

Table 7.15.1: Return on Equity claimed by the Petitioner for FY 2013-14 (in Rs Crores)

Particulars	FY 13-14
	Projected
Opening Equity	11.63
Addition in Equity	13.96
Closing Equity Amount	**25.59**
Average Equity Amount	18.61
Rate of Return on Equity	16.00%
Return on Equity	**2.98**

Commission's analysis

ED-DD 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 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 information on the assets category-wise and depreciation registers besides other data. The petitioner this time has submitted the Fixed Asset Register (FAR) for FY 2010-11 and FY 2011-12, which have accordingly been considered by the Commission for the consideration of the opening GFA from FY 2010-11.

As discussed in para 5.10 and para 5.14 of this order, Commission has 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. 5.84 Crores as a 3% return on net block at the beginning of FY 2013-14.

Table 7.15.2 : Return on Capital Base approved in ARR of FY 2013-14 (Rs. Crores)

Sr. No.	Particulars	Approved FY 2013-14
1	Gross block at beginning of the Year/Opening GFA	301.62
2	Less accumulated depreciation	107.12
3	**Net block at beginning of the year**	**194.51**
4	Less accumulated consumer contribution	-
5	**Net fixed assets at beginning of the year**	**194.51**
6	**Reasonable return @3% of NFA**	**5.84**

The Commission considers the Return on Capital Base of Rs. 5.84 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 has considered the provision of 0.50% of the revenue for FY 2013-14 in the revenue requirement for FY 2013-14.

Table 7.16.1: Provision for Bad & Doubtful debts as submitted by Petitioner for FY 2013-14

Provision for Bad & Doubtful Debts (Rs. Crores)	FY 13-14 Projected
Provision for Bad &Doubtful Debts as % of Receivables	0.50%
Provision for Bad & Doubtful Debts	**4.41**

Commission's analysis

As can be observed from the audited accounts, there were no bad & doubtful debts in FY 2010-11 and FY 2011-12. Further 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 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.	*Provision made for debts in ARR*	

Keeping in view the fact that the Petitioner did not actually write off Bad and Doubtful Debts in the past, the Commission has considered the provision of 0.5% (against up to 1% in the regulation) of the receivables towards bad and doubtful debts subject to availability (at the time of true up) of audited accounts & auditor's certificate of actual write off of bad & doubtful debts.

Commission has considered the provision of 0.5% of the receivables for FY 2013-14 as bad and doubtful debt at Rs 4.45 Crores as reasonable and approves the same as per the regulations for ARR of FY 2013-14 subject to final adjustment in the true-up when audited accounts become available.

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 estimating the non-tariff income for FY 12-13, an increase of 10% p.a. has been considered over the actual FY 11-12 non-tariff income. For projecting the non-tariff income for FY 13-14, an increase of 10% p.a. has been considered over the estimated non-tariff income for FY 12-13.

The Petitioner has claimed an amount of Rs 9.17 Crores and Rs 10.08 Crores as non-tariff income for FY 2012-13 and FY 2013-14 respectively.

Commission's analysis

The Commission has considered the approved figure for review of FY 2012-13 and has escalated the same by 5% to arrive at the approved non tariff income for FY 2013-14 of Rs 9.19 Crores, considered reasonable and approved.

The Commission considers Non-Tariff Income of Rs. 9.19 Crores as reasonable and approves the same for ARR of FY 2013-14.

7.18 Revenue from Sale of Surplus Power

Petitioner's submission

No sale of surplus power has been estimated by the Petitioner in the energy balance for FY 2013-14 and accordingly no revenue from the sale of surplus power has been estimated for FY 2013-14.

Commission's analysis

The Commission as also discussed in the section on power purchase of this chapter, has applied merit order dispatch principles in estimating the power procurement of the utility. Based on this, the Commission has only allowed power purchase as required to meet the requirement within the territory and as such, no surplus power has been considered in the ARR for sale outside the territory. The Commission, therefore, has not considered the revenue from outside sales for FY 2013-14 and the same will be considered at the time of true-up once the actual sale and revenue data becomes available. **The Commission however expects that the Licensee shall manage the surplus energy availability in a prudent manner in the overall interest of the stakeholders.**

7.19 Revenue at existing tariff for FY 2013-14

Petitioner's submission

The petitioner has submitted that the revenue from sale of power for FY 13-14 is determined based on the energy sales estimated and category wise tariff prevalent in the UT of Daman & Diu.

Revenue from sale of power at existing tariff is estimated to be Rs. 815.83 Crores (inclusive of Fuel price surcharge) and Rs. 909.19 Crores in FY 12-13 and FY 13-14 respectively. The estimated revenue for FY 12-13 is based on the first four months actual revenue from sale of power at the earlier tariff structure and one month actual revenue in the month of August 2012 raised through the sale of power on account of the new tariff as per the retail tariff notified by the Commission vide the Tariff Order for FY 12-13 dated 25th August, 2012.

The fuel purchase adjustment surcharge approved by the Commission is also being levied to all the consumer categories except the Domestic and Agriculture consumers during the period April 2012 to August 2012 and has also been estimated for the remaining seven months of revenue estimation for FY 12-13.

ED-DD has computed the revenue for the full year of FY 13-14 based on the tariff notified by the Commission in the Tariff Order for FY 12-13 dated 25th August, 2012.

The table below summarizes the revenue from sale of power at existing tariff for FY 13-14.

Table 7.19.1: Revenue from Sale of Power at Existing Tariff as submitted by the Petitioner for FY 2013-14 (Rs. Crores)

Revenue at Existing Tariff (Rs Crores)	FY 13-14 Projected
Domestic	16.59
LIG	0.01
Commercial	16.63
Agriculture	0.51
LT Industry	71.93
HT/EHT Industry	800.54
Public Lighting	2.26
Public Water Works	0.36
Temp. Supply	0.36
Total Revenue from existing tariff	**909.19**

Commission's analysis

Based on the estimates of sales, consumers and connected load approved by the Commission for FY 2013-14, the Commission has arrived at the revenue from existing tariff of Rs 889.03 Crores.

Table 7.19.2: Revenue from Sale of Power at existing tariff approved by the Commission for FY 2013-14 (Rs. Crores)

S. No.	Category/Consumption Slab	FY 2013-14 Revenue at existing tariff of FY 2012-13
1	**LT-D/Domestic**	

S. No.	Category/Consumption Slab	FY 2013-14 Revenue at existing tariff of FY 2012-13
	Up to 50 units	0.02
	51-200 units	1.86
	201-400 units	2.33
	401 units and above	14.76
	Total Domestic	**18.97**
	Low Income Group	
2	**LT-C/Commercial**	
	0-100 units	3.76
	Beyond 100 units	7.90
	Total Commercial	**11.66**
3	**LT- Ag/Agriculture**	
	Upto 10 HP per unit	0.15
	Beyond 10 HP per unit	0.10
	Total Agriculture	**0.26**
4	**LTP Motive Power**	
	Upto 20 HP of connected load	60.91
	Above 20 HP of connected load	0.74
	Total Agriculture	**61.65**
5	**LT-PL/Public Lighting**	**1.79**
6	**LT-Public Water Works**	
	Upto 20 HP of connected load	0.15
	Above 20 HP of connected load	0.25
	Total Public Water Works	**0.39**
7	**HT Industrial**	
A	**HT (A) General**	
	0-50000	177.98
	50000-5 lakh	392.94
	Above 5 lakh	157.75
B	**HT (B) Furnace**	
	0-300 units per kVA	45.70
	301-500 units per kVA	16.59
	Above 500 units per kVA	3.35
	Total HT Industrial	**794.31**
	Total	**889.03**

7.20 Aggregate revenue Requirement and Revenue Surplus/Deficit for FY 2013-14

Petitioner's submission

The petitioner estimated the Aggregate Revenue Requirement for FY 2013-14 to be Rs. 972.17 Crores.

Commission's analysis

Based on the estimates approved in the preceding sections, the aggregate revenue requirement is summarized in the table below.

Table 7.20.1 : Aggregate Revenue Requirement (ARR) approved for FY 2013-14 (Rs Crores)

Sr. No.	Particulars	Petitioner Submission (FY 2013-14)	Approved (FY 2013-14)
1	Power Purchase Cost	922.73	827.17
2	Employee costs	7.92	7.92
3	Administration and General Expenses	3.36	3.57
4	Repair and Maintenance Expenses	6.08	6.08
5	Depreciation	16.46	15.77
6	Interest and Finance charges	6.77	6.84
7	Interest on working capital	11.56	8.76
8	Interest on security deposit	NIL	0.86
9	Return on NFA	2.98	5.84
10	Provision for Bad Debt	4.41	4.45
11	**Total Revenue Requirement**	**982.26**	**887.24**
12	Less: Non Tariff Income	10.08	9.19
13	**Net Revenue Requirement (11-12)**	**972.17**	**878.05**

The estimated gap has been mentioned in the following table:

Table 7.20.2 : Estimation of Deficit approved for FY 13-14 (Rs. Crores)

Sr. No.	Particulars	Petitioner Submission (FY 2013-14)	Approved (FY 2013-14)
1	**Net Revenue Requirement**	**972.17**	**878.05**
2	Less: Revenue from Retail Sales at Existing Tariff	909.19	889.03
3	Less: Revenue from Surplus Power Sale/UI	0.00	0.00
4	**Net Gap/(Surplus) at existing tariff (1-2-3)**	**62.99**	**(10.97)**
5	Gap for the previous year/ (Surplus)	111.93	101.35
6	**Total Gap (4+5)**	**174.92**	**90.38**

As can be observed there is a revenue gap of **Rs 90.38 Crores** at the end of FY 2013-14, considering the estimated gap of the previous year(s). As can be seen from the above, a reasonable tariff hike in the appropriate categories is inevitable; the Commission has therefore taken a considerate view in terms of the determination of tariff for FY 2013-14 and is discussed in detail in Chapter 9 of this order.

