TARIFF ORDER

Re-determination of Retail Tariff for FY 2011-12,

Petition no. 33/2011

Provisional Truing up of FY 2010-11,

Review of ARR of FY 2011-12

&

Determination of Aggregate Revenue Requirement

&

Retail Tariff for FY 2012-13,

Petition no.63/2012

For

Electricity Department, Daman & Diu

JOINT ELECTRICITY REGULATORY COMMISSION

For the State of Goa and Union Territories

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25th August 2012

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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[1]

Dr. V K Garg (Chairperson)

Petition No. 33/2011

Petition No. 63/2012

In the matter of

Re-determination of Retail Tariff for FY 2011-12, Truing up of Aggregate Revenue Requirement for FY 2010-11, Review of FY 2011-12 & Aggregate Revenue Requirement (ARR) & Retail Tariff for the Financial Year 2012-13 of the Electricity Department, Union Territory of Daman & Diu

And in the matter of

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

ORDER

Date: 25th August 2012

[1] As per section 93 of the Electricity Act, 2003; No act or proceedings of the Appropriate Commission shall be questioned or shall be invalidated merely on the ground of existence of any vacancy or defect in the constitution of the Appropriate Commission. Therefore due to vacancy of the position of one of the Hon'ble Member in the Joint Electricity Regulatory Commission for the state of Goa and the UTs, the Hon'ble Chairperson constituted Coram for the hearing on 15th and 17th May 2012 in respect of the determination of ARR & tariff for FY 2012-13. The Member joined on forenoon of 31st May 2012 and attended the hearing on the re-determination of tariff for FY 2011-12 on 17th and 21st August 2012 at Diu and Daman respectively.

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 does not have its own power generation and draws the bulk power supply from the Central Generating Stations in Western Region and Eastern Region. The present transmission and distribution system of ED-DD consists of 25.71 circuit km of 220 kV double circuit (D/C) lines, 80.7 kms of 66 kV lines, 342 circuit kms of 11 kV and above lines and 890.89 kms of LT lines along with 491 transformers. Presently, there are 78 11 kV feeders in the network of Daman & Diu.

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

Earlier in FY 10-11, the electricity drawal of EDDD was approximately 220 to 250 MW against the daily scheduled availability of 280 to 290 MW resulting in a surplus of 30 to 40 MW during FY 10-11. The current demand is primarily dependent on the HT and LT Industrial consumers which contributed approx. 94% of the total sales in FY 10-11. The high demand from industrial consumers is primarily due to the 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.

In view of the huge power demand in future, EDDD has proposed a number of schemes to be implemented during FY 11-12 and FY 12-13 for strengthening and augmentation of the transmission and distribution system in the territory. EDDD is also undertaking efforts to get higher allocation from the Central Generating Stations. The EDDD is also 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 2012-13 under section 61, 62 & 64 of the Electricity Act, 2003. However the petition was deficient as the requisite formats as per JERC regulatory norms/formats and audited accounts was not submitted. ED-DD has submitted its ARR and Tariff petition for FY 2012-13 vide affidavit dated November 25' 2011 and filed on November 30' 2011.

1.5 Admission of Petition

On submission of ARR & Tariff Petition filed by ED DD on November 30' 2011, the Commission's office had pointed out preliminary defects in the ARR petition vide letter dated December 09' 2011. Copy of the said letter is enclosed as **Annexure 1** to this Order. The response to the queries raised by the Commission was submitted by the Petitioner vide letter dated December 24' 2011. The intimation for the pre-admission hearing was given to the Petitioner vide letter dated January 13' 2012 and the Petitioner was directed to appear before the Commission in person or by an authorized representative duly instructed and able to answer all material questions relating to the matter on January 20' 2012.

A Pre-admission hearing was necessitated due to non-submission of the petition as per JERC regulatory norms/formats & audited accounts. Accordingly pre-admission hearing of the petition was conducted on January 20' 2012 at 11 AM. The Petitioner presented the salient features of the Petition. The Commission vide the Order dated January 20' 2012 directed the Petitioner to file an affidavit for compliance of tariff order passed by the Commission for FY 2011-12. After initial scrutiny/analysis of the submissions furnished by the petitioner, the Petitioner was directed to file information required by February 14’ 2012, so that review and true-up of earlier ARRs could also be carried out. A copy of the Order dated January 20’ 2012 is enclosed as **Annexure 2** to this Order.

The Petitioner vide letter dated February 13’ 2012 submitted the partial compliance of the tariff order passed by the Commission for FY 2011-12, true-up petition for FY 2010-11, Review for FY 2011-12 (till December 2011) along with the provisional audited accounts for FY 2010-11.

The Commission observed that in the submission of the Petitioner vide affidavit dated February 13’ 2012, the Petitioner had stated that it had implemented the tariff structure approved by the Commission vide tariff order dated October 3’ 2011 from June 1’ 2011 **for all consumer categories, except for LIG, domestic and agriculture categories**, as the same was under the judicial consideration of the Appellate Tribunal of Electricity. The Petitioner was directed to appear before the Commission for further hearing of the Petition on February 16’ 2012. Accordingly, the Commission vide its Order dated February 16’ 2012 observed that the Petitioner had filed the affidavit submitting that the part tariff order dated October 3’ 2011 had been implemented. The consultant of the Petitioner submitted that an appeal is pending for hearing before the APTEL against the order.

The Commission observed that the Hon’ble APTEL has neither granted stay against the order nor passed any other order affecting the implementation of the order. The Commission maintained that the Petitioner should submit compliance report in the form of an affidavit for compliance of the tariff order issued by the Commission for FY 2011-12 by February 24’ 2012 and the matter shall be heard on February 27’ 2012. A copy of the Order dated February 16’ 2012 is enclosed as **Annexure 3** to this Order. The petitioner was under obligation to implement the tariff order dated October 3’ 2011 issued by JERC till February 29’ 2012, when Hon’ble APTEL gave partial relief. This non-compliance of the order is being dealt with separately in this order.

The Petitioner vide their affidavit dated February 23’ 2012 submitted that the appeal filed by the Petitioner before the Hon’ble Appellate Tribunal against the Order dated October 3’ 2011 has been admitted on February 23’ 2012 and requested the Commission to proceed with the petition filed for determination of the revenue requirements and tariff for FY 2012-13 subject to the result in the appeal filed before the Appellate Tribunal for Electricity (Appeal No. 35/2012).

The Commission vide their Order dated February 27’ 2012 observed that an affidavit had been submitted and noted that the Petitioner did not appear before the Commission and their authorized representatives i.e. the Consultant of the Petitioner who could not reply satisfactorily to the queries raised during the hearing. The matter was further put up for hearing on March 13' 2012. A copy of the order dated February 27' 2012 is enclosed as **Annexure 4** to this Order.

The Commission vide their Order dated March 13' 2012 observed that the information filed by the Petitioner is to be examined by the Commission and the matter would be heard on March 30' 2012. A copy of the said Order is enclosed as **Annexure 5** to this Order.

The Commission vide their Order dated March 30' 2012 observed that the data and information furnished by the Petitioner had been analysed and the Petition was accordingly admitted.

Quote *The Commission directed the Electricity Department of Daman and Diu to file following documents to substantiate the information filed earlier on or before April 10' 2012:*

(A)
i Methodology, computation and working sheet of fuel surcharge for FY-2011-12
ii. UI Power Purchase within frequency band of 49.7 to 50.2 HZ as well as purchase outside this frequency band
iii. Time, frequency, quantity and price at which these units of electricity have been purchased outside the above frequency band under UI
iv. Sale under UI: Number of Units sold, at what frequencies –time and price
v. Bilateral Purchase-sale: Quantity - price – total value of purchase-Sale-Net value of gain or loss
vi. Purchase from Power exchange: quantity –price- time of purchase
vii. Sale at Power exchange: Quantity-time-price-total value-Net gain or loss from sale at the exchange
viii. Purchase from any other source: Quantity-time-price-total value-Net gain or loss from sale to any other source
ix. Petitioner's computed fuel surcharge for 2011- 2012 till date as per Generator's Bills for pre July and post -July, 2011-12
x. Whether the above information was loaded on the Website of the Utility?
xi. Details of the "Designated Officer" appointed by the Electricity Department of Daman and Diu as per JERC Tariff Order dated 03.10.2011, his duties and responsibilities

(B) List of consumers who requested Electricity Department, Daman & Diu to provide information regarding detailed calculation of PPCA charged from them and the status of replies from the Department to those requests of the consumers.

*(C) One Performa annexed as 'D' also supplied to counsel/consultant for petitioner. Information asked for therein be also supplied in the performa."****Unquote***

The matter was directed to be further heard on April 16' 2012 and the copy of the Admission Order dated March 30' 2012 is enclosed as **Annexure 6** to this Order.

The Commission through a separate Order dated March 30' 2012 observed that Appeal No 169/ 2011 filed by M/S Daman Industries Association before the Hon'ble Aptel had been partly allowed by the Hon'ble Aptel on May 25' 2012 and the Commission had been given directions in para 10.6 of the judgement as under:

Quote

"The Joint Commission is directed to re-determine the formula taking into account the Regulations and the conditions specified under the PPCA formula. The formula should be such that there is no scope for ambiguity and it determines the PPCA by mechanical application of the formula. The State Commission may also direct the Respondent No. 1 to display the PPCA in a consumer friendly format on its website for the benefit of the consumers.

As FY 2011-12 is going to end shortly, the State Commission is also at liberty to decide the PPCA for the FY 2011-12 and consequential modification in retail supply tariff after hearing the concerned parties and our directions for specifying the correct formula may be noted for future." ***Unquote***

The Commission noted that since the financial year 2011-12 would end on 31st March 2012, the Commission opts to decide the the PPCA for FY 2011-12 after hearing the concerned parties.

In view of the above, the Commission directed ED-DD to furnish the following information on or before April 10' 2012:

Quote

"(A) (i) Total amount collected by the Electricity Department, Daman and Diu on account of fuel surcharge till date

(ii) Total amount billed on account of Fuel surcharge by Electricity Department, Daman and Diu, till date

(iii) Methodology, computation and working sheet of the Fuel Surcharge calculation

(iv) Details of the "Designated officer" appointed by Electricity Department of Daman and Diu as per the JERC Tariff Order dated 03.10.2011, his role and responsibilities

(v) Whether details of Fuel Surcharge, its computation methodology & calculations were uploaded on the website of Electricity Department, Daman and Diu.

(B) (i) List of consumers who asked information about the basis of calculation and computation of such fuel surcharge as per the JERC Order and status of the replies from the department to the consumers."
Unquote

The copy of this Order dated March 30’ 2012 is enclosed as **Annexure 7** to this Order.