Directives

8. Directives

8.1 Commission's Observation

While examining the compliance note submitted by the Petitioner, it has been observed that the directives issued in the tariff order dated August 25'2012 for FY 2012-13 have not been fully complied with by ED-DD.

Pending compliance of directives as per the tariff order for FY 2011-12 dated October 3' 2011 on which the Commission had given further directions in the tariff order for FY 2012-13 dated August 25' 2012

1. Management Information System

Commission's Comments

Action taken is noted. The Petitioner is directed to submit the quarterly reports in the RIMS formats specified by CERC from the implemented computerized system.

Compliance/Action Taken

Petitioner's Submission

ED-DD has submitted that RACE (Revenue Administration through Computerized Energy Billing System) is running and is being upgraded for all consumers and necessary changes in report generation are also in progress. Simultaneously, the study of preparation of report in the format of RIMS is under progress and expected to be completed in this financial year.

Commission's Comments

Action taken is noted and the Petitioner is directed to submit the status report and progress of the said facility. The submission should be ensured before the next ARR filing.

2. Billing Efficiency / Collection Efficiency

Commission's Comments

Action taken is noted and the Petitioner is directed to submit the status report and progress of the said facility.

Compliance/Action Taken

Petitioner's Submission

ED-DD has submitted that RACE is being upgraded to include other than industrial consumers and report is being validated on real time basis for correction if necessary and expected to be completed in this financial year.

Commission's Comments

Action taken is noted and submission should be ensured before the next ARR filing.

3. Collection of Arrears

Commission's Comments

Action taken is noted and the Commission appreciates that the petitioner has taken up steps for collection of arrears. The petitioner is directed to furnish details of The pending arrears opening balance, liquidation during the year, additions during the year be given as on 31st March for the years 2007, 2008, 2009, 2010, 2011 and 2012 by end October 2012.

Compliance/Action Taken

Petitioner's Submission

ED-DD has submitted that the system of billing and collection of receipts was maintained manually and records were not kept as required by the Commission. However, on implementation of RACE necessary modification has already been done to generate such type of report for industrial consumers. The total arrears at the end of FY 2011-12 were Rs 1.93 Crores. For other than industrial consumers, the same modification is being carried out and under validation and expected to be completed by the end of financial year.

Commission's Comments

Action taken is noted and the pending submission should be ensured before the next ARR filing.

4. Augmentation of Transmission and Distribution System

Commission's Comments

Action taken is noted. Even after 8 months report has not been submitted. The requisite suggestions of the Petitioner and the required capital expenditure of the schemes be put up before the Commission by September 30' 2012 and be included in the next ARR filing of the Petitioner for FY 2013-14.

Compliance/Action taken

Petitioner's Submission

ED-DD has submitted that the Transmission Network Analysis and Recommendation Report for ED-DD has been submitted by Techlabs, New Delhi and enclosed as an annexure.

Commission's Comments

Action taken is noted. The capital expenditure required should be put up before the next ARR & tariff filing for FY 2013-14.

5. Demand Side Management and Energy Conservation

Commission's Comments

Action taken is noted. Even after 8 months as directed earlier by the Commission, the utility is still in the process of sharing the scope of work and the not the result of the study. The Commission directs that the process of completion of the study be expedited and the same shall be submitted to the Commission by November 30' 2012.

Compliance/Action taken

Petitioner's Submission

ED-DD has submitted that studies are being carried out for implementation of the various Demand Side Management (DSM) activities in the UT of Daman & Diu. The final study report of the consultant on DSM implementation shall be submitted to the Commission in this financial year.

Commission's Comments

Action taken is noted. The pending submission should be made before the next ARR filing.

<u>Compliance of Directives issued by the Commission in the tariff order for FY 2012-13 dated August 25' 2012</u>

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

Petitioner's submission

Quote *'The EDDD has evaluated T&D losses for the financial year 2011-12 on the basis of total power purchase at Daman & Diu periphery and total units billed to the various categories of consumers. Moreover the status report on energy accounting and T&D losses is under preparation and will be submitted to the Hon'ble Commission shortly.'* **Unquote**

Commission's Comments

Action taken is noted. The Energy audit report for FY 2011-12 has been submitted by the licensee in its additional submission to the Commission on January 16' 2013.

The Petitioner is directed to submit the status report for FY 2012-13 alongwith the next year's ARR.

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. The load forecasting study should be conducted in two scenarios: one with open access for 1 MW and above consumers and second with the existing consumer base.

Compliance/Action Taken

Petitioner's submission

Quote *'EDDD is in the process to carry out 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 its future load requirements.'* **Unquote**

Commission's Comments

Action taken is noted and the Petitioner is directed to submit the status report and progress of the said facility.

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

The Petitioner is directed to enforce already signed long term PPA(s) in line with their base load requirements to avoid short term power purchases from U.I. beyond the prudent level so as to minimize the impact on ARR. Further, the Commission also 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 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 that the surplus power available should be adjusted through banking arrangements to the extent possible, which will ensure optimal utilization of the available power.

Compliance/Action Taken

Petitioner's submission

Quote *'EDDD would like to submit to the Hon'ble Commission that the present allocation of power from the central generation stations and other power plants to EDDD is sufficient enough to cater to the demand of the various consumer categories of the UT. The EDDD has to resort to short term procurement of power through UI at peak hours which is again being monitored by the department.*

The department would further like to submit to the Hon'ble Commission that it has no generation of its own and the load pattern in the UT is uniform throughout the year so it cannot resort to banking of power as a possible source of short term power procurement. Moreover the department has proposed to implement the ToD tariff in the UT in the present petition to address the issue of load balancing.' **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.

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 by October 31' 2012.

Compliance/Action Taken

Petitioner's submission

Quote '*EDDD would like to submit that facility of payment through debit/credit cards is being implemented with effect from 1st Jan'2013. Further there is no provision of extra charges to be paid to the department for online payment'* **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 September 2013.

5. **Renewable Purchase Obligation**

The Petitioner is directed to stagger the purchase over the year to avoid purchase at high cost towards the end of the year to meet RPO targets as specified by the Commission. In case, the Petitioner is buying Renewable Energy certificates to meet their RPO targets, the Commission directs the Petitioner to avoid bulk purchase of RE certificates at high cost towards the end of the year. RE certificates should be procured in such a manner that average cost of RE certificates is close to the floor price of the ensuing year.

Compliance/Action Taken

Petitioner's submission

Quote ***'****EDDD 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. EDDD will explore the possibility of purchase the power form Solar Energy after the guidelines are finalized by MOP.*

Further, the tendering process for purchase of solar energy is underway for the procurement of solar power.' **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. All efforts should be made by the licensee to meet its RPO obligations and maintain compliance with the RPO regulations of the Commission. 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. **Rural Electrification**

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

Compliance/Action Taken

Petitioner's submission

Quote *'It is submitted that, 100% electrification of all the villages of UT Daman and Diu has already been completed.'* **Unquote**

Commission's Comments

Compliance with the Commission's direction is noted.

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

Petitioner's submission

Quote *'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 provided in Table 42 of the petition'.* **Unquote**

The Petitioner has incurred an expenditure of Rs 13.83 Crores during the 1st quarter of FY 12-13 and Rs 7.72 Crores during the 2nd quarter of FY 12-13.

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. 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, sub-judice cases, and reduction in losses as a consequence. The 1st status report for FY 2011-12, first half of FY 2012-13 i.e. April to September 2012 is submitted in the ARR filing for FY 2013-14.

Compliance/Action Taken

Petitioner's submission

Quote '*It is submitted that the Electricity Department Daman & Diu has a separate section headed by Assistant Engineer for Vigilance to conduct vigilance check on all category of consumers. The 1st status report for first half of FY 2012-13 i.e. April to September 2012 will be submitted to the Hon'ble Commission shortly.'* **Unquote**

Commission's Comments

Action taken is noted. The Commission directs that the process of completion of the study be expedited and the same be submitted to the Commission by September 2013.

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 differential tariff for this category could be set as they draw power during the evening peak hours when it is most expensive.

Compliance/Action Taken

Petitioner's submission

Quote *'It is submitted that in the UT of Daman & Diu there is no separate category for the users of advertisement, hoardings, signboards, signage's etc.'* **Unquote**

Commission's Comments

The Commission fully 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 September 2013, failing which the Commission would be forced to take serious action.

10. **Assessment of the open access consumers**

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

Compliance/Action Taken

Petitioner's submission

Quote *'It is submitted that the department has notified the procedure for according open access on short and long term basis. The list of consumers 1 MW and above has been evaluated and* *submitted to the Hon'ble Commission and is being enclosed along with this petition as Annexure IV along with the procedure for according open access for the long term and short term open access. The matter for evaluation of wheeling charges, loss charges and cross subsidy charges for Open Access Customer is under progress in consultation with M/s Panacean Energy Solutions Pvt. Ltd, Mumbai. The U.T Daman & Diu already has notified State Transmission Utility (STU) and has established SLDC and a Deputy Engineer has given the responsibility to operate and maintain the SLDC.'* **Unquote**

Commission's Comments

The submission of the Petitioner is noted. On further clarification on the status of the notification of the STU and the SLDC during the technical validation session held at the Commission's office, the Petitioner vide email dated January 16' 2013 has submitted that the notification regarding the setting up of STU and SLDC is presently being prepared and will be published in the official gazette by October 2013 following which it will be submitted to the Commission.

The process of operationalisation of open access in the licensee's area should be expedited and the Commission should be updated about the progress of the same.

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

Petitioner's submission

Quote *'The EDDD would like to submit that it is complying with the guidelines for short term procurement of power by distribution licensees.'* **Unquote**

Commission's Comments

The submission of the Petitioner is noted.

12. Standard of Performance

The Commission has notified the JERC (Standards of Performance) Regulation 2009, wherein the guaranteed and overall standard of performance is 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 issuance of this order. Further, the licensee should ensure timely submission of the information as per the requirements laid down in the JERC (Standards of Performance) Regulation, 2009.

Compliance/Action Taken

Petitioner's submission

Quote *'The SOP data upto September, 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 EDDD is in the process to develop software for availing the data of each complaint centre and office details on month to month basis.'* **Unquote**

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. 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 the requirement of the regulations and the reasons for non-compliance.

Compliance/Action Taken

Petitioner's submission

Quote *'The EDDD 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 banker's cheque or demand draft. Further all the consumer categories other than the HT and LT industrial category have deposited the security deposit either in cash or through demand draft.'* **Unquote**

Commission's Comments

The submission is noted. However, the Petitioner has not indicated any time frame for conversion of security deposit as per the provisions of the Regulations. The Commission has viewed it seriously and directs the Petitioner to ensure compliance of the directive and conform compliance by end of June.

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; especially purchase of expensive power during peak hours by conducting a better demand survey from major consumers

Compliance/Action Taken

Petitioner's submission

Quote *'EDDD would like to submit that it is under the process of appointing a consultant 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.'* **Unquote**

Commission's Comments

The status and the progress of the load forecasting study should be submitted to the Commission by September 2013.

15. Assets verification

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

Compliance/Action Taken

Petitioner's submission

Quote *'The third party physical verification of the assets of EDDD has been done by of Chartered Accountancy firm and the fixed asset register of EDDD has been prepared. The same has been enclosed along with this petition. The assets not employable for delivery of service to the consumer as useful assets have been kept out of the cost for tariff determination.'* **Unquote**

Commission's Comments

On going 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, to which the Petitioner in its additional submission vide email dated January 16' 2013 submitted the certificate of third party physical verification and the list of assets which have been kept out of the cost for tariff determination.

The above submission is noted; however the Commission would like to highlight that further improvement in the details as mentioned in the fixed asset register should be done for the future years. The data quality should be further improved for better maintenance of details and analysis by the Commission.

16. 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 2013-14, FY 2014-15 and FY 2015-16, a review thereafter and further reduction during FY 2016-17 and FY 2017-18.

Compliance/Action Taken

Petitioner's submission

Quote *'The EDDD is pursuing the matter with the Administration of the UT of Daman & Diu and a letter written to the Administration for the same is being enclosed along with this petition as Annexure V'* **Unquote**

Commission's Comments

Action taken is noted. Persistent efforts should be made by the Petitioner to formulate the proposed road map for reduction of cross-subsidy and submit the same to the Commission keeping in view the demographics and the consumer-mix of the licensee.

17. 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 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-DD. The ED-DD 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 through power purchase cost. 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

Petitioner's submission

Quote *'The date wise/time wise details of all short term Power purchases including quantum, rate & amount and grid frequency in case of U.I. over drawls/under drawls is being enclosed along with this petition as Annexure VI(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.

18. 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. 9.50[24]% 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

Petitioner's submission

[24] 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.

Quote *'The EDDD would like to submit to the Hon'ble Commission that the present billing system of the department is not having the provision of giving the interest on security deposit to its consumers. The department is presently upgrading its billing software and also updating the security deposit records and as soon as these two processes are complete it will start paying interest on security deposit to its consumers and also appraise the Hon'ble Commission on the same.'* **Unquote**

Commission's Comments

The process of upgrading the billing software and updating the security deposit records should be completed so that consumers can receive the interest on the security deposits as per the Regulations. In an earlier submission on the compliance of directive no. 13, the Petitioner has submitted that it does maintain the security deposit from the consumers, so the Petitioner is duty-bound to pay the interest on the collected security deposit. The same should be ensured by the licensee so that payment to all consumers due is made with effect from April 1'2012 for FY 2012-13 at the applicable bank rate.

19. **Shifting of existing consumers to higher voltage** : In compliance of the Hon'ble APTEL judgement 35/ 2012, as regards the issue of shifting of existing consumers to higher voltage, the Petitioner is directed to provide the following information to the Commission by November 30' 2012.
    a) The Supporting data on the number of existing consumers at 11 kV having contracted demand above 1500 kVA
    b) Maximum contracted demand sanctioned to the existing consumers as referred in point no. 1 above
    c) Cost benefit analysis of shifting to higher voltage of the existing consumers as referred to in point no. 1 above

Compliance/Action Taken

Petitioner's submission

Quote *'The data on the number of existing consumers at 11 kV having contracted demand above 1500 kVA and the contracted demand sanctioned to the existing consumers therein is being enclosed along with this petition as Annexure VII.*

Further the EDDD is carrying out the cost benefit analysis of shifting the existing consumers at 11 kV having contracted demand above 1500 kVA to higher voltage and will submit the report on the same to the Hon'ble Commission shortly.' **Unquote**

Commission's Comments

The submission of the Petitioner is noted and the pending submission should be made to the Commission by September 2013. The Commission observes that the Petitioner has proposed the following in the tariff schedule:

''Supply to consumers having contracted load between 100 kVA to 4000 kVA will be generally at 11 kV and for more than 4000 kVA at 66 kV. The consumer who requires load more than 25000 kVA, the voltage of supply shall be at 220 kV level.''

The Commission has noted that the Petitioner has made the above proposal without any supporting cost-benefit analysis as directed earlier by the Commission. In absence of the same, the Commission is constrained to take a view in the matter and has decided to maintain the status-quo. Commission may take a further view once the compliance is submitted with cost-benefit analysis.

20. **Filing of the ARR**: The Petitioner is directed to improve the quality of data required for analysis by the Commission in its submission for the ARR& tariff filing before the Commission. The Petitioner should furnish adequate data in the first instance alongwith the ARR& tariff petition so as to avoid undue delays. The Petitioner has now had sufficient learning as to the data requirements required for regulatory processes before the Commission and should furnish a self contained petition alongwith the supporting documentary evidences in the next ARR filing.

Compliance/Action Taken

Petitioner's submission

Quote *'The EDDD is enclosing all the relevant data along with this petition for the analysis of the Hon'ble Commission.'* **Unquote**

Commission's Comments

The submission of the Petitioner as regards the ARR & tariff petition for FY 2013-14 has been examined. Though the quality of the submission has improved, further scope for improvement is definitely there. The Commission had highlighted during the technical validation session that the details submitted are void of slab-wise breakup of the no. of consumers and connected load (other than the slab-wise load details of the HT and LT category).

In response to this, the Petitioner had submitted the slab wise break up of no. of consumers and connected load for the LT domestic, agriculture and commercial categories as on 31st March, 2012. Further, the Petitioner had said that the slab wise break up of no. of consumers for the HT and LT industrial category would be submitted by February 2013 as the software for the same is presently being upgraded.

The Commission desires that the software systems of the Petitioner be upgraded soon so that all data pertaining to the regulatory requirements is furnished in the first instance.

21. It is noted from the submission of the petitioner that the Tariff stipulated by the Commission in the order dated October 3, 2011, has not been implemented for certain consumer categories. ED-Daman and Diu shall show cause - within 30 days from the issue of this order failing which the Commission shall be constrained to initiate proceedings under section 142 of the Electricity Act 2003.

Compliance/Action Taken

Petitioner's submission

Quote *'EDDD will submit the show cause for not implementing the tariff stipulated by the Hon'ble Commission in the Order dated October 3, 2011 for certain consumer categories in a separate filing shortly'* **Unquote**

Commission's Comments

The Petitioner must appreciate that failing to comply with the Commission's order can attract penalty under Section 142 of the Electricity Act 2003. A reminder to this effect was given to the Petitioner during the technical validation session. The Petitioner, then, submitted a letter enclosing the copy of the affidavit dated October 8' 2012. In the affidavit, the Petitioner had submitted that tariff for the certain categories were not implemented as the matter was pending before the Hon'ble Aptel.

The Commission is of the view that there was no stay granted by the Hon'ble Aptel and therefore, the licensee's claim is not justified. It is however noted that the matter has been subsequently settled as per the judgment of the Hon'ble Aptel.

Tariff Philosophy and category-wise tariffs for FY 2013-14

9. Tariff Philosophy and category-wise tariffs for FY 2013-14

9.1 Preamble

The Commission in determining the aggregate revenue requirement and retail supply tariff for the financial year 2013-14 has been guided by the provisions of the Electricity Act, 2003, the Tariff Policy, Regulations on Terms and Conditions of Tariff issued by the Hon'ble Central Electricity Regulatory Commission (CERC) and Regulations on Terms and Conditions of Tariff notified by the JERC under Section 61 of the Act which lays down the broad principles, which shall guide for determination of retail tariff.

Keeping view of the above, the tariff has been designed in such a way to bring down the cross subsidies within reasonable and sustainable levels so as to reduce it gradually without giving 'Tariff Shock' to any category and retail tariff of different categories of consumers remains within + / - 20% of average cost of supply and that even for BPL category consumers, tariff rates more close to 50% of the average cost of supply. Commission has taken a considerate view in this regard to determine the tariff so that it progressively reflects the cost of supply of electricity and also reduce cross subsidies within a reasonable period thereby balancing the interest of the utility and the consumer, thus compensating the department with additional revenue and provides the reasonable hike in consumer's tariff.