The Petitioner submitted the response to the queries raised by the Commission in the Order dated March 30’ 2012 to the Commission vide letter dated April 12’ 2012. The Commission further heard the matter on April 16’ 2012 and vide its Order dated April 16’ 2012 noted that the information sought by the Commission vide its Order dated March 30’ 2012 was submitted by the Petitioner without documentary proof and the information was not in the form of an affidavit. The Counsel for the Petitioner requested one week’s time for filing the remaining information and the supporting affidavit as directed by the Commission. The Commission acceded to the request and directed the Petitioner to submit the remaining information on or before April 23’ 2012. The copy of the Order dated April 16’ 2012 is enclosed as **Annexure 8** to this Order.

The data provided by the Petitioner for FY 2011-12 and FY 2012-13 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 email dated July 13’ 2012. The Commission sought the actual sales, revenue and power purchase cost for FY 2011-12 since the year was already over besides other important data like amount of security deposit held, compliance of directives, status of fixed asset register etc. It was also informed that the technical validation session would be conducted on July 19’ and July 20’ 2012.

On July 19’ 2012, the representatives of the Department were present at the Commission’s office for the technical validation session; however, they did not have the data as sought and communicated by the Commission to them. The Petitioner requested for additional time, and accordingly July 23’ 2012 was agreed upon by the Petitioner for the validation session. The technical validation session was shifted to July 23’ 2012. However, the data as desired by the Commission was not fully provided and further time till July 24’ 2012 was given to them. On July 24’ 2012, the Petitioner further sought time and submitted that the data would be provided at the earliest.

The Commission vide email dated July 27’ 2012 further gave time to the Petitioner and the list of data points was narrowed down to save time. . The Petitioner responded vide email dated August 9’ 2012 in which critical information like the true-up formats for FY 2010-11, actual sales, revenue and FPPPA collected for FY 2011-12, amount of security deposit, UI details for FY 2010-11 and FY 2011-12 etc. were provided, which as a matter of fact, should have come along with the petition or in response with the first set of data and documents.

The Commission before proceeding for the public hearing in respect of the re-determination of tariff for FY 2011-12 to be held on August 17’ and August 21’ 2012, sought confirmation from the Petitioner on whether all objections received in respect of the petition for FY 2012-13 were responded to vide email dated August 14' 2012. Simultaneously, the Commission also sought certain clarifications from the Petitioner vide email dated August 14' 2012 as regards to the maintainability of the data submitted by the petitioner earlier. The clarifications/additional data were responded to by the Petitioner vide email dated August 16' 2012 and additional replies to the objections of the stakeholders in respect of the petition for FY 2012-13were received vide email dated August 17'2012.

The Commission has considered the submissions of the Petitioner till August 17' 2012 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 computation of the ARR and the resultant tariff thereof, of the Petitioner.

Table 1.6.1 : Formal Interaction with the Petitioner

Sl.	Date	Action by	Subject
1.	30.11.2011	ED-DD	Petition submission
2.	09.12.2011	Commission	Defects to be rectified by ED-DD
3.	24.12.2011	ED - DD	Replies to the queries dated 09.12.2011
4.	13.01.2011	Commission	Notice for hearing on 20.01.2012
5.	20.01.2012	Commission	Pre-admission hearing of petition no. 63/2012
6.	16.02.2012	Commission	Compliance of tariff order FY 2011-12 to be submitted; Further hearing on 27.02.12
7.	23.02.2012	ED-DD	Affidavit by the petitioner
8.	27.02.2012	Commission	Order for further hearing on 13.03.2012
9.	13.03.2012	Commission	Information submitted to be examined as asked in the Order 27.02.2012 and further hearing on 30.03.2012
10.	30.03.2012	Commission	Submission of details on Calculations of PPCA,UI Purchase, sales etc.
11.	12.04.2012	ED-DD	Replies to the Commission as per order dated 30.03.2012
12.	16.04.2012	Commission	Further pending information as per Order dated 30.03.2012 to be submitted
13.	13.07.2012	Commission	Data gaps to be submitted for issuance of a complete tariff order and intimation of validation session to be held on 18th and 19th July 2012
14.	17.07.2012	Commission	Intimation of the shifting of the Technical Validation session to 19th and 20th July 2012
15.	19.07.2012	Commission	Information sought not provided by Petitioner; validation session shifted to 23rd July 2012
16.	23.07.2012	Commission	Validation session held; Power Purchase Bills for FY 2011-12 provided; additional time till 24th July 2012 sought by Petitioner to provide the information sought vide email 13.07.2012

Sl.	Date	Action by	Subject
17.	24.07.2012	ED-DD	Additional time sought by the Petitioner and it submits that the data would be provided at the earliest
18.	27.07.2012	Commission	The list of data points are pruned for the convenience of the Petitioner and the Commission seeks the data by 1st August 2012
19.	09.08.2012	ED-DD	Petitioner submits the data as asked in email 27.07.2012
20.	14.08.2012	Commission	Clarifications/additional data based on the information provided by Petitioner on 9th August 2012
21.	16.08.2012	ED-DD	Petitioner submits the replies to the email of the Commission dated 14.08.2012
22.	17.08.2012	ED-DD	Additional replies to the objections in respect of the petition for FY 2012-13

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 notice published by the Petitioner

S.No.	Date of Publication	Language	Name of Newspaper
1.	December 10th, 2011	Gujarati	Vartaman Pravah
2.	December 10th, 2011	English	The Free Press Journal
3.	December 10th, 2011	English	Indian Express

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 9** 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 Fuel & Power Purchase Cost Adjustment (FPPCA) for FY 2012-13 in the leading newspapers giving due intimation to stake holders, consumers, objectors and the public at large about the public hearing to be conducted by the Commission as per the mentioned schedule:

Table 1.8.1 : Schedule of Public hearing at Daman and Diu

S.No.	Date & Time	Venue of Hearing	Subject
1.	15th May 2012	Swami Vivekananda Hall, Nani,	ARR & Tariff Proposal as per

S.No.	Date & Time	Venue of Hearing	Subject
	10 am onwards for all category of consumers	Daman	Petition for FY 2012-13 & Fuel & Purchase Power Cost Adjustment, Road Map for Tariff Rationalization, Previous Years Review & True Up
2.	16th May 2012 11 am onwards for all category of consumers	Conference Hall, Primary Health Centre, Diu	ARR & Tariff Proposal as per Petition for FY 2012-13 & Fuel & Purchase Power Cost Adjustment, Road Map for Tariff Rationalization, Previous Years Review & True Up

Table 1.8.2 : Details of public notice published by Commission

S.No.	Date	Language	Name of Newspaper
1.	1st May 2012	Hindi	Savera India Times, Daman
2.	1st May 2012	Gujarati	Divya Bhaskar, Surat
3.	1st May 2012	Gujarati	Vartman Pravah, Daman
4.	1st May 2012	English	Free Press Journal, Mumbai

The Commission revised the date, time and venue of the above public hearings and included the petition on the proposed solar power purchase by Electricity Department, Daman & Diu from M/S Waaree Energie (P) Ltd. (petition no. 72/2012) with the earlier mentioned subjects i.e. approval of Aggregate Revenue Requirement (ARR), tariff and Fuel & Power Purchase Cost Adjustment (FPPCA) for FY 2012-13 (petition no 63/2012). The combined hearing on the two petitions was held on 15th May 2012 and 17th May 2012.

Table 1.8.3 : Details of revised public notices published by Commission

S.No.	Date	Language	Name of Newspaper
1.	8thMay 2012	Hindi	Savera India Times, Daman
2.	8thMay 2012	Gujarati	Divya Bhaskar, Surat
3.	8thMay 2012	Gujarati	Vartman Pravah, Daman
4.	8thMay 2012	English	Free Press Journal, Mumbai

Table 1.8.4 : Revised Schedule of Public hearing at Daman and Diu

S.No.	Date & Time	Venue of Hearing	Subject
1.	15th May 2012	Swami Vivekananda	Proposed Solar Power Purchase from a 5 MW

S.No.	Date & Time	Venue of Hearing	Subject
	10 am onwards for all category of consumers	Hall, Nani, Daman	Power Plant being set up by M/S Waaree Energies Pvt. Ltd by Electricity Department, UT of Daman & Diu (ED-DD) @ Rs 14.39 / Kwh (petition no 72/2012) ARR & Tariff Proposal as per Petition 63/2012 for FY 2012-13 and Fuel & Purchase Power Cost Adjustment, Road Map for Tariff Rationalization, Previous Year Review of FY 2011-12 & True Up for FY 2010-11
2.	17th May 2012 10 am onwards for all category of consumers	Community Hall, Ashok Nagar Colony, Near Sidhi Vinayak Temple Ghoghla, Diu	Proposed Solar Power Purchase from a 5 MW Power Plant being set up by M/S Waaree Energies Pvt. Ltd by Electricity Department, UT of Daman & Diu (ED-DD) @ Rs 14.39 / Kwh (petition no 72/2012) ARR & Tariff Proposal as per Petition 63/2012 for FY 2012-13 and Fuel & Purchase Power Cost Adjustment, Road Map for Tariff Rationalization, Previous Year Review of FY 2011-12 and true-up for FY 2010-11

In accordance with the directions given by the Hon'ble Aptel in the judgment on the matter of appeal no. 35 of 2011, the Commission conducted the public hearing in respect of the re-determination of tariff for FY 2011-12 at Diu and Daman on August 17' 2012 and August 21' 2012 respectively. The analysis of the re-determination of the tariff for FY 2011-12 is elaborated in Chapter 3 and Chapter 5 of this order.

The public notices in respect of this for intimation to all stakeholders were published in the following newspapers on August 8' and August 20' 2012.

Table 1.8.5 : Details of public notices published by Commission in respect of the re-determination of tariff for FY 2011-12

S.No.	Date	Language	Name of Newspaper
1.	8th August 2012, 20th August 2012	Hindi	Savera India Times, Daman & Diu
2.	8th August 2012,	Gujarati	Divya Bhaskar, Rajkot edition (circulated in

S.No.	Date	Language	Name of Newspaper
	21^{st} August 2012		Diu)
3.	8^{th} August 2012, 20^{th} August 2012	Gujarati	Vartaman Pravah, Daman & Diu
4.	8^{th} August 2012, 20^{th} August 2012	Gujarati	Daman Ganga Times, Vapi
5.	8^{th} August 2012, 20^{th} August 2012	English	Free Press Journal, Mumbai

Table 1.8.6 : Schedule of Public hearing at Diu and Daman on 17^{th} and 21^{st} August 2012

S.No.	Date & Time	Venue of Hearing	Subject
1.	17^{th} August 2012 10 am onwards for all category of consumers	Community Hall, Ashok Nagar Colony, Near Sidhi Vinayak Temple Ghoghla, Diu	In respect of the judgment issued by the Hon'ble Aptel vide order dated May 25' 2012 against the Commission's order dated 03.10.2011 and 04.11.2011 - Re-determination of tariff - Issue of shifting of existing HT consumers to higher voltage as a consequence of the impugned order and decide the matter after hearing all concerned and considering cost benefit analysis of such transfer - Re-consider the provision of bad debts after the audited accounts are submitted by the Appellant in the truing up in terms of JERC Regulations
2.	21^{st} August 2012 12 pm onwards for all category of consumers	Swami Vivekananda Hall, Nani, Daman	

The copies of public notice published by the Commission for intimation of public hearing(s) are attached as **Annexure 10** 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 at **Annexure 11** 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 and Chapter 5 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 ARR & Tariff for FY 2012-13, Review for FY 2011-12 and True-up for FY 2010-11 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 2012-13 to the Commission on November 30' 2011 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. In accordance with the directions given by the Commission vide Order dated January 20' 2012, ED-DD had submitted its true-up petition for FY 2010-11 and Review of FY 2011-12 along with the provisional audited accounts for FY 2010-11 as per the letter dated February 13' 2012.

As discussed at Para 1.5 of Chapter 1, after initial scrutiny & analysis of the additional information as stated during the admission hearing in respect of ARR and Tariff Petition filed by ED- DD for FY 2012-13, submitted by the Petitioner; the petition was admitted subject to removal of infirmities to the extent possible. The Commission has taken the petition bearing no. 63/2012 on record.

2.2 Summary of the Petition for ARR for FY 2012-13, Review for FY 2011-12 and True-up for FY 2010-11

The Petitioner has submitted the ARR & tariff petition for FY 2012-13 based on the actual performance during FY 2010-11, FY 2011-12 (upto September 2011) with supporting rationales. Based on the estimates and projections for FY 2012-13, the ARR for ED-DD for FY 2012-13 has been proposed at Rs. 825.46 Crores. The brief summary of the proposal is presented below:

Table 2.2.1 : Brief Summary of ARR for FY 2012-13, Review of FY 2011-12 and True-up of FY 2010-11 submitted by the petitioner (Rs. in Crores)

Sr. No.	Particulars	True-Up FY 2010-11 (13th Feb 2012 submission)	Revised Estimates FY 2011-12 (30th Nov 2011 submission)	Petitioner Submission FY 2012-13 (30th Nov 2011 submission)
1	Power Purchase Cost	570.94	679.15	785.76
2	O&M Expense	8.61	13.84	14.73
3	Depreciation	12.12	15.13	16.76
4	Interest Cost on Long-term Capital Loans	21.07	-	1.64
5	Interest on Working Capital Loans	5.67	8.52	9.84
6	Return on Equity	12.30	-	0.80
7	Provision for Bad Debt	0.49	6.84	5.81
8	Less: Non-Tariff Income	8.72	9.41	9.88
9	**Annual Revenue Requirement**	**622.48**	**714.07**	**825.46**
10	Revenue @ Existing Tariff	518.36	683.99*	580.79**
11	Revenue from Surplus Power Sale	46.43	38.83	27.46
12	**Total Revenue**	**564.79**	**722.82**	**608.24**
13	**Revenue (Gap) /Surplus**	**(57.69)**	**8.75**	**(217.22)**
	Covered by			
14	Additional Revenue @ Proposed Tariff	-	0.00	217.50
15	Total	-	0.00	217.50
16	**Net (Gap)/ Surplus**	**(57.69)**	**8.75**	**0.28**

The Petitioner has revised the estimates for FY 2011-12 for certain components of the ARR in the submission dated February 13' 2012 and has submitted the actual data for 9 months in respect of the sales, power purchase, O&M expenses, capital expenditure and non tariff income from April 2011 to December 2011 as per the February 13' 2012 submission. Further major components of FY 11-12 including sales and power purchase cost which submitted by the petitioner vide its submission dated August 9 ' 2012 show substantial increase more than 20% over the figures submitted in the petition.

2.3 Summary of the Tariff Proposal for FY 2012-13

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 ED-DD. Further, the average cost of supply has also increased over the past year due to increase in power purchase cost. Therefore, the Petitioner submits that the current Tariff structure is inadequate to compensate for the loss of revenue. Further the petitioner has proposed a new slab under domestic category '600 & above' with the tariff rate of Rs 3.00/unit as against the existing tariff rate of Rs 3.25/unit.

The Petitioner has requested the Commission to review the tariff fixed for the consumer categories – Domestic and BPL. The Petitioner has submitted that

Quote

'' .. the Commission is requested to review the tariff fixed for these two consumer category (Domestic and BPL) in the previous tariff order and restore it to the previous level.''

Unquote

The Petitioner has also requested to exclude the domestic, LIG and the agriculture consumers from the FPPCA formula.

Table 2.3.1 : Summary of Tariff Proposal for FY 2012-13 submitted by the petitioner

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

Tariff Structure	Existing		Proposed		
Consumer Category	**Energy Charges (Rs/kWh)**	**Fixed Charges**	**Energy Charges ((Rs/kWh)**	**Fixed Charges**	
Public Lighting	3.32		3.32		
HT					
HTC General Industrial / Motive Power 11KV or 66KV having CMD above 100KVA					
50000 units	2.95	Rs. 60 /KVA	4.21	Rs.120 / KVA	For connected load >500KVA, Rs.500/KVA
50000 to 5 lakh units	3.10	Rs. 60 /KVA	4.36	Rs.120 /KVA	
Beyond 5 lakh units	3.15	Rs. 60 /KVA	4.41	Rs. 120 /KVA	
Penal Charges for exceeding contracted demand	8.00	Rs. 180/KVA	8.00	Rs. 360/KVA	Beyond 500 KVA Rs. 1500/KVA
HT Industrial(Ferro Metallurgical / Steel Melting/ Steel Rerolling Power Intensive)					
First 300 Units per KVA	2.05	Rs. 450/KVA	3.31	Rs. 600/KVA	
Next 200 units per KVA	3.05	Rs. 450/KVA	4.31	Rs. 600/KVA	
Above 500 units per KVA	3.55	Rs. 450/KVA	4.81	Rs. 600/KVA	
Penal Charges for exceeding contracted demand	8.00	Rs. 900/KVA	8.00	Rs. 900/KVA	
Temporary Supply					
	Fixed / Demand charges (if any) plus energy charges (for relevant slab if any) under corresponding permanent supply category plus 50% of both				

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

2.4 Prayer to the Commission

The petitioner respectfully prays that the Commission may:

"

- Admit the Aggregate Revenue Requirement of FY 2012-13 and the tariff revision proposal for FY 2012-13 as submitted herewith
- Approve the revised estimates for FY 2011-12
- Make the proposed Retail Supply Tariffs applicable from April 1' 2012
- Condone any inadvertent omissions/ errors/ shortcomings and permit the Petitioner to add/ change/ modify/ alter this filing and make further submissions as may be required at a future date
- The Petitioner would 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 "

3. Approach of the Order for re-determination of tariff for FY 2011-12 and determination of ARR & Tariff for FY 2012-13, Review for FY 2011-12 and Provisional True-up for FY 2010-11

3.1 Introduction

The Petitioner has submitted the ARR & tariff petition for FY 2012-13 comprising of the revised estimates for FY 2011-12 based on the actual data of first six months and the true-up petition for FY 2010-11 and review for FY 2011-12 (till December 2011) as per the submission dated February 13' 2012. The Petitioner has submitted the audited accounts for FY 2010-11 as the basis for the true-up of FY 2010-11. The actuals of FY 2010-11 and the actual available data of FY 2011-12 form the basis of projection for FY 2012-13.

3.2 Directions given in the Judgment(s) issued by Hon'ble APTEL on ARR and tariff order for FY 2011-12

Directions issued by Hon'ble APTEL in judgment in the matter of Appeal no. 169 of 2011 and Appeal No. 35/2012 have been complied by the Commission:

1. **Appeal no. 169 of 2011** – Daman Industries Association Versus Electricity Department of Daman & Diu and Joint Electricity Regulatory Commission (Respondent No. 1 and 2 respectively) was disposed of by the judgment dated February 29'2012 wherein the Hon'ble APTEL decided the following:

   Quote

   '' *13. Our findings are summarized as under:*

   (i) In view of the provisions of the 2003 Act, Tariff Policy, Tariff Regulations and findings of the Tribunal in OP 1 of 2011 and other judgments, there is no illegality in the Joint Commission permitting the Electricity Department (R-1) to compute the Power Purchase Cost Adjustment according to the formula and conditions specified by the Joint Commission and recover the same from the consumers. Computation of PPCA is only by mechanical application of the formula. The authority given to the distribution licensee is not absolute without any regulatory control of the Commission. The final Power Purchase Cost to be allowed to the distribution licensee is subject to prudence check at the true up stage by the Joint Commission.

   (ii) The formula specified by the Joint Commission in the impugned order is set aside as it is inconsistent with the conditions specified therein and the Tariff Regulations. However, we have given some directions to the Joint Commission in paragraph 10.6 above in regard to allowing the Power Purchase Cost Adjustment to the respondent no. 1.

(iii) The third issue regarding retrospective increase in tariff due to PPCA does not survive in view of our findings in (ii) above.

(iv)There is no reason for us to interfere in the findings of the Joint Commission with regard to Transmission & Distribution losses. ''

Unquote

2. **Appeal no. 35 of 2012** – Electricity Department, Daman Versus Joint Electricity Regulatory Commission for UT and state of Goa. The above appeal were disposed of vide Judgment dated May 25'2012. The Hon'ble APTEL's findings are summarized below:

Quote

"34. Our findings are summarized as under:

i) Regarding tariff shock to domestic and agriculture consumers, the findings of the Tribunal in its judgment dated 28.2.2012 in Appeal no.159 of 2011 will squarely apply to the present case. Accordingly, we set aside the impugned order and remand the matter to the Joint Commission for re-determination of tariff.

ii) The Power Purchase Cost Adjustment formula has already been set aside by this Tribunal in its judgment dated 29.02.2012 in Appeal no.169 of 2011 in the case of Daman Industries Association Vs. Electricity Department of Daman & Diu and Another with direction to the Joint Commission to re-determine the formula afresh. Accordingly, this issue does not survive.

iii) Regarding supply voltage for HT consumers, we direct the Joint Commission to consider the issue of shifting of the existing consumers to higher voltage as a consequence of the impugned order and decide the matter after hearing all concerned and considering cost benefit analysis of such transfer. Accordingly, this matter is remanded back to the Joint Commission.

iv) According to Regulation 28, the Joint Commission may after considering the audited account for receivables allow bad and doubtful debts upto 1% of receivables. The receivables here refer to the total receivables and not outstanding arrears. However, providing 1% for bad debts in the ARR is not binding on the Joint Commission. The Appellant has also not indicated if the audited accounts were submitted to the Joint Commission. Accordingly, we do not want to interfere with the findings of the Joint Commission in this regard. However, the Joint Commission may reconsider the provision of bad debts after the audited accounts are submitted by the Appellant in the Truing up.''