9.2 Revenue Gap for FY 2013-14 and Recovery

The petitioner in its ARR Petition for FY 2013-14 has projected a revenue gap of Rs. 62.99 Crores for FY 2013-14 at the tariffs approved in the Commission's tariff order dated August 25' 2012. The petitioner has considered 40% of the cumulative gap for FY 11-12 and FY 12-13 to be carried forward to FY 13-14 and accordingly has considered the total gap to be addressed for FY 13-14 to be Rs 106.87 Crores. The Petitioner has proposed complete recovery of the gap of Rs 106.87 Crores through the proposed revised tariffs.

As elaborated in para 7.20 of this Order, the Commission has estimated the cumulative revenue gap at the end of FY 2013-14 would be Rs 90.38 Crores after considering the gap created after the truing-up of ARR of FY 2011-12, review of ARR of FY 2012-13 alongwith the revision in the true-up of FY 2010-11 on account of consideration of the opening GFA.

In order to recover the cumulative revenue gap of Rs. 90.38 Crores, the average tariffs have to be increased by around 10.17 % to recover the same during FY 2013-14. In accordance with the principles of the tariff policy, the tariff should be prospective in nature; the Commission has therefore taken a considerate view in this regard. The Commission considers the recovery of revenue gap of Rs 90.20 Crores as additional revenue from the increased tariffs in FY 2013-14.

9.3 Tariff Proposal

Petitioner's submission

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

The category wise existing and proposed tariff submitted by the Petitioner are as under:

Table 9.3.1: Existing and Proposed Tariff for FY 2013-14 proposed by the Petitioner (in Rs.)

Tariff Structure	Existing (FY 2012-13)		Proposed (FY 2013-14)	
	Energy Charges (Rs/kWh)	Fixed Charges	Energy Charges ((Rs/kWh)	Fixed Charges
Low Income Group		Rs. 10/connection /month		Rs. 10/connection /month
LT-D/Domestic				
Ist 50 Units	1.10		1.10	
51 to 200 Units	1.70		1.70	
201 to 400 Units	2.10		2.10	
401 to 600 Units	2.45		2.45	
LT-C/Commercial				
1st 100 Units	2.50		2.65	
Beyond 100 Units	3.50		3.65	
LT- Ag/ Agriculture				
Upto 10 HP per unit	0.60		0.60	
Beyond 10 HP per unit	0.90		0.90	
LTP Motive Power				
Upto 20 HP of Connected Load	3.55		3.70	
Above 20 HP Connected Load	3.65	Rs. 25/HP	3.80	Rs. 25/HP
LTP Public Water Work				
Upto 20 HP of Connected Load	3.55		3.55	

Tariff Structure	Existing (FY 2012-13)		Proposed (FY 2013-14)	
	Energy Charges (Rs/kWh)	Fixed Charges	Energy Charges ((Rs/kWh)	Fixed Charges
Above 20 HP Connected Load	3.65	Rs. 25/HP	3.65	Rs. 25/HP
LT-PL/Public Lighting				
Public Lighting	4.00		4.00	
HT				
HTC General Industrial / Motive Power 11KV or 66KV having CMD above 100KVA				
50000 units	4.20	Rs. 100 /KVA	4.77	Rs.100 / KVA
50000 to 5 lakh units	4.35	Rs. 100 /KVA	4.92	Rs.100 /KVA
Beyond 5 lakh units	4.55	Rs. 100/KVA	5.12	Rs. 100 /KVA
HT Industrial(Ferro Metallurgical / Steel Melting/ Steel Rerolling Power Intensive)				
First 300 Units per KVA	3.30	Rs. 550/KVA	3.87	Rs. 550/KVA
Next 200 units per KVA	4.00	Rs. 550/KVA	4.57	Rs. 550/KVA
Above 500 units per KVA	4.25	Rs. 550/KVA	4.82	Rs. 550/KVA

ED-DD has requested the Commission to approve the fuel purchase adjustment formula including the "k" factor for FY 13-14 as well, which can take care of any variation in the ARR over and above the approved level by the Commission for FY 13-14.

Commission's analysis

The Commission has determined the retail tariff for FY 2013-14 in view of the guiding principles as stated in the Electricity Act, 2003 and Tariff Policy, the suggestions/objections of the stakeholders in this regard and the petitioner's submission as discussed above.

Further, keeping in view the relevant directions given by the Hon'ble APTEL in the judgment in O.P. no. 1 of 2011 as mentioned below, the Commission has taken a considered view in this regard.

Relevant section from tariff policy:

Quote"

8.3 Tariff design: Linkage of tariffs to cost of service

It has been widely recognised that rational and economic pricing of electricity can be one of the major tools for energy conservation and sustainable use of ground water resources.

In terms of the Section 61 (g) of the Act, the Appropriate Commission shall be guided by the objective that the tariff progressively reflects the efficient and prudent cost of supply of electricity.

The State Governments can give subsidy to the extent they consider appropriate as per the provisions of section 65 of the Act. Direct subsidy is a better way to support the poorer categories of consumers than the mechanism of cross-subsidizing the tariff across the board. Subsidies should be targeted effectively and in transparent manner. As a substitute of cross-subsidies, the State Government has the option of raising resources through mechanism of electricity duty and giving direct subsidies to only needy consumers. This is a better way of targeting subsidies effectively. Accordingly, the following principles would be adopted:

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

2. *For achieving the objective that the tariff progressively reflects the cost of supply of electricity, the SERC would notify roadmap within six months with a target that latest by the end of year 2010-2011 tariffs are within ± 20 % of the average cost of supply. The road map would also have intermediate milestones, based on the approach of a gradual reduction in cross subsidy.*

   For example if the average cost of service is Rs 3 per unit, at the end of year 2010-2011 the tariff for the cross subsidised categories excluding those referred to in para 1 above should not be lower than Rs 2.40 per unit and that for any of the cross-subsidising categories should not go beyond Rs 3.60 per unit.

3. *While fixing tariff for agricultural use, the imperatives of the need of using ground water resources in a sustainable manner would also need to be kept in mind in addition to the average cost of supply. Tariff for agricultural use may be set at different levels for different parts of a state depending of the condition of the ground water table to prevent excessive depletion of ground water. Section 62 (3) of the Act provides that geographical position of any area could be one of the criteria for tariff differentiation. A higher level of subsidy could be considered to support poorer farmers of the region where adverse ground water table condition requires larger quantity of electricity for irrigation purposes subject to suitable restrictions to ensure maintenance of ground water levels and sustainable ground water usage*

4. *Extent of subsidy for different categories of consumers can be decided by the State Government keeping in view various relevant aspects. But provision of free electricity is not desirable as it encourages wasteful consumption of electricity besides, in most cases, lowering of water table in*

turn creating avoidable problem of water shortage for irrigation and drinking water for later generations. It is also likely to lead to rapid rise in demand of electricity putting severe strain on the distribution network thus adversely affecting the quality of supply of power. Therefore, it is necessary that reasonable levels of user charges are levied. The subsidized rates of electricity should be permitted only up to a pre-identified level of consumption beyond which tariffs reflecting efficient cost of service should be charged from consumers. If the State Government wants to reimburse even part of this cost of electricity to poor category of consumers the amount can be paid in cash or any other suitable way. Use of prepaid meters can also facilitate this transfer of subsidy to such consumers.

5. *Metering of supply to agricultural / rural consumers can be achieved in a consumer friendly way and in effective manner by management of local distribution in rural areas through commercial arrangement with franchisees with involvement of panchayat institutions, user associations, cooperative societies etc. Use of self closing load limitors may be encouraged as a cost effective option for metering in cases of "limited use consumers" who are eligible for subsidized electricity.*

"Unquote

Directions given by the Hon'ble APTEL in the Judgment in O.P. no. 1 of 2011:

Quote "

1) *…………………….*

2) *…………………….*

3) *……………………..*

4) *In determination of ARR/tariff, the revenue gaps ought not to be left and Regulatory Asset should not be created as a matter of course except where it is justifiable, in accordance with the Tariff Policy and the Regulations. The recovery of the Regulatory Asset should be time bound and within a period not exceeding three years at the most and preferably within Control Period. Carrying cost of the Regulatory Asset should be allowed to the utilities in the ARR of the year in which the Regulatory Assets are created to avoid problem of cash flow to the distribution licensee.*

5) *Truing up should be carried out regularly and preferably every year. For example, truing up for the financial year 2009-10 should be carried out along with the ARR and tariff determination for the financial year 2011-12.*

6) *Fuel and Power Purchase cost is a major expense of the distribution Company which is uncontrollable. Every State Commission must have in place a mechanism for Fuel and Power Purchase cost in terms of Section 62 (4) of the Act. The Fuel and Power Purchase cost adjustment should preferably be on monthly basis on the lines of the Central Commission's Regulations for the*

generating companies but in no case exceeding a quarter. Any State Commission which does not already have such formula/mechanism in place must within 6 months of the date of this order must put in place such formula/ mechanism." ***Unquote***

The Commission has considered an average hike of 10.15% for all consumer categories to recover the revenue gap of FY 2013-14 over the entire financial year 2013-14 (applicable from April 1' 2013).