Unquote

As may be seen from the above, the Hon'ble APTEL through the above judgments has

1) Remanded back the impugned Order for FY 2011-12 with the direction to re-determine the tariff for domestic and agriculture categories,

2) Directed the Commission to decide the PPCA for FY 2011-12 and consequential modification in retail supply tariff after hearing the concerned parties and specify the correct formula for future

3) Directed the Commission to consider the issue of shifting of the existing consumers to higher voltage after hearing all the concerned parties and after considering the cost benefit analysis of such transfer.

4) Suggested that the Joint Commission may reconsider the provision of the bad debts after the audited accounts are submitted by the Appelant in the True up

The Commission, in compliance to the directions of the Hon'ble APTEL has determined the Tariff for FY 2011-12 for Domestic, Agriculture, LIG categories; issued new FPPCA formula in-line with the JERC Regulations. The Commission has complied with the directions issued by Hon'ble APTEL while scrutinizing the true-up petition for FY 2010-11, Review of ARR for FY 2011-12 and ARR & determination of tariff for FY 2012-13.

As regards to the FPPCA formula the Commission has already issued the new FPPCA formula after due consultation with the stakeholders and petitioners.

3.3 Approach for Provisional True-up of FY 2010-11 and Review of FY 2011-12

The Petitioner has requested for the True-up of FY 2010-11 and review of the ARR for FY 2011-12 which was determined earlier by the Commission in its order for FY 2011-12 dated October 3 '2011. The True-up of FY 2010-11 and Review of ARR for FY 2011-12 are to be carried out as per the provisions of regulation 8 of JERC Tariff Regulations, 2009, which is as under:

Quote

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

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

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

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

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

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

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

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

Unquote

In view of the above, the Commission has reviewed the variations between approvals and actuals of sale of electricity, income and expenditure for FY 2010-11 and also the revised estimates/actuals for sale of electricity, income and expenditure for FY 2011-12 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 6 (Provisional True-Up of ARR for FY 2010-11) and Chapter 7 (Review of ARR for FY 2011-12) of this Order.

In compliance with judgment of Hon'ble APTEL in the matter of Appeal no 169 of 2011 dated February 29' 2012 and the public hearing held over Fuel Surcharge on May 15' 2012 & May 17'2012, as discussed in Chapter 5 of this order, PPCA for FY 2011-12 has been treated on actual basis as collected & adjusted due to the increase in Power Purchase cost for all categories except BPL and Agriculture.

3.4 Approach for Determination of ARR & Retail Tariff for FY 2012-13

In the determination of ARR & tariff for FY 2012-13, 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, self-generation 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 considered the figures of income & expenditure submitted by the Petitioner in the audited accounts for FY 2010-11 and provisional figures for FY 2011-12 to form the basis of projection for income and expenditure for FY 2012-13. Further, the Commission has relied on the actual data of FY 2010-11 and FY 2011-12 provided by the Petitioner during technical validation sessions held after the submission of the petition. The detailed analysis & treatment of each component is provided in Chapter 8 (Aggregate Revenue Requirement for FY 2012-13) of this Order.

3.5 Approach for Determination of Retail Tariff for FY 2012-13

The Commission in determining the aggregate revenue requirement and retail supply tariff for the financial year 2012-13 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 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. As per Notification no. 23/1/2008-R&R (Vol-IV) issued by Ministry of Power, Government of India on the opinion from Ministry of Law & Justice on the Operationalization of Open Access in Power Sector, M/o Law & Justice in consultation with Ld. Attorney General of India has opined that all 1 MW and above consumers are deemed to be open access consumers and the regulator has no jurisdiction for fixing the electricity tariff for them.

Accordingly, the relationship between the 'subsidizing' consumers and the 'subsidized' consumers must be seen in the emerging situation of the 'Open Access' and its implications for all consumers, the licensee, the tariff determination process and the 'subsidized' consumers.

Consumers consuming more than 1 MW of electricity be subject to open access process i.e. they will be free to determine their tariff with the supplier of electricity and their tariff not be determined by the appropriate Commission. In such an eventuality, next year or thereafter, approximately 94 % of the 'subsidizing' consumers of DD may not contribute to the ARR to the extent they are doing now. Therefore the 'subsidized' consumers have to stand on their own and move towards paying for the cost of supplying electricity to them to meet the average cost of supply obligations of the licensee. The wheeling charges, cross subsidy surcharge etc. may or may not provide the financial resources to maintain the existing level of cross-subsidy.

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 should move progressively towards reducing the cross subsidy in such a manner that:

a. Subsidizing class is able to economically, financially and commercially able to sustain the cross subsidy

b. The subsidized class do not become too much dependent on the cross subsidy by the subsidizing class especially in the context of the open access.

When open access is implemented, the subsidizing class will progressively move out of the purview of the tariff determination by the Commission, which means the shrinking of the subsidizing class, which was subsidizing the revenue. The wheeling charge, cross subsidy surcharge etc. fixed by the Commission will bridge this gap but to what extent cannot be determined or forecasted today.

Therefore, the retail consumer in general will have to be mentally prepared to progressively pay a tariff close to average cost of supply of power over a period of time.

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

4.1 Public response to the Petition

Before admission of the ARR & Tariff Petition for the FY 2012-13, the Petitioner had published the summary of ARR and Tariff proposal in the newspapers and the copies of the petition made available to the general public, posted the petition on their website duly inviting comments/objections from public as per provision of the JERC (Conduct of Business) regulations 2009. The objections raised during the public hearing conducted on Daman and Diu on 21st August and 17th August 2012 respectively in respect of the re-determination of tariff for FY 2011-12 (compliance of the judgment in the matter of appeal no. 35/2012) have been dealt in Chapter 5 of this order.

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 Vijay Mishra has submitted that the quality of power in the UT has improved as compared to the past. The plan fund given by the central government should be used judiciously for the betterment of the ED-DD infrastructure.
2. Diu Jilla Nagrik Samiti and Diu District Chamber of Commerce have submitted that the corruption in the department has led to the department moving from a profit- making enterprise to one that has gone bankrupt. The unchecked irregularities in the department are responsible for this state of affairs and the general public is being made to pay a price for this. The stakeholder requests the Commission to go into the roots of the problem and play an active role in controlling unchecked irregularities of the department.
3. Daman Municipal Council has submitted that a specific wing in the Electricity Department should be set up to process the RTI applications and ED-DD should give the reason and fact for the revenue loss reported in the Department during the last four years.

Petitioner's submission:

The Petitioner has submitted that it has made note of the stakeholder's submission.

Commission's views:

The Commission has taken note of the objection of the stakeholders and the Petitioner's response. As regards the quality of supply, the Commission appreciates the stakeholder observation that the quality of supply has improved, however it has also noted the grievances of the other stakeholders. The Commission has notified the JERC (Standards of Performance) Regulation, 2009, wherein the Guaranteed and overall standard of performance to assure quality of supply as 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 the year FY 2011-12 within one month from the issue of this order. Further, the licensee should ensure timely submission of the information as per the requirement laid down in the JERC (Standards of Performance) Regulation, 2009.**

Redressal of consumers' complaints and grievances is an important function and responsibility of the distribution licensee, therefore ED-DD must pay due attention to it. The Commission has put in place an appropriate mechanism for redressal of consumer grievances. Consumer Grievance Redressal Forums (CGRF) is functioning at various levels. Besides that, an Ombudsman is also functional at the JERC office. ED-DD need to give due publicity to the said Forum and its redressal mechanism so that general public is made aware of the same. ED-DD should work towards the goal of greater consumer satisfaction, adopt a pro-active approach and settle consumers' complaints in a professional, time bound manner and should make themselves available whenever need be. The Commission directs ED-DD to create awareness among the consumers on the standards of performance notified by the Commission, and directs the Department to make arrangements to publish the Standard of Performance/Salient features of Supply Code and Distribution Code in all leading newspapers and in the vernacular in simple language understandable to a general consumer.

PART 2: ARR related

4.2.2 T&D Losses

Stakeholders Objections/Comments:

The points raised by Shri Vishal Tandel, (Pradesh Congress President), Shri Manojbhai Naik (President and Councillor), Shri Umesh Patel, Shri Vasubhai Patel (Pradesh, Mahamantri, BJP), Shri Lalubhai B. Patel (Member of Parliament, Lok Sabha, Daman & Diu), Daman Municipal Council in brief are as under:

The stakeholders submitted that the line losses in Daman & Diu are 12% whereas the same are 6-7% in Dadra and Nagar Haveli, and submitted that the line losses should be brought down. The stakeholders have submitted that this as a serious issue that needs urgent consideration by the utility. They have also submitted that the T&D losses of ED-DD are high even after the underground wiring done by the utility. Dedicated feeders above 2500 kVA should be installed to reduce the line losses. Revenue savings should be done by reducing the line losses.

Petitioner's submission:

The Petitioner has submitted that the T&D losses in ED-DD are one of the lowest in the country. Further, the Petitioner has submitted that the Petitioner has been taking various steps to bring down the T&D losses so as to keep them within the level approved by the Hon'ble Commission. The Petitioner has also submitted that it is quite difficult to reduce losses by more than 0.25% p.a. due to low base loss level of 9.95% estimated for FY 2011-12. 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 views:

The petitioner submitted that they are taking all steps to reduce T&D losses in the ARR and tariff Petition. However, they should undertake an energy audit of their area, as it is the basis of assessment of present loss level and reduction in it. Commission, therefore, directs the petitioner to furnish the assessment of T&D loss level of entire system and segregation of losses into technical and commercial heads in their next ARR & Tariff petition along with a status report on energy accounting and T&D losses. The Commission has taken an appropriate view in light of the capital investment proposed by the Petitioner and the plausible reduction trajectory of the T&D losses.

4.2.3 FPPCA Recovery

Stakeholders Objections/Comments:

The points raised by Miss Prachi Aggarwal, Shri K C Parekh, Shri Anand Goyal, Shri Vasubhai Patel, Diu District Ice Factory Association in brief are as under:

1. Some of the stakeholders submitted that the industrial consumers were ready to bear the surcharge arising out of the increase in the fuel price. On the other hand, some objected saying that the payment of FPPCA charge by the HT industrial consumers was affecting the costing of the industries.
2. Miss Prachi Aggarwal submitted that HT industrial consumers had to pay the arrears for the past period which was affecting the costing of the company and as a result the industrial consumers had to incur losses.
3. Shri Vasubhai Patel submitted that the fuel surcharge should not be recovered from the common man
4. Diu District Ice Factory Association has submitted that the burden of the PPCA charge of the Domestic consumers of Diu District should not be imposed on the shoulders of Diu Ice Factories. The stakeholder has submitted that the business of ice factories is involved with the fishing business exclusively and should be charged at the tariff rates of the agriculture category. Being a seasonal industry, the burden of the recovery of the FPPCA from the domestic consumers of Diu should not fall on the Diu Ice Factory Association.
5. Daman & Diu Territorial Congress Committee representative Shri Vishal Tandel has submitted that the PPCA imposed on the LT commercial category should be withdrawn and no future rate increase be made for this sector. The stakeholder submits that the consumers in this category are small shop owners and restaurants and they would not be able to survive the rate increase on account of the fuel surcharge.
6. Daman Municipal Council has submitted that the PPCA charges on the domestic, commercial and agriculture categories should be removed forever.

Petitioner's submission:

The Petitioner has submitted that that the arrears of the past period have not been billed to the industrial consumers, but only the incremental cost arising due to the increase in the fuel price have been passed on to the consumers in the form of FPPCA charges. The FPPCA charges are based on the FPPPA formula approved by the Hon'ble Commission in its Tariff Order dated 3rd October, 2011.

The Petitioner has further submitted that the price of fuel has risen substantially in the recent past and as a result of which the power purchase cost has gone up. The incremental cost arising due to the increase in the fuel price has been passed on to the consumers in the form of FPPCA charges, based on the FPPCA formula approved by the Hon'ble Commission in its Tariff Order dated 3rd October, 2011.

Commission's views:

The Fuel Cost Adjustment (FCA) provided in the regulations allows the licensee only to recover the fuel cost adjustment. The Appellate Tribunal for Electricity in its Judgment dated 11 November 2011, in the matter of OP no. 1 of 2011 has advised all State Electricity Regulatory Commissions to put in place a mechanism for Fuel & Power Purchase cost adjustment preferably on a monthly basis but in no case exceeding a quarter. Sub-section (4) of section 64 of the Electricity Act 2003 provides that, no tariff or part of any tariff may ordinarily be amended more frequently than once in any financial year, except in respect of any changes expressly permitted under the terms of any fuel surcharge formula, as may be specified. Accordingly it is stated that the recovery of Fuel and power purchase cost adjustment is legitimate and is in accordance with the Electricity Act, 2003. The Commission after much deliberation and public participation has also issued the new FPPCA formula for recovery of such variation beyond April 2012. The Commission has also specified the exempted categories in the said formula.

4.2.4 Power Purchase

Stakeholders Objections/Comments:

The points raised by Shri Satishbhai Modasia, Shri Bakul Desai, Shri Vasubhai Patel in brief are as under:

1. The Petitioner is purchasing power at a higher price and further it is purchasing more power to cater to the needs of the industrial consumers

2. The stakeholders have suggested that electricity should be produced at lower rates, from sources such as hydro generation stations and accordingly the hike in tariff should be less

3. ED-DD should make efforts to produce its own electricity

Petitioner's submission:

The Petitioner has submitted that power to ED-DD is allocated by the Ministry of Power, Government of India, and the tariff of such power is determined by the Central Electricity Authority of India and therefore, ED-DD has no role in the pricing of its power purchases. ED-DD does not have their own generation plants so it has to depend solely on the allocation of power or bilateral agreement with other PSUs. The Petitioner submitted that regarding own-generation/self-generation, it has taken note of the stakeholders' suggestion.

Commission's views:

The Commission has carefully analyzed the power procurement of the Petitioner. Further data and information in this regard had been sought during the technical validation sessions with the licensee. The Commission has dealt with this issue in the chapter on ARR determination for FY 2011-12 and FY 2012-13.

The Commission directs the Petitioner 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 assess the load requirements in their area at various periods at the time of day, month/seasons and submit the outcome of the study to the Commission in their future ARR & Tariff Petitions. The Commission also directs the Petitioner to make long term PPA to meet their base load requirement to avoid/minimize short term Power purchases from Power exchanges and U.I. not 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 to 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. The availability of the power purchase cost summary sheets on website will provide authentic information to the stakeholder and avoid criticism.

The petitioner is also required to furnish the power purchase agreement and the price discovery process adopted by the Petitioner to ensure that the rate of purchase of power especially from short term and solar energy is reasonable at the true-up stage in order to substantiate their claims. The

PART 3: Tariff related

4.2.5 General Comments

Stakeholders Objections/Comments:

The points raised by Shri Vishal Tandel, Shri Navin Patel, Shri Manojbhai Naik, Shri Umesh Patel, Shri Lalubhai B. Patel (Member of Parliament, Lok Sabha, Daman & Diu), Shri Gopal Tandel, Shri Ketan D. Patel (President-cum Chief Councillor, District Panchayat, Daman), Shri Nawal Bansal (Daman Steel Association), Ramji D. Chavda (Vice Sarpanch, Saudwadi Village Panchayat), Shri Diu Jilla Nagrik Samiti, Diu District Chamber of Commerce, Daman Industries Association, Daman Municipal Council in brief are as under:

i. The stakeholders have submitted that the tariff for the domestic and agriculture categories should be reduced; the domestic and agriculture consumers of ED-DD form only 4% of the total consumer mix of the utility, and accordingly the tariff for these categories should be less. Some of the stakeholders also suggested that agriculture category should be supplied electricity free of cost, others suggested that these categories should be subsidized.

ii. The ice factory should not come under the HT industries

iii. Daman Steel Association has submitted that the fixed charges for the HT industries (Ferro) are very high and should be brought at par with the other HT industries

iv. Saudwadi Village Panchayat has submitted that the tariff for the street lights, specifically Village Panchayat Street Light bills should be kept at the existing level of Rs 1.20/unit. The stakeholder submits that the street light is being used for public purposes only to give better and more comfortable lives to the villagers.

v. The tariff for the LT industries should be set keeping in mind that the industries are the backbone of the territory and this category should be viewed sympathetically and not at par with the HT industries

vi. Daman Industries Association has welcomed the introduction of night tariff for the industries as per the proposal of the Petitioner and same would be considered after due modalities by the Commission Rebate on fixed charges should be introduced for night tariff on the pro-rata basis for proposed eight hours. The stakeholder has submitted that the revision in tariff should not be from a retrospective date and should be divided in the remaining period after passing tariff order so that industries can add the revised cost of electricity in their costing as industries does not have any mechanism to recover the cost charge by EDD from retrospective effect.

vii. Daman Industries Association representing the industrial consumers of LT-P, LT-C, HT-GENERAL & HT-C FERROW has submitted that the proposed tariff by ED-DD for FY 2012-13 is very high for these categories and unrealistic, so humbly requests the Commission

Quote

viii. ‘’ to increase the tariff in most reasonable way by safeguarding consumer interests.’’
Unquote

Petitioner’s submission:

The Petitioner has submitted that it has not proposed any hike in tariff for the domestic and the agriculture consumer categories. It has proposed to bring the tariff rates in these two consumer categories down to the earlier level.

The Petitioner as regards the categorization of the consumers in various categories has submitted that ED-DD has to implement the tariff schedule as approved by the Commission and this is the sole prerogative of the Commission. The Petitioner has further submitted that the tariff for the agriculture category of consumers is proposed lesser against the estimated average cost of supply for FY 2012-13, considering the total quantum of agricultural consumption in the UT of Daman & Diu.

Commission’s views:

Regarding cross-subsidy, Clause 8.3 of Tariff Policy states “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 a transparent manner. As a substitute of cross subsidies, the State Govt. has the option of raising resources through mechanism of electricity duty and giving that subsidy to only needy consumers. This is a better way of targeting subsidies effectively”.

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 level 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***

Further the relevant extract of the Electricity Act 2003, Section 61 g as amended on May 28, 2007 is reproduced below for ready reference:

Quote "that the tariff progressively reflects the cost of supply of electricity and also reduce cross subsidies in the manner specified by the Appropriate Commission." **Unquote**

In line with the above provision of the Tariff Policy any consumer desirous of getting subsidized tariff should approach the State Govt. and if the request for subsidy is found justified, the State Govt. may give subsidy to that class of consumers under Section 65 of the Electricity Act, 2003 so that these consumers get electricity at concessional tariff.

The Commission is of the view that it would be ideal to fix electricity tariff for all consumers on cost to serve basis. But considering that historically, there has been extensive cross subsidization in electricity sector, it would take time to bring about a regime with no cross subsidy. Efforts are being made by the Commission to reduce cross subsides. Further, as per the Tariff Policy and Regulations, the tariff of domestic, agriculture and commercial consumers should match the cost of supply in 5 years so as to reduce the cross subsidies between the consumer categories. In view of the above, the petitioner is directed:

a. To propose a road map of achieving the tariff which can bridge 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 2013-14, 2014-15 and 2015-16; a review thereafter and further reduction during 2016-17 and 2017-18.

b. To propose a surcharge mechanism for recovering the marginal cost of power purchased during the peak hours to maintain uninterrupted power supply to the continuous process industry & others. The petitioner should clearly bring out the definition of continuous process industry, the criteria for recovery of such marginal cost, the treatment of under-drawl/over–drawl by a consumer during peak hours and the sharing of cost /savings, if any, (between the licensee and the different categories of consumers).

The Commission has taken a prudent view to assess the reasonableness of cost projected for ARR of FY 2012-13 as per the tariff regulations and thereafter decided the tariff which has been discussed in detail in relevant sections of this order.

4.2.6 Actions to be taken by ED-DD

The Commission during the above Public Hearing(s) on 15th and 17th May directed ED-DD for the following actions to be undertaken by Department urgently.

a. Option for "Open access" to be given to all the Consumers having 1MW and above, to get their consent, as to how would these Customers wish to source their Electric Power requirements. A complete list of Such Customers ($1MW^+$) is required by the Commission.

b. Action taken in regard to Indexing of all the customers with 1 MW & above on a Global Information System (GIS) be indicated.