It is observed that the average cost of supply has gone up from Rs 3.25/kWh in FY 2010-11 to Rs 4.42 /kWh in FY 2012-13 as per the values approved in this tariff order. Further, it is noted that the ACOS for FY 2013-14 is Rs 4.37/kWh (as approved in this tariff order) which is 0.89% higher than the approved ACOS of Rs 4.33/kWh for FY 2012-13 as determined in the previous tariff order of DD dated August 25' 2012.

The Commission while determining the tariffs for the various consumer categories has kept the consumer mix of ED-DD in view i.e. approximately 94% of the total sales are to the LT industrial and HT/EHT category and the rest 6% are accounted by sales to the other classes primarily domestic, low income group, agriculture, public lighting and the commercial categories.

Due to the gap created out of the provisional truing up exercise of FY 2011-12 and review of FY 2012-13; the assessed cumulative gap is Rs. 90.38 Crores for FY 2013-14; the Commission has therefore considered an average hike of 10.15% in tariff from the values as set out in the tariff order for FY 2012-13 dated August 25' 2012 as reasonable and appropriate in the interest of the consumers and the Electricity Department of UT of Daman & Diu. The Commission's approved tariff for FY 2013-14 is given below.

Table 9.3.2 : Commission's Approved Tariff for FY 2013-14

S. No.	Category/Consumption Slab	Approved Tariff for FY 2013-14 (Rs.)			
		Demand Charges (Rs./KVA/Month or Rs. per consumer/ month) or (Rs./HP/month)	Variable Charges (Rs./KWh)	Average tariff (Rs./Unit)**	K Factor[25] for FPPCA formula for FY 2013-14
1	**LT-D/Domestic**				
	Up to 50 units	-	1.20	1.20	0.25
	51-200 units	-	1.80	1.80	0.37
	201-400 units	-	2.20	2.20	0.45
	401 units and above	-	2.55	2.55	0.52
	Low Income Group	10.00	-		N/A
2	**LT-C/Commercial**				
	0-100 units	-	2.65	2.65	0.54
	Beyond 100 units	-	3.65	3.65	0.75

25 FPPCA is not applicable (N/A) for the consumer categories including BPL, agriculture and temporary supply. Therefore, the K factor against these categories is shown as zero.

S. No.	Category/Consumption Slab	Approved Tariff for FY 2013-14 (Rs.)			
		Demand Charges (Rs./KVA/Month or Rs. per consumer/ month) or (Rs./HP/month)	Variable Charges (Rs./KWh)	Average tariff (Rs./Unit)**	K Factor[25] for FPPCA formula for FY 2013-14
3	**LT- Ag/Agriculture**				
	Upto 10 HP per unit	-	0.70	0.70	N/A
	Beyond 10 HP per unit	-	1.00	1.00	N/A
4	**LTP Motive Power**				
	Upto 20 HP of connected load	-	3.70	3.70	0.76
	Above 20 HP of connected load	25.00	3.80	4.21	0.86
5	**LT-PL/Public Lighting**	-	4.20	4.20	0.86
6	**LT-Public Water Works**				
	Upto 20 HP of connected load	-	3.70	3.70	0.76
	Above 20 HP of connected load	25.00	3.80	4.06	0.83
7	**HT Industrial**				
A	**HT (A) General**				
	0-50000	100.00	4.70	4.91	1.01
	50000-5 lakh	100.00	4.85	5.17	1.06
	Above 5 lakh	100.00	5.05	5.34	1.10
B	**HT (B) Furnace**				
	0-300 units per kVA	550.00	3.85	5.79	1.19
	301-500 units per kVA	550.00	4.55	4.55	0.93
	Above 500 units per kVA	550.00	4.80	4.80	0.99

** Average tariff means the average revenue realization from the category i.e revenue/sales and is inclusive of both the fixed charges and the variable charges

9.4 Average Cost of Supply

The Commission observes that the Average Cost of Supply (ACoS) has gone up from Rs. 3.25/kWh as per trued up ARR of FY 2010-11 to Rs. 4.37/kWh approved for FY 2013-14. Considering the cumulative gap, the Commission is of the view that the approved increase in tariff of 10.15 % for FY 2013-14 is reasonable and justifiable to recover the revenue gap.

The Commission observes that the tariff being charged to most of the categories of consumers is below average cost of supply. The Commission has attempted to reduce the cross-subsidy in the consumer categories in this order, by rationalizing the tariff for subsidized categories and suitably adjusting the tariff for subsidizing categories, vis-à-vis the prevailing average cost of supply, while at the same time, trying to ensure that there is no 'tariff shock' to any consumer category. With the progressive increase in the tariff of the subsidized categories towards Average cost of supply at the rate 10-15% per year; the tariff may over the years touch ACOS and the existing gap of the cross subsidy may progressively narrow down. The average tariff as a percentage of average cost of supply of Rs. 4.37/kWh approved in this tariff order for FY 2013-14 is as shown in the table below.

*Table 9.4.1 : Comparison of average revenue realization with ACOS for FY 2013-14 ***

S. No.	Category/Consumption Slab	Average revenue realization for FY 2013-14 (Existing tariff of FY 12-13)	Average revenue realization as a percentage of ACOS for FY 2013-14 (Existing tariff of FY 12-13)	Average revenue realization for FY 2013-14 (Approved tariff of FY 13-14)	Average revenue realization as a percentage of ACOS for FY 2013-14 (Approved tariff of FY 13-14)
1	**LT-D/Domestic**				
	Up to 50 units	1.10		1.20	
	51-200 units	1.70		1.80	
	201-400 units	2.10		2.20	
	401 units and above	2.45		2.55	
	Domestic category		**53%**		**55%**
	Low Income Group				
2	**LT-C/Commercial**				
	0-100 units	2.50		2.65	
	Beyond 100 units	3.50		3.65	
	Commercial category		**71%**		**74%**
3	**LT- Ag/Agriculture**				
	Upto 10 HP per unit	0.60		0.70	
	Beyond 10 HP per unit	0.90		1.00	
	Agriculture category		**16%**		**18%**
4	**LTP Motive Power**				
	Upto 20 HP of connected load	3.55		3.70	
	Above 20 HP of connected load	4.06		4.21	
	LTP Motive Power		**81%**		**85%**
5	**LT-PL/Public Lighting**	4.00	**92%**	4.20	**96%**
6	**LT-Public Water Works**				
	Upto 20 HP of connected load	3.55		3.70	
	Above 20 HP of connected load	3.91		4.06	
	LT-Public Water Works		**94%**		**98%**
7	**HT Industrial**				
A	**HT (A) General**				
	0-50000	4.41		4.91	
	50000-5 lakh	4.67		5.17	

S. No.	Category/Consumption Slab	Average revenue realization for FY 2013-14 (Existing tariff of FY 12-13)	Average revenue realization as a percentage of ACOS for FY 2013-14 (Existing tariff of FY 12-13)	Average revenue realization for FY 2013-14 (Approved tariff of FY 13-14)	Average revenue realization as a percentage of ACOS for FY 2013-14 (Approved tariff of FY 13-14)
	Above 5 lakh	4.84		5.34	
B	**HT (B) Furnace**				
	0-300 units per kVA	5.24		5.79	
	301-500 units per kVA	4.00		4.55	
	Above 500 units per kVA	4.25		4.80	
	Total HT Industrial		**107%**		**118%**

** Average Revenue Realization is defined as the revenue for the category divided by the sales for the category i.e. it is inclusive of both the fixed charges and the variable charges

9.5 Introduction of Time of Day (TOD) tariff

The Petitioner has proposed the introduction of TOD tariff for HT consumers having contract demand of 900 kVA and above as a first step towards better demand side management. The Petitioner has submitted that the peak hours usually vary from around 9:00 am to 11 am in the morning and 6 pm to 10 pm in the evening. The off-peak hours varies from 0:00 am to 06:00 am. The licensee has proposed energy charge @ 7.50 per kWh during peak hours and rebate of Rs 0.80 per kWh during off-peak hours in the energy charges approved by the Commission.

The Commission is of the view that TOD tariff helps in better demand side management. The Commission has therefore decided to introduce TOD tariff for the HT consumers having sanctioned demand of 900 kVA and above be introduced within 3 months of the issuance of this tariff order. The licensee is directed to take necessary measures and ensure appropriate technical infrastructure for implementation of TOD tariff.

For the purpose of TOD tariff, the peak/off-peak/normal hours and charges for the corresponding period shall be as under.

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

9.6 Applicability of Revised Tariffs

The revised tariffs shall be applicable from 1st April 2013.

In cases, where there is a billing cycle difference for a consumer with respect to the date of applicability of the revised tariffs, then the revised tariff should be made applicable on a pro-rata basis for the consumption. The bills for the respective periods as per existing tariff and revised tariffs shall be calculated based on the pro-rata consumption (units consumed during respective period arrived at on the basis of average unit consumption per day multiplied by number of days in the respective period falling under the billing cycle).

9.7 Estimated Revenue and Surplus/Deficit at approved Tariff for FY 2013-14

The estimated Revenue at approved tariff for FY 2013-14 works out to be as under.

Table 9.7.1 : Total Revenue estimated by the Commission at approved tariff for FY 13-14 (in Rs. Crores)

S. No.	Category/Consumption Slab	FY 2013-14
		Revenue at approved tariff
1	**LT-D/Domestic**	
	Up to 50 units	0.02
	51-200 units	1.97
	201-400 units	2.44
	401 units and above	15.37
	Low Income Group	
2	**LT-C/Commercial**	
	0-100 units	3.99
	Beyond 100 units	8.24
3	**LT- Ag/Agriculture**	
	Upto 10 HP per unit	0.18
	Beyond 10 HP per unit	0.11
4	**LTP Motive Power**	
	Upto 20 HP of connected load	63.48
	Above 20 HP of connected load	0.77

S. No.	Category/Consumption Slab	FY 2013-14
		Revenue at approved tariff
5	**LT-PL/Public Lighting**	1.87
6	**LT-Public Water Works**	
	Upto 20 HP of connected load	0.15
	Above 20 HP of connected load	0.25
7	**HT Industrial**	
A	**HT (A) General**	
	0-50000	198.15
	50000-5 lakh	435.02
	Above 5 lakh	174.05
B	**HT (B) Furnace**	
	0-300 units per kVA	50.50
	301-500 units per kVA	18.87
	Above 500 units per kVA	3.78
8	**Temporary Supply**	
	TOTAL	**979.23**

The estimated gap/surplus after incorporating impact of revised tariff for FY 2013-14 from 1st April 2013 is as under:

Table 9.7.2 : Estimation of ARR Gap/Surplus at approved tariff for FY 13-14 (in Rs. Crores)

Sr. No.	Particulars	Approved (FY 2013-14) with tariff applicable from 1st April 2013
1	**Net Revenue Requirement**	878.05
2	Less: Revenue from Retail Sales at Existing Tariff	889.03
3	Less: Revenue from Surplus Power Sale/UI	-
4	**Net Gap/(Surplus)**	**(10.97)**
5	Gap for the previous year/ (Surplus)	101.35
6	Carrying Cost	**-**
7	Past Arrears/Refunds to Consumers	-
8	**Total Gap at the existing tariff**	**90.38**
9	Additional Revenue from revised tariffs	90.20
10	**Revenue Gap after revised tariffs**	**0.18**

10. Determination of open access charges

Petitioner's Submission

The Petitioner has submitted the open access charges for FY 2012-13 shall be calculated based on the actual performance parameters of ED-DD for FY 2011-12. The JERC (Open Access in Transmission and Distribution) Regulations 2009 and the JERC (Terms and Conditions for Determination of Tariff) Regulations 2009 have been referred to for the determination of open access charges by the Petitioner.

1. Transmission Charges

The Petitioner has submitted that no intra-state generation capacity is connected to the transmission system of ED-DD. Further, intra-state transmission and distribution system is not handling any long term transactions as no current customer has opted for LTOA.

In absence of transmission network in present conditions and separate account of the assets, ED-DD does not propose any transmission charges to the open access customer. In future, whenever the assets/liabilities of the STU are separated, the charges will be accordingly revised.

The Petitioner has proposed nil transmission charges for both the LTOA and the STOA customers.

2. Wheeling Charges

1. As separate ARR of transmission and distribution are not available, T&D cost can be apportioned as below.

Particular (Rs Cr)	FY 2011-12	FY 2012-13
ARR (a)	714.07	825.46
Power Purchase Cost (b)	679.15	785.76
T&D Cost (a-b)	34.92	39.7

2. Customer wise energy sales are taken from actually billed MUs for FY 2011-12 have been considered for the apportionment of the distribution cost. The HT/EHT customers together consume 1473.52 MUs which is 84.09% of the total electricity sales. As the assets are not separated, voltage wise distribution cost is not available. So, the actual usage of electricity for FY 2011-12 has been used as a reference for apportionment of voltage wise distribution cost. The distribution cost of Rs 34.92 Crores has been apportioned between the EHT/HT and the LT categories in the same ratio of the energy sales.

The wheeling charges thus derived are as:

Sr. No.	Particulars	HT and EHT	LT
A	**Total Cost apportioned (Rs Cr)**	**29.36**	**5.56**
B	Usage of electricity (%)	84.09	15.91
C	Cost Allocation brought forward (Rs Cr) (d)-(f)X(g)/1000	0.00	4.68
D	**Total cost of allocation (Rs Cr) (a)+(c)**	**29.36**	**10.24**
E	Quantum of energy (MU)	1752.34	278.82
F	**Energy Sale (MU)**	**1473.52**	**278.82**
G	**Rate of wheeling charge in paisa per kWh (d)/(e) X 1000 paise/kWh**	**16.75**	**36.73**

The wheeling charge of 16.75 paisa/kWh and 36.73 paisa/kWh are proposed for the EHT/HT and the LT customers respectively (both for LTOA and STOA).

3. Cross Subsidy Surcharge

The calculation of the various components of the CSS is as:

1. Estimation of 'T'

Sr. No.	Energy Sale (MUs) (a)	Revenue Realized Rs Cr (b)	Average Cost Rs/kWh (b)/(a) X 10
EHT+HT	**1473.52**	**634.66**	**4.307**

2. Estimation of 'C'

For determination of 'C' weighted average cost of the costliest 96.65 MUs (5% of the total MUs procured) procured for FY 2011-12 needs to be calculated. 'C' shall be calculated based on the actual power purchase cost for FY 2011-12.

Generator	MUs (a)	Power Purchase Cost Rs/kWh (b)	Total Power Purchase Cost (Rs Cr) (a)/(b) X 10
TAPP 3 &4	**76.29**	**4.02**	**30.67**
KHSTPP II	**7.81**	**3.93**	**3.07**
JGPP	**12.55**	**3.77**	**4.73**
TOTAL	**96.65**	**-**	**38.47**

Weighted average cost of power purchase 'C' = 38.47/96.65 X 10 = Rs 3.98/kWh

3. Estimation of 'L'

For the year 2011-12, the total losses are reduced from 12.75% to 9.95%. The losses for FY 2011-12 at various voltage levels have been determined in proportion to the audited losses for FY 2010-11.

Component under consideration	% losses in FY 2010-11	% losses in FY 2011-12
Transmission Losses	**0.21**	**0.164**
220/66 kV transformation losses	**0.35**	**0.273**
66 kV sub transmission losses	**0.65**	**0.507**
66/11 kV transformation losses	**0.98**	**0.765**
11 kV bus losses	**2.68**	**2.091**
Distribution losses	**7.88**	**6.149**
Total losses (%)	**12.75**	**9.95**

Total applicable losses at HT and EHT level 'L' is 0.273+0.507+0.765+2.091 = 3.636%

4. Estimation of 'D'

Wheeling charges 'D' is as:

Sr. No.	Description	EHT + HT (66 kV + 11 kV)
1.	**Wheeling charge in paise/kWh**	**16.75**

5. Calculation of 'S'

Cross subsidy surcharge for EHT and HT customers can be calculated as follows:

At 66 kV, S = 4.31 – (3.98 X (1+3.636/100) + 16.75/100) = 1.78 paise/kWh.
Under Section 9 of the Electricity Act 2003, captive power plants are entitled for open access without payment of cross subsidy surcharge, to carry their generation to the point of their own use.

The proposed cross subsidy surcharge can be summarized as below.

Cross Subsidy Surcharge for consumer	Paise/kWh
At 66 kV and 11 kV	1.78

4. Additional Surcharge

ED-DD has not proposed additional surcharge for LTOA/STOA customer for FY 2012-13.

5. SLDC Charges

As per the JERC (Open Access in Transmission and Distribution) Regulations 2009, ED-DD has proposed SLDC charges of Rs 1000/- per day payable separately by supplier as well his consumer availing open access. In case of multiple supplier, each supplier individually needs to pay Rs 1000/- per day. However, no schedule revision charges are proposed.

6. Standby Charges

ED-DD has proposed standby power supply facilities to all the customers opting for open access. In case of any default or failure of open access power supplier, the open access customer may draw power from the existing ED-DD network with prior information of the incidence.

Accordingly, ED-DD has proposed standby tariff rates as approved by the Commission in the tariff order for Daman & Diu for FY 2012-13 for Temporary Supply for respective category of the consumer.

7. Reactive Energy Charges

The reactive energy charges have been proposed to be levied in line with the charges levied on ED-DD by WRPC.

8. UI Charges

All open access customers need to install ABT compliant meter at their drawal point. ED-DD proposes UI settlements for intra-state open access customers to frequency based in line with the inter-state settlements of UI accounts.

9. Application and Agreement Fees

ED-DD proposes non-refundable Application and Agreement fees of Rs 5000/- and Rs 50000/- respectively.

10. Summary of Open Access Charges

Open access charges for FY 2012-13 for LTOA and STOA customers can be summarized as below.

S. No.	Category	Unit	LTOA	STOA
1.	Transmission Charges	Rs/MW/day	NIL	NIL
2.	Wheeling Charges	Paise/kWh	16.75	16.75
3	Cross Subsidy charges	Paise/kWh	1.78	1.78
4	Additional Charges	Rs	NIL	NIL
5	Standby Charges	Rs/kWh	As per tariff order	
6	SLDC operating charges	Rs	1000.00	1000.00

S. No.	Category	Unit	LTOA	STOA
7	Reactive energy charges	Rs	As per WRPC	
8	UI charges	Rs	As per WRPC	
9	Application Fees	Rs	5000.00	5000.00
10	Agreement Fees	Rs	50000.00	50000.00

Commission's Analysis

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 to be notified by the Commission shortly 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

As mentioned above the petitioner has accordingly filed petition for determination of the open access charges for FY 2012-13. The Commission feels that the year FY 2012-13 has already been over and presently there are no open access consumers in the UT of Daman and Diu, whereby the need charges for FY 2012-13 does not arise. The Commission has therefore in order to facilitate the open access has approved the Open Access related charges for FY 2013-14.

It is also seen from the Petitioner's submission that the Transmission and Distribution business has not been segregated and the ED-DD continues to function as an integrated utility. The Commission in line with the petitioner's submission and the fact that the expenses of the utility are consolidated has considered "NIL" transmission charges for the open access consumers in the UT.