   For handling purchase of expensive power during peak hours/power shortages, commercial mechanism needs to be developed and announced for public suggestions before implementation. Consumers under Continuous Industry and Non Continuous Industry (defining these Industry segments clearly) should be clearly defined

   i. Roaster of Load Shedding during Shortage of Power.
   ii. Penalty / Compensation to ED-DD by the Industry Customer needing Uninterrupted Power & ED-DD having arranged the same for them, and finally the individual Consumer not utilizing the same.

c. Time frame of installation of Three Meters on the dedicated feeders for the Industry Consumers. The Commission had also directed the location of these meters to be at the Substation (at outgoing feeder, inside and outside the premises of such consumer). The reconciliation of such meter readings to be weekly or monthly and review on quarterly basis.

d. Action to be taken by ED-DD in regard to keeping separate accounts for Daman & Diu to assess T&D loss separately.

4.2.7 Undertaking from Daman Industry Association regarding exclusion of domestic category from FPPCA charges

During the public hearing held at Daman on May 15’ 2012, Daman Industries Association had given a verbal undertaking stating that the PPCA charges for the domestic consumers in Daman & Diu will be borne by the HT consumers of Daman.

The Commission accordingly asked Electricity Department, Daman & Diu to submit the resolution as stated by the Daman Industries Association during the public hearing in the form of an affidavit. Electricity Department, Daman & Diu vide affidavit dated May 25’ 2012 submitted the resolution of the Daman Industries Association alongwith the letter received from the President, Daman Industries Association to the ED-DD stating that the resolution was in favour of the domestic consumers.

The contents of the said resolution of the Daman Industries Association is as below –

‘’ A meeting of HT Consumer had been called alongwith the 2nd Exe. Committee Meeting held on 9th May 2012 to discuss regarding bearing of FPPCA charges for the year 2012-2013 on domestic consumer. The above point was discussed and debated in detailed by the Members present in the Meeting and it was resolved that in the larger interest of industries and social responsibility towards territory it was unanimously decided that the FPPCA charges for the year 2012-2013 on domestic consumers in Daman will be borne by the HT Consumers.’’

The resolution above states that the FPPCA charges for the domestic consumers in Daman & Diu for FY 2012-13 will be borne by the HT consumers of Daman.

Commission’s View:

Keeping in view the consumption pattern of the ED-DD and the submission made by the industry association in view; and the support of the licensee to this arrangement the Commission has no objections, if one class of consumer wants to voluntarily subsidize the other class of consumers.

RE-DETERMINATION
of
TARIFF
for
FY 2011-12

(Petition no. 33/2011)

Tariff for FY 2011-12 is re-determined in compliance with the following judgments of Hon'ble APTEL:

1. *Appeal No. 35 of 2012 –Electricity Department, Daman Versus Joint Electricity Regulatory Commission was disposed of by the judgment dated May 25' 2012*
2. *Appeal No. 169 of 2011- Daman Industries Association, Daman versus Electricity Department of Daman & Diu and Joint Electricity Regulatory Commission, disposed of by the judgment dated February 29' 2012*

5. Re-determination of tariff for FY 2011-12

5.1 Background

The petition for approval of Aggregate Revenue Requirement (ARR) and determination of tariff for FY 2011-12 was taken on record and numbered as petition 33/2011. The said petition was disposed of by the Commission through the order dated October 3' 2011 approving ARR and determining tariff for the various consumer categories. In the same order, the Commission had also provided a formula for periodic adjustment of power purchase cost.

Aggrieved by certain provisions of the Commission's above order dated October 3'2011, Daman Industries Association and Electricity Department, Daman & Diu have filed appeal no 169 of 2011 and appeal no 35 of 2012 respectively before the Appellate Tribunal. The appeals and the Hon'ble APTEL findings are summarized in para 3.2 of this order. In accordance with the directions given by the Hon'ble Aptel in the judgment on the matter of appeal no. 35 of 2012, the Commission conducted the public hearing as detailed at para 1.8 of this order. The comments, objections and suggestions of the stakeholders during the hearing process have been summarized in para 5.2 along with Commission's view.

In this redetermination, as per the data submitted by the Petitioner basis the actuals of power purchase cost and revenue figures, there is a gap of Rs 116.99 Crore in ARR i.e. an increase in tariff of 13.92% would be required for FY 2011-12 which is not possible as the entire tariff cannot be re-determined retrospectively. Thus at the time of redetermination, a gap of Rs 14.84 Crores estimated in the tariff order of FY 2011-12 dated October 3' 2011, has increased to Rs 77.82 Crore, i.e. to almost four times as approved by the Commission in Chapter 7 of this order.

5.2 Objections/Suggestions and Commission's views on petition no. 33/2011

5.2.1 Public Comments/Suggestions:

The main points raised by the stakeholders during the public hearing on 17th August and 21st August 2012 on petition no. 33/2011 in Daman & Diu in brief are as under:

1. Shri Umesh Patel, Shri Gopal Dada, Shri Manoj Naik said that the department which has been showing losses is actually in profit and a separate monitoring committee comprising of representatives from the society should be set up to look into how the department which was profitable till 2007 has suddenly turned into a loss making entity

2. Shri Umesh Patel suggested that the common man should be given electricity at Rs 1/unit or free power. He also suggested that adequate publicity should be given by the Commission so that the general public can be more participative in the public hearing process.

3. Shrimati Tarunaben suggested that since domestic consumer base of the ED-DD is just 2-3% of the total consumption, there is not much rationale in increasing the tariff for this category; BPL consumers should be given free power; Common man will not be able to bear the increase in the tariff and there is not much economic activity left for the agriculture consumers in the UT to bear the burden of higher tariff

4. Shri Vijay Mishra said that the tariff for the industrial class has increased much over the years and they do not have much incentive to continue in the UT of Daman; He also said that as per the affidavit submitted to the Commission earlier, the industries are willing to bear the burden of the FPPCA charges on the domestic consumers for FY 2012-13; Needs to be looked into as to why the T&D losses of ED-DD are higher, in range of 10-11% as compared to Dadra & Nagra Haveli where the line losses are in the range of 6-7% when both of them are similarly placed in terms of the consumption pattern.

5. Shri K.C.Parekh highlighted that the department has not asked for any increase in the tariff of the domestic consumer

6. Shri Umesh Patel, Shri Manojbhai Naik were strongly against the privatization of the department and said privatization would be strongly protested.

7. Shri Jignesh said that adequate publicity should be given by the Commission so that the general public is well aware of the public hearing process; Not much of agricultural activity is left in the state

8. Shri Manoj Naik, Shrimati Tarunaben suggested that a separate category for the chawl should be made so that the tariff to the chawl consumers can be rationalized from the present charges

The complete list of the objectors is enclosed as **Annexure 11**.

Commission's View:

The Commission highlighted to the common man that the industries are only willing to bear the burden of the fuel and power purchase cost adjustment charge and not the entire increase in the tariff of the domestic consumer.

The Commission gave directive to the Department to highlight to the common man how the variable charges of the power purchase cost have increased over the years. This should be advertised adequately so that the consumer knows that the cost of the utility has increased in large part due to the increase in the price of the fuel which is an uncontrollable factor at the hands of the utility. This being the major reason that department is showing huge losses in its accounts. At the same time, department should be more efficient so that costs can be kept in control.

The Commission is of the view that adequate publicity of the public hearing process is being done. The advertisement was published twice in four local newspapers of the region informing the stakeholders of the public hearing process. The Commission asked the representatives present in the hearing to submit the list of the local bodies after due consensus to the Commission's office so that separate notification can be sent to them.

During the public hearing, the stakeholders were informed that as per Notification no. 23/1/2008-R&R (Vol-IV) issued by Ministry of Power, Government of India on the opinion from Ministry of Law & Justice on the Operationalization of Open Access in Power Sector, M/o Law & Justice in consultation with Ld. Attorney General of India has opined that all 1 MW and above consumers are deemed to be open access consumers and the regulator has no jurisdiction for fixing the electricity tariff for them.

Accordingly, the stakeholders were made to understand that the relationship between the 'subsidizing' consumers and the 'subsidized' consumers must be seen in the emerging situation of the Open Access and its implications for the consumer & the licensee, the tariff determination and the 'subsidized' consumers.

The consumers consuming more than 1 MW of electricity will be subject to open access process and their tariff will not be determined by the appropriate Commission. In such an eventuality, approximately 94 % of the 'subsidizing' consumers of DD may not be contributing to the ARR to the extent they are doing now, next year or thereafter. Therefore the 'subsidized' consumers have to stand on their own and move towards paying for the cost of purchase of power to meet the average cost of supply obligations of the licensee for supplying electricity to them.

The tariff of each of the consumer categories has been determined appropriately as discussed in section 5.6 of this tariff order. As regards the industrial consumers of Daman bearing the burden of the FPPCA charged to the domestic consumers of Daman & Diu, the Commission has no objection, if one class of consumer wants to voluntarily subsidise the other class of consumers. The same has also been discussed in section 4.2.7 of this tariff order.

5.3 Compliance of the Hon'ble APTEL judgment on Appeal no. 169 of 2011 dated February 29 '2012

The Commission conducted the public hearing on petition no. 33 of 2011 at Diu on August 17' 2012 and at Daman on August 21' 2012 and heard the views of the stakeholders/objectors.

As regard the issue of power purchase cost adjustment formula as directed by the Hon'ble APTEL, the Commission has specified a new formula keeping in view the observations of the Hon'ble APTEL in the Appeal no. 169 of 2011 & Appeal No. 175 of 2011 as well as the judgment in O.P. no. 1 of 2011.
The formula was published in the newspapers and uploaded on the website of JERC inviting objections, comments, suggestions on the formula till 25th April, 2012. All objections/suggestions have been dealt with in the statement of reasons appended to the Commission's Order, ordering the insertions of the formula in the Regulation no. 7 in the JERC regulations, 2009 for the determination of tariff. After following the due process of consultation with the stakeholders and conducting public hearing at a number of locations in the UTs and the State of Goa, the Commission specified a formula which is applicable with effect from April 1'2012, thereby complying with the directions of the Hon'ble APTEL.

However, the petitioner, based on their understanding of the PPCA formula given in the impugned Order dated October 3' 2011; had already raised bills and recognized the revenue collected as a part of tariff income.

Various possible options that were examined to comply with Hon'ble APTEL judgment dated February 29 '2011 in the matter of Appeal no. 169 of 2011. The same are as under:

Option a) Direct the petitioner to reverse the claims raised on account of fuel price adjustment and refund the entire amount to the consumers. This would mean that the bills raised on account of fuel price adjustment would not be considered as tariff income for FY 2011-12.

Option b) Recognize the entire revenue on account of fuel price adjustment as a tariff income of FY 2011-12 (as already done by the licensee) and carry out the review of ARR of FY 2011-12 accordingly. This would mean that only a much smaller amount surplus/deficit would have to be dealt along with ARR of FY 2012-13, at the same time concern of all will be addressed.