Allocation Matrix

The Petitioner in its calculation has considered the allocation by considering the ARR after deducting the power purchase cost. The Commission feels that there has to be proper bifurcation of all expenses pertaining to the Petitioner between functions of wheeling business (wire business) and retail supply business. 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 10.1.1: Allocation of ARR between Wheeling and Retail Supply

Wheeling and Retail Supply ARR (Rs. Crores) - Daman and Diu									
		Allocation (%)		Allocation FY 2012-13			Allocation FY 2013-14		
S.No.	Particulars	Wheeling	Supply	Wheeling	Supply	Total	Wheeling	Supply	Total
1	Cost of Fuel	0%	100%	-	-	-	-	-	-
2	Power Purchase Expenses (incl transmission charges)	0%	100%	-	788.30	788.30	-	827.17	827.17
3	Employee cost	70%	30%	5.09	2.18	7.27	5.54	2.38	7.92
4	Repair & Maintenance expenses	90%	10%	2.95	0.33	3.28	3.21	0.36	3.57
5	Administration & General expenses	50%	50%	2.79	2.79	5.58	3.04	3.04	6.08
6	Depreciation	90%	10%	12.44	1.38	13.82	14.20	1.58	15.77
7	Interest & Finance Charges	90%	10%	3.19	0.35	3.55	6.16	0.68	6.84
8	Interest on working capital	22%	78%	1.90	6.72	8.62	1.93	6.83	8.76
9	Interest on Security Deposit	0%	100%	-	0.76	0.76	-	0.86	0.86
10	Return on Net Fixed Assets /Equity	90%	10%	4.89	0.54	5.43	5.25	0.58	5.84
11	Provision for Bad & Doubtful Debt	0%	100%	-	4.21	4.21	-	4.45	4.45
12	Advance against Depreciation	90%	10%	-	-	-	-	-	-
13	**Total Revenue Requirement**			**33.25**	**807.58**	**840.82**	**39.33**	**847.91**	**887.24**
14	Less: Non Tariff Income	0%	100%	-	8.75	8.75	-	9.19	9.19
15	Less: Revenue from Sale through UI	0%	100%	-	7.02	7.02	-	-	-
16	Less: Revenue from Sale of Power (Exchanges)	0%	100%	-	-	-	-	-	-
17	**Net Revenue Requirement (13-14-15-16)**			**33.25**	**791.81**	**825.05**	**39.33**	**838.73**	**878.05**

Voltage wise Wheeling Charges

The Petitioner has submitted that the voltage wise bifurcation of expenses and assets are not available. The Petitioner in the absence of the said details has considered the bifurcation of wheeling cost based on system usage in proportion to the sales. 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 petitioner has submitted a loss level of 3.636% at EHT and HT level which has been grossed 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 9.25% 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 10.1.2: Determination of input energy for network usage percentage

Particulars	UoM	FY 2013-14
Total Input	MU	2,216.00
Input for HT and EHT Sales	MU	1,772.38
% to total input	%	80%
Losses for HT and EHT	%	3.64%
Losses	MU	64.44
Sales at 11 kV and above	MU	1,707.94

Input for LT	MU	443.62
% of total input	%	20%
Losses at LT level	%	32%
Losses	MU	140.54
Sales at 11 kV anad above	Mu	303.09
Balance	MU	-

Accordingly the wheeling cost has been considered in the ratio of 80:20 and the wheeling charge so arrived has been shown in the table below

Table 10.1.3: Wheeling charges approved for FY 2013-14

Particulars	UoM	S. No	FY 2013-14
Wheeling Cost	Rs Crores	A	39.33
Wheeling Cost at EHT and HT (80%)	Rs Crores	B=A*80%	31.45
Wheeling Cost at LT (20%)	Rs Crores	C=A*20%	7.87
Energy Input at Discom Periphery	MU	D	2,216.00
Wheeling Charge at EHT and HT level	Rs per Unit	E=B/D*10	0.14
EHT and HT losses	%	F	4%
EHT and HT losses	MU	G	80.57
Sales at EHT and HT level	MU	H	1,707.94
Energy Input at LT	MU	I=D-G-H	427.49
Wheeling Charge at LT level	Rs per Unit	J=C/I*10	0.18
Sales at LT level	MU	K	303.09
LT Losses	MU	L=I-K	124.41
Total Losses	MU	M=G+L	204.98
	%		9.25%

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 each item is given below.

Table 10.1.4: Calculation of "T"

Particular	Sales	Revenue from approved tariff	Average Tariff
HT Industrial	1707.94	880.38	5.15

Table 10.1.5: Calculation of ''C''

Station	Energy Procured	Average Rate	Total Power Purchase cost
Bhilai	114.88	4.27	49.00

The Cross subsidy surcharge based on the above formula is worked out in the table below:

Table 10.1.6: Approved Cross subsidy surcharge for FY 2013-14

Cross Subsidy Surcharge	UoM	HT&EHT Industry
T	Rs Per kWh	5.15
C	Rs Per kWh	4.27
D	Rs Per kWh	0.14
L	%	3.64
Surcharge	Rs Per kWh	0.59

Additional Surcharge

In order to promote competition through open access the Commission in line with the petitioner's submission approved "Nil" Additional Surcharge. This would be revisited at the time of next tariff order based on Open Access implementation.

11. 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:

1. 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 future years with necessary changes.** From the below mentioned schedule, the Commission has already introduced the proviso of advance payment rebate, prompt payment rebate, power factor surcharge/rebate and TOD tariff 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.

Proposed Uniform Tariff Schedule and Terms & Conditions of Supply

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

1.0 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)

Sl.	Category of consumers	Fixed charge (Rs/connection/ month or part thereof)	Energy charge (Paisa/kwh)
	Metered	x	
	unmetered		X

1.2 DOMESTIC SERVICE-II (DS-II)

Sl.	Category of consumers	Fixed charge (Rs/KW/ month or part thereof)	Energy charge	
			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)

Sl.	Category of consumers	Demand charge (Rs/KW/ month or part thereof)	Energy charge	
			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, 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.

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)

Sl.	Category of consumers	Fixed charge (Rs/KW/ month or part thereof)	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)

Sl.	Category of consumers	Demand charge (Rs/KW/ month or part thereof)	Energy charge	
			Consumption/ month (Units)	Rate (Ps/unit)
	All Three Phase		For all units	

2.2 NON-DOMESTIC SERVICE-II (NDS-II)

Sl.	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

2.2.1 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)

Sl.	Category of consumers	Demand charge (Rs/KW/ month or part thereof)	Energy charge	
			Consumption/ month (Units)	Rate (Ps/unit)
	All Three Phase		For all units	

2.3 NON-DOMESTIC SERVICE-III (NDS-III)

Sl.	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

2.3.1 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)

Sl.	Category of consumers	Demand charge (Rs/KW/ month or part thereof)	Energy charge	
			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)

Sl.	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)

Sl.	Category of consumers	Fixed charge (Rs/HP/ month or part thereof)	Energy charge (Paisa/kwh)

3.3 IRRIGATION AND AGRICULTURAL SERVICE-III (IAS-III)

Sl.	Category of consumers	Fixed charge (Rs/HP/ month or part	Energy charge (Paisa/kwh)

		thereof)	
	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)

Sl.	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)

Sl.	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)

Sl.	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)

Sl.	Category of consumers	Demand charge (Rs/HP/ month or part thereof)	Energy charge	
			Consumption/ months(Units)	Rate (Ps/unit)
	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)

Sl.	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)

Sl.	Category of consumers	Demand charge (Rs/HP/ month or part thereof)	Energy charge	
			Consumption/ months(Units)	Rate (Ps/unit)
	All Three Phase			

5.2 PUBLIC LIGHTING (PL)

Sl.	Category of consumers	Fixed charge (Rs/KW/ month or part thereof)	Energy charge (Paisa/kwh)
	Metered		
	Unmetered		X

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)

Sl.	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)

Sl.	Category of consumers	Demand charge (Rs/KW/ month or part thereof)	Energy charge	
			Consumption (Units)	Rate (Ps/unit)
	All Three Phase			

6.2 BULK SUPPLY SERVICES-II (BS-II)

Sl.	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)

Sl.	Category of consumers	Demand charge (Rs/KW/ month or part thereof)	Energy charge	
			Consumption/ MONTHS(Units)	Rate (Ps/unit)
	All Three Phase			

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 bi-monthly billing is done. Similarly, slabs of energy consumption shall also be doubled in case of bi-monthly 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:

Sl	Category of consumers	Load Factor	Average Unit
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 lag)	0.40	260 units/kVA

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 ....:

Sl	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 months	175% of normal rate of appropriate tariff category
3.	More than 18 months and upto 24 months	200% of normal rate of 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.

Sl	Period of Supply	Tariff Rate
1.	Upto 3 consecutive months in a year	Appropriate tariff plus 40 percent
2.	More than 3 consecutive months and upto 6 consecutive months in a year	Appropriate tariff plus 30 percent
3.	More than 6 consecutive months and upto 9 consecutive months in a year	Appropriate tariff plus 20 percent
4.	More than 9 consecutive months but less than one year	Appropriate tariff plus 10 percent.