Option c) To calculate the variation in power purchase cost based on the actual data submitted by the petitioner for FY 2011-12 vis-à-vis the approved cost. The amount so derived would be considered refundable/ recoverable to/from the consumer. In case the amount already billed is more than the amount recoverable, then the excess amount would be refunded through adjustment in the subsequent bills in the ratio of PPCA already recovered. However, if the amount already billed is less than the amount due from the Consumer, then the shortfall be recovered through bills in addition to the regular tariff.

The Commission has analyzed the options as mentioned above. The petitioner has recovered Rs 168.57 Crores through PPCA charge through consumers in the FY 2011-12 (as per submission dated August 9' 2012). The Commission in its order dated October 3' 2011 had approved the power purchase cost at Rs 556.89 Crores as against which the Commission has approved Rs 731.97 Crores (Net of UI under/over drawl charges) as part of the review exercise for the year . Therefore the petitioner has incurred an additional Rs 170.11 Crores on account of Power purchase cost against the value of power purchase cost approved earlier for FY 2011-12. The recovery through PPCA does not exceed the difference between the approval as per the earlier order dated 03.10.2011 and the power purchase cost now approved for FY 2011-12. The Commission feels that the Option b is the most plausible option amongst the alternatives evaluated and listed above in the circumstances where the amount recovered shall be considered while calculating the ARR for FY 2011-12 and appropriate adjustment shall be made while determining the tariff for FY 2012-13.

5.4 Compliance of the Hon'ble APTEL judgment on Appeal no. 35 of 2012 dated May 25'2012

In compliance of Hon'ble APTEL Judgment dated May 25'2012 in Appeal no. 35 of 2012 the Commission examined the following issues in the Public Hearing for the determination of tariff for FY 2011-12 for the deemed licensee, Electricity Department – Daman & Diu at Diu on August 17' 2012 and at Daman on August 21' 2012.

- Re-determination of tariff for FY 2011-12
- Issue of shifting of existing HT consumers to higher voltage as a consequence of the impugned order and decide the matter after hearing all concerned and considering cost benefit analysis of such transfer
- Re-consider the provision of bad debts after the audited accounts are submitted by the Appellant in the truing up in terms of JERC Regulations

The above decision of the Hon'ble APTEL was read out to the stakeholders and the same has also been stated in the Public Notice of the Public Hearing published in the newspapers on August 8' 2012 and August 20' 2012.

During the public hearing held on August 17' 2012 and August 20' 2012, as regards the issue of shifting of existing HT consumers to higher voltage as a consequence of the impugned order, the Petitioner/stakeholders did not raise any suggestions/objections on the said issue and failed to address the following concerns of the Commission:

1. Supporting data on the number of existing consumers at 11 kV having contracted demand above 1500 kVA
2. Maximum contracted demand sanctioned to the existing consumers as referred in point no. 1 above
3. Cost benefit analysis of shifting to higher voltage of the existing consumers as referred to in point no. 1 above

The above information is required for redressal of the issue in compliance of the Hon'ble Aptel judgment 35/2012. In absence of the above information, the Commission is not in a position to conclusively decide the said issue.

Keeping the concern of the existing consumers as referred in point no. 1 above and the observations of the Hon'ble APTEL in this regard, the Commission restores the provision under 'General Terms and Condition' of the Tariff Schedule as approved in the tariff order of FY 2010-11 dated November 1' 2010 in this tariff order, which is reproduced below –

''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''.

The relevant extract of the proposal of the Petitioner in the ARR& tariff petition for FY 2012-13 dated November 30' 2011 is as mentioned below:

''Supply to consumers having contracted load between 100kVA to 2500kVA will be generally at 11kV and for more than 2500kVA at 66kV. For separate feeders, the consumer will get contracted load upto 4000 KVA. Further, the consumer who required load more than above, the voltage of supply shall be at 66kV level.''

Due to reasons mentioned above i.e. in absence of relevant supporting data, the Commission is of the view not to accept the proposal of the licensee and restore the provision in the tariff order of FY 2010-11 dated November 1' 2010 in this tariff order.

The Petitioner is directed to provide the data as enlisted above alongwith the cost benefit analysis of shifting of existing consumers to higher voltage to the Commission by November 30' 2012 to enable the Commission to take an appropriate view in this regard.

The re-determination of tariff of FY 2011-12 has been dealt in section 5.6 of this order. The provision for bad debts has been dealt appropriately in the relevant chapters – Chapter 6, 7 and 8 in the appropriate sections of this order.

5.5 Revenue Gap of FY 2011-12

In the ARR Petition for FY 2011-12, the petitioner projected the revenue gap for FY 2011-12 of Rs. 101.84 Crores. As elaborated in table 5.24 of ARR and tariff order dated October 3'2011 for FY 2011-12, the Commission has estimated the revenue gap at the end of FY 2011-12 would be Rs. 14.84 Crores.

Table 5.5.1: Revenue gap for FY 2011-12 as approved in tariff order dated October 3'2011 (Rs Crores)

Sr. No.	Particulars	Approved in T.O. of FY 11-12 dated 03.10.2011
1	2	3
1	**Net Revenue Requirement for FY 2011-12**	**569.45**
2	Revenue from Retail Sales at Existing Tariff	554.61
3	**Net Gap (1-2)**	**14.84**

5.6 Re-determination of tariff for FY 2011-12

Keeping in view the judgment issued by Hon'ble APTEL, tariff policy, objections received from the stakeholders and submission of industry associations, Commission has examined all aspects and has taken a considerate view in this regard.

The Petitioner vide their letter dated February 13' 2012 in reference to the order of the Commission dated January 20' 2012 submitted the compliance of the tariff order for FY 2011-12 dated October 3' 2011 in the form of an affidavit as Annexure 1. In the said affidavit dated February 13' 2012, ED-DD submitted that it had implemented the tariff structure approved by the Commission vide tariff order dated October 3' 2011 from 1st June 2011 for all the consumer categories, except LIG, domestic and agriculture categories, as the same was under the judicial consideration of the Appellate Tribunal of Electricity (appeal no. 35/2012).

Further, as can be observed from the para 5.5 above, there was a total revenue gap of Rs 14.84 Crores at the end of FY 2011-12 as per the order dated October 3' 2011The Commission's re-determined tariff for FY 2011-12 is as given below:

Table 5.6.1 : Commission's Re-determined Tariff for FY 2011-12

S.No.	Category/Consumption Slab	Re-determined Tariff for FY 2011-12	
		Demand Charges (Rs./KVA/Month or Rs. per consumer/ month) or (Rs./HP/month)	Variable Charges (Rs./KWh)
1	**LT-D/Domestic**		
	Up to 50 units		1.00
	51-200 units		1.60
	201-400 units		2.00
	401 units and above		2.25
	Low Income Group	10.00	
2	**LT-C/Commercial**		
	0-100 units		2.25
	Beyond 100 units		3.25
3	**LT- Ag/Agriculture**		
	Upto 10 HP per unit		0.55
	Beyond 10 HP per unit		0.85
4	**LTP Motive Power**		
	Upto 20 HP of connected load		2.50
	Above 20 HP of connected load	25.00	2.60
5	**LT-PL/Public Lighting**		3.32
6	**LT-Public Water Works**		
	Upto 20 HP of connected load		2.50
	Above 20 HP of connected load	25.00	2.60
7	**HT Industrial**		
A	**HT (A) General**		
	0-50000	60.00	2.95
	50000-5 lakh	60.00	3.10
	Above 5 lakh	60.00	3.15
B	**HT (B) Furnace**		
	0-300 units per kVA	450.00	2.05
	301-500 units per kVA	450.00	3.05
	Above 500 units per kVA	450.00	3.55

The Commission is in the process of developing a road map for reduction of cross-subsidies for all the UTs and the State of Goa in accordance with the tariff policy and judgment issued by Hon'ble APTEL in this regard and the road map for such reduction shall be notified separately after taking into account the observations of the stakeholders and consumers in accordance with the relevant regulations of JERC, tariff policy and Electricity Act, 2003.

5.7 Applicability of Re-determined tariff

The Commission has re-determined the tariff for the domestic, LIG, and agriculture categories for FY 2011-12 to the earlier approved tariff vide order dated November 1' 2010. For the consumer classes – Commercial, LTP motive power, public lighting, public water works and HT industrial the tariff has been kept the same as approved vide order dated October 3' 2011.

It is observed that ED-DD has not implemented the tariff structure approved by the Commission vide its order dated October 3' 2011 for the domestic, LIG and the agriculture consumer categories. The same has been submitted by the Petitioner vide affidavit dated February 13' 2012.

As the Commission has re-determined the tariff for these consumer categories as approved earlier vide its order dated November 1' 2010, no refund seems to be due to these consumer categories as ED-DD had not implemented the tariff as determined by the Commission for FY 2011-12 vide order dated October 3' 2011. However, refund due, if any shall be made to the consumers at the time of true-up for FY 2011-12.

For the consumer classes – Commercial, LTP motive power, public lighting, public water works and HT industrial no refund is due as the Commission has kept the tariff same as that approved in order dated October 3' 2011.

It is observed that no refund amount seems to be due to any of the consumer classes due to reasons as mentioned above. However, refund due, if any shall be made to the consumers at the time of true-up for FY 2011-12. The comparison of the re-determined tariff and the tariff approved earlier vide order dated October 3' 2011 is as shown below.