(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:

Sl	Supply Voltage	Contract Demand	
		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, ferro-alloy, 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)

Sl.	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)

Sl.	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)

Sl.	Category of consumers	Fixed charge (Rs/KVA/ month or part thereof)	Energy charge Rate (Ps/unit)

8.3 HIGH TENSION/IAS (HT/IAS)

Sl.	Category of consumers	Fixed charge (Rs/KVA/ month or part thereof)	Energy charge Rate (Ps/unit)

8.4 HIGH TENSION/INDUSRIAL (HTIS-I)

Sl.	Category of consumers	Fixed charge (Rs/KVA/ month or part thereof)	Energy charge Rate (Ps/unit)

8.5 HIGH TENSION/POWER INCENTIVE (HTIS-II)

Sl.	Category of consumers	Fixed charge (Rs/KVA/ month or part thereof)	Energy charge Rate (Ps/unit)

8.6 HIGH TENSION/PWW (HT/PWW)

Sl.	Category of consumers	Fixed charge	Energy charge

		(Rs/KVA/ month or part thereof)	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:

Sl	Supply Voltage	Contract Demand	
		minimum	Maximum
1	66 kV	5001 kVA	25000 kVA
2	110 kV or 132 kV or 220 kV	Above 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)

Sl.	Category of consumers	Fixed charge (Rs/KVA/ month or part	Energy charge
			Rate (Ps/unit)

		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:

Sl	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 kV	Above 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 ....:

Sl	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 months	175% of normal rate of appropriate tariff category
3.	More than 18 months and upto 24 months	200% of normal rate of appropriate 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.

Sl	Period of Supply	Tariff Rate
1.	Upto 3 consecutive months in a year	Appropriate tariff plus 40 percent
2.	More than 3 consecutive months and upto 6 consecutive months in a year	Appropriate tariff plus 30 percent
3.	More than 6 consecutive months and upto 9 consecutive months in a year	Appropriate tariff plus 20 percent
4.	More than 9 consecutive months but less than one year	Appropriate tariff plus 10 percent.

(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.

PART - D: MISCELLANEOUS AND GENERAL CHARGES (FOR ALL CATEGORIES OF CONSUMERS)

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

12. Conclusion of Commission's Order

The Commission has considered the submissions made by Electricity Department of Daman & Diu for Truing-up of Aggregate Revenue Requirement of FY 2011-12, Review of FY 2012-13 and Aggregate Revenue Requirement (ARR) and determination of retail tariff for FY 2013-14 bearing petition no. 90/2012 and has accordingly approved 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 Daman & Diu for FY 2013-14 is given below.

Sr. No.	Particulars	Approved (FY 2013-14) (Rs. Crores)
1	Power Purchase Cost	827.17
2	Employee costs	7.92
3	Administration and General Expenses	3.57
4	Repair and Maintenance Expenses	6.08
5	Depreciation	15.77
6	Interest and Finance charges	6.84
7	Interest on working capital	8.76
8	Interest on security deposit	0.86
9	Return on NFA	5.84
10	Provision for Bad Debt	4.45
11	Incentive on achievement of norm of T&D loss	-
12	Total Revenue Requirement	**887.24**
13	Less: Non Tariff Income	9.19
14	**Net Revenue Requirement**	**878.05**
15	Less: Revenue from Retail Sales at Existing Tariff	889.03
16	Less: Revenue from Surplus Power Sale/UI	-
17	**Net Gap/(Surplus) for FY 2013-14**	**(10.97)**
18	Gap for the previous year/ (Surplus)	101.35
19	Carrying Cost	-
20	Past Arrears/Refunds to Consumers	-
21	**Total Gap (at the existing tariff of FY 2012-13)**	**90.38**
22	Additional Revenue from proposed tariffs	**90.20**
23	**Revenue Gap after proposed tariffs**	**0.18**

2. The approved retail tariff (as given below) for FY 2013-14 shall be in accordance with the tariff schedule specified in this order.

S. No.	Category/Consumption Slab	Approved Tariff by Commission for FY 2013-14			
		Fixed Charges (Rs./KVA/Month or Rs. per consumer/ month) or (Rs./HP/month)	Variable Charges (Rs./KWh)	Average Revenue Realization (Rs./Unit) (including fixed charges)	K Factor[26] for FPPCA formula for FY 2013-14
1	**LT-D/Domestic**				
	Up to 50 units	-	1.20	1.20	0.25
	51-200 units	-	1.80	1.80	0.37
	201-400 units	-	2.20	2.20	0.45
	401 units and above	-	2.55	2.55	0.52
	Low Income Group	10.00	-		N/A
2	**LT-C/Commercial**				
	0-100 units	-	2.65	2.65	0.54
	Beyond 100 units	-	3.65	3.65	0.75
3	**LT- Ag/Agriculture**				
	Upto 10 HP per unit	-	0.70	0.70	N/A
	Beyond 10 HP per unit	-	1.00	1.00	N/A
4	**LTP Motive Power**				
	Upto 20 HP of connected load	-	3.70	3.70	0.76
	Above 20 HP of connected load	25.00	3.80	4.21	0.86
5	**LT-PL/Public Lighting**	-	4.20	4.20	0.86
6	**LT-Public Water Works**				
	Upto 20 HP of connected load	-	3.70	3.70	0.76
	Above 20 HP of connected load	25.00	3.80	4.06	0.83
7	**HT Industrial**				
A	**HT (A) General**				
	0-50000	100.00	4.70	4.91	1.01
	50000-5 lakh	100.00	4.85	5.17	1.06
	Above 5 lakh	100.00	5.05	5.34	1.10
B	**HT (B) Furnace**				
	0-300 units per kVA	550.00	3.85	5.79	1.19
	301-500 units per kVA	550.00	4.55	4.55	0.93
	Above 500 units per kVA	550.00	4.80	4.80	0.99

26 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.

3. The approved tariff of FY 2013-14 shall come in force with effect from 1st April 2013 and shall remain valid till 31st March 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 as per the Regulation. **The approved per unit cost of power purchase ($R_{approved}$) for use in the FPPCA formula (paisa per unit) is 371 paisa per unit for FY 2013-14**.

5. Copy of this order may be sent to Petitioner, CEA and Administration of UT of Daman and Diu. It shall be placed on the website of the Commission.

Sd/-	**Sd/-**
(S. K. Chaturvedi)	**(Dr. V. K. Garg)**
Member	**Chairman**

Place: Gurgaon
Date: March 22' 2013

Certified Copy
Sd/-
(R. K. Malik)
Secretary

13. Tariff Schedule

General Terms and Conditions

1) The tariffs are exclusive of electricity duty, taxes and other charges levied by the Government or other competent authority from time to time which are payable by the consumers in addition to the charges levied as per the tariffs.

2) Unless otherwise agreed to, these tariffs for power supply are applicable for supply at one point only.

3) Supply to consumers having contracted load between 100 kVA to 1500 kVA will be generally at 11 kV and for more than 1500 kVA at 66 kV. The consumer who requires load more than 25000 kVA, the voltage of supply shall be at 220 kV level. (also refer to the compliance of directive no. 19 on page 170 of this order)

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 (also refer to point no. 1.2 on page 194 of this order)

   (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 replacement of appliances such as lamps, fans, fuses, switches, low voltage domestic appliances, fittings, it shall not fall under Section 126 and Section 135 of the 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 paisa shall be ignored and amount of 50 paisa 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) **TOD tariff:** For HT consumers having sanctioned demand of 900 kVA and above has been introduced through this tariff order. The licensee is directed to take necessary measures and ensure appropriate technical infrastructure for implementation of TOD tariff.

For the purpose of TOD tariff, the peak/off-peak/normal hours and charges for the corresponding period shall be as under.

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

14) 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.

15) 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.

16) Schedule of other charges would be as approved in this tariff order.

The detailed tariff Schedule is outlined as under:

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	120
51-200 units	180
201-400 units	220
401 and above	255

(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. 10 per service connection per month**. For any unauthorized increase in the load beyond 2x40 watts, penal charges at the rate of Rs. 20 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, 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	265
101 units and above	365

III. LT Industrial Category including Public Water Works

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

I. Energy Charges

	Energy charge (Ps./Unit)
Upto 20 HP	370
For loads above 20 HP	380

II. Fixed Charges

	Tariff (Rs./HP/month) part thereof
Upto 20 HP	NIL
For loads above 20 HP	Rs 25.00/- 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 100/kVA/month or part thereof

ii. Energy Charges

Usage (Units/Month)	Tariff (Ps/Unit)
1 - 50,000 units	470
50001 – 500000 Units	485
500001 and above	505

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 550.00/- per kVA per month

ii. **Energy Charges**

Usage	Tariff (Ps./Unit)
First 300 units / kVA	385
Next 200 units / kVA	455
Above 500 units / kVA and above	480

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

V. Agriculture

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

i. Energy Charges

	Tariff (Ps./Unit)
For sanctioned load up to 10 HP	70
Beyond 10 HP and upto 99 HP sanctioned load	100

ii. 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.

VI. Public Lighting

i. Energy Charges

Usage	Tariff (Ps./Unit)
For all units	420

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 there of
1	Single Phase	Rs 10 per month or part thereof
2	Three Phase	Rs 25 per month or part thereof
3	LT Meter with MD indicator	Rs 200 per month or part thereof
4	Tri- vector Meter	Rs 500 per month or part thereof

Note: The type of meters to be installed in 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 LT	Rs 50
2	Three Phase LT	Rs 100
3	HT	Rs 1000

c. Service Connection Charges

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

d. Extra Length Charge

S. No.	Connection Type	Tariff / Meter (in Rs.)
1	Single Phase	Rs 25/meter
2	Three Phase	Rs 50/meter

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

e. Cost of HT connection

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

f. Service connection charges for- Under Ground Lines

(a) Single phase consumers

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

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

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

g. Testing Fee for various Metering Equipment

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

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

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