Table 5.7.1 : Commission's Re-determined Tariff for FY 2011-12 vis-à-vis approved tariff of October 3' 2011

S.No.	Category/Consumption Slab	Approved Tariff for FY 2011-12 vide order dated October 3' 2011		Re-determined Tariff for FY 2011-12	
		Demand Charges (Rs./KVA/Month or Rs. per consumer/ month) or (Rs./HP/month)	Variable Charges (Rs./KWh)	Demand Charges (Rs./KVA/Month or Rs. per consumer/ month) or (Rs./HP/month)	Variable Charges (Rs./KWh)
1	**LT-D/Domestic**				
	Up to 50 units		1.6		1.00
	51-200 units		2.25		1.60
	201-400 units		3		2.00
	401 units and above		3.25		2.25
	Low Income Group	24	-	10.00	
2	**LT-C/Commercial**				
	0-100 units		2.25		2.25
	Beyond 100 units		3.25		3.25
3	**LT- Ag/Agriculture**				
	Upto 10 HP per unit		2.5		0.55
	Beyond 10 HP per unit		2.65		0.85
4	**LTP Motive Power**				
	Upto 20 HP of connected load		2.5		2.50
	Above 20 HP of connected load	25	2.6	25.00	2.60
5	**LT-PL/Public Lighting**		3.32		3.32
6	**LT-Public Water Works**				
	Upto 20 HP of connected load		2.5		2.50
	Above 20 HP of connected load	25	2.6	25.00	2.60
7	**HT Industrial**				
A	**HT (A) General**				
	0-50000	60	2.95	60	2.95
	50000-5 lakh	60	3.1	60	3.10
	Above 5 lakh	60	3.15	60	3.15
B	**HT (B) Furnace**				
	0-300 units per kVA	450	2.05	450	2.05
	301-500 units per kVA	450	3.05	450	3.05
	Above 500 units per kVA	450	3.55	450	3.55

Table 5.7.2 : ACOS comparison of Commission's Re-determined Tariff for FY 2011-12 vis-à-vis approved tariff of October 3' 2011

S.No.	Category/Consumption Slab	Approved Tariff for FY 2011-12 vide order dated October 3' 2011		Re-determined Tariff for FY 2011-12	
		Average Revenue Realisation	%age of ACOS	Average Revenue Realisation	%age of ACOS
1	**LT-D/Domestic**				
	Up to 50 units	1.60	48%	1.00	30%
	51-200 units	2.25	68%	1.60	48%
	201-400 units	3.00	90%	2.00	60%
	401 units and above	3.25	98%	2.25	68%
	Low Income Group				
2	**LT-C/Commercial**				
	0-100 units	2.25	68%	2.25	68%
	Beyond 100 units	3.25	98%	3.25	98%
3	**LT- Ag/Agriculture**				
	Upto 10 HP per unit	2.50	75%	0.55	17%
	Beyond 10 HP per unit	2.65	80%	0.85	26%
4	**LTP Motive Power**				
	Upto 20 HP of connected load	2.85	86%	2.85	86%
	Above 20 HP of connected load				
5	**LT-PL/Public Lighting**	3.32	100%	3.32	100%
6	**LT-Public Water Works**				
	Upto 20 HP of connected load	2.60	78%	2.60	78%
	Above 20 HP of connected load				
7	**HT Industrial**				
A	**HT (A) General**				
	0-50000	3.32	100%	3.32	100%
	50000-5 lakh				
	Above 5 lakh				
B	**HT (B) Furnace**				
	0-300 units per kVA	3.95	119%	3.95	119%
	301-500 units per kVA				
	Above 500 units per kVA				

NOTE: The comparison as shown in the above table is based on the parameters as in the approved tariff order of FY 2011-12 dated October 3'2011 vis-à-vis the re-determined tariff for FY 2011-12 as determined above in section 5.6 of this tariff order.

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Provisional Truing up of Aggregate Revenue Requirement for FY 2010-11, Review of FY 2011-12 & Aggregate Revenue Requirement (ARR) & Retail Tariff for the Financial Year 2012-13

(Petition no. 63/2012)

Provisional Truing up of Aggregate Revenue Requirement for FY 2010-11

6. Provisional Truing up of Aggregate Revenue Requirement for FY 2010-11

6.1 Preamble

The Petitioner, in their true-up petition for FY 2010-11 has submitted the details of expenditure and revenue for FY 2010-11 based on the audited accounts submitted by the petitioner for FY 2010-11. The petitioner provided the comparison of actual revenue and expenditure against each head with the revenue and expenditure approved by the Commission. The petitioner has not submitted the reasons for deviations against each component of ARR along with the true-up petition for FY 2010-11.

It is to be noted that the Petitioner has submitted the True-up Petition for FY 2010-11 along with audited accounts for FY 2010-11, 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 larger interest of the consumer and the utility. The Commission, therefore decided to carry out true-up for FY 2010-11 on provisional basis based on the accounts audited by Chartered Accountant, pending CAG audit which is a statutory requirement for ED-DD, being Govt. Department. The petitioner is required to file an affidavit before the Commission on completion of CAG audit bringing out the outcome of the same and any change in provisional truing up of ARR. Further as per the Regulations, True-up is supposed to be carried out on audited accounts. In this case though the accounts are said to be audited, but lacks the auditors verification of the assets, hence the true-up is provisional.

In this Chapter, the Commission has analyzed all the elements of actual revenue and expenses for FY 2010-11 based on the audited accounts submitted by the petitioner, and have carried out the provisional true-up of expenses and revenue after due prudence check.

6.2 Provisional Truing up and Analysis of performance for FY 2010-11

The True-up of FY 2010-11 is to be carried out as per the provisions of regulation 8 of JERC Tariff Regulations, 2009. As per the regulation 8 of JERC Tariff Regulations, 2009:

Quote

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

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

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

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

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

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

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

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

Unquote

The Commission has reviewed the variations between approvals and actuals of sale of electricity, power purchase expenses, other income and expenditure for FY 2010-11 as per the audited accounts submitted by the petitioner (which is void of the CAG audit as brought out at Para 6.1 of this order) and has permitted necessary adjustments in cases where variations are for reasonable and justifiable reasons.

6.3 Energy Sales

Petitioner's submission

The petitioner has submitted the category-wise actual energy sales of 1655 million units for FY 2010-11. The petitioner has stated that there has been an increase in energy sales by 114.50 Million Units for FY 2010-11 against the energy sales approved by the Commission in its ARR and tariff order dated November 1’2010 i.e. 1540.5 MU.

Commission’s analysis

The petitioner had forecasted the energy sales of 1540.5 million units in its ARR and tariff petition for FY 2010-11, and the Commission had approved sales of 1540.5 million units in its ARR and tariff order dated November 1’2010. The petitioner has submitted the actual sales at 1655 MU for the FY 2010-11. The variation in sales from the approved values is majorly on account of increased energy sales in industrial HT & LT category, which comprised of approximately 94% of the total energy consumption in the UT of ED-DD for FY 2010-11. 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 has considered and approved the actual sales of 1655 million units for FY 2010-11 as submitted by the petitioner.

Table 6.3.1 : Energy Sales approved by the Commission for FY 2010-11 (in Million Units)

S.No.	Category/Consumption Slab	FY 2010-11	FY 2010-11	FY 2010-11	FY 2010-11
		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 (FY 2010-11)
1	**Domestic**	65.00	65	64.2	64.2
2	**Low Income Group**	0.10	0.1	0.1	0.1
3	**NRS/Commercial**	28.70	28.7	29.3	29.3
4	**Agriculture**	2.40	2.4	2.6	2.6
5	**LT Industrial**	137.90	137.9	151.0	151.0
6	**Public Lighting**	4.60	4.6	4.4	4.4
7	**Public Water Works**	0.90	0.9	0.9	0.9
8	**HT/EHT Industry**	1,300.20	1300.2	1402.0	1402.0
9	**Temporary Supply**	0.70	0.7	0.7	0.7
	TOTAL	**1540.5**	**1540.5**	**1655.0**	**1655.0**

6.4 Surplus Energy Sale/UI sales

Petitioner’s submission

The petitioner has submitted the actual surplus energy sale of 139 million units under UI mechanism for FY 2010-11.

Commission’s analysis

The Commission has considered the actual surplus energy sale of 139 million units (as submitted by the petitioner) under UI mechanism for FY 2010-11 for the purpose of truing up.

6.5 Inter-State Transmission losses

Petitioner's submission

The petitioner has submitted the energy balance for FY 2010-11, wherein the petitioner has considered the actual pool losses at 5.7% resulting in 119.89 million units.

Commission's analysis

The Commission vide its letter dated July 13, 2012 amongst others had asked the petitioner to file the basis for consideration of the interstate losses. The representatives of the petitioner during the technical validation session with the Commission were present on 19th and 23rd July 2012. However the representatives were not able to provide adequate data/rationale in support of the petition and the letter dated July 13, 2012. However, representatives of the petitioner vide their communication dated August 9, 2012 in regard to the interstate losses has submitted as follows:

Quote

> *"The details for computation of the T&D losses for the FY 2011-12 i.e. sale to retail customers (**Annexure II**), surplus power sale (including UI) (**Annexure VII**) are being attached along with this mail. The details of power purchase will be submitted shortly, however the bills for FY 2011-12 have already been submitted to the Honorable Commission. The details of the PGCIL losses for FY 2010-11 and FY 2011-12 have been attached with this mail as **Annexure V**."*

Unquote

The Commission has observed that the "Annexure V" referred in the above communication includes the week wise Western region pooled losses for the FY 2010-11 and onwards. The petitioner has placed reliance to this report as the basis for consideration of the interstate losses. The average pooled losses of the western region for FY 2010-11 derived from the submission is 4.61%. **The Commission in this regards directs the petitioner to measure and record the actual energy input at the periphery of the licensed area rather than deriving it, to arrive at the actual interstate losses for the petitioner.**

However, considering the present status, the Commission provisionally considers the submission of the petitioner. The petitioner in its petition for true up of FY 2010-11 had submitted the interstate losses at

5.7%, however the above referred submission indicates the average losses at 4.61%. Accordingly, the Commission for the purpose of this true up approves the interstate transmission losses at 4.61%.

6.6 Intra-State Transmission and Distribution losses

Petitioner's submission

The petitioner has submitted that the actual loss level achieved in FY 2010-11 is 10.27% as against the loss level of 11.00% approved by the Commission in its ARR and tariff order dated November 1'2010.

Commission's analysis

In its ARR petition for FY 2010-11, the petitioner had projected the loss level at 11% for FY 2010-11 as compared to the loss level achieved of 11.48% for FY 2008-09 and 11.25% for FY 2009-10. The petitioner had proposed to carry out the system improvement schemes to reduce/sustain the losses along with the proposed trajectory for reduction in losses from 11% in FY 2010-11 to 9.5% in FY 2012-13. The Commission had allowed the T&D loss level at 11.00 % for FY 2010-11 subject to the condition that the petitioner shall carry out an energy audit of their system through an accredited agency, authenticate the losses and submit the report to the Commission by 31.12.2010.

The petitioner has submitted the T&D losses for FY 2010-11 at 10.27% considering the interstate loses at 5.7%. However, the interstate losses have been approved at 4.61%, as discussed in the preceding paragraph. The Commission while looking at the regional energy accounts issued by the WRPC and the bills submitted by the petitioner has also found anomaly in the quantum of units submitted by the petitioner. The petitioner in its true up petition for FY 10-11 has mentioned the total units purchased at 2103.34 MU and has also mentioned that the same includes 23.56 MU purchased towards UI and short term sources. It has been noticed that the quantum purchased through UI and short term sources at 2103.34 MU as submitted by the Petitioner does not include the UI purchases . Accordingly the Commission has considered the units recorded in the REA which are tabulated below.

Table 6.6.1 : Energy Purchased approved by the Commission for FY 2010-11 (in Million Units)

Source (Rs. Crore)	Petitioner's claim in True-up petition of FY 2010-11	Actual
NTPC Stations	**1,244.35**	**1,244.48**
NSPCL-Bhilai	**774.59**	**774.71**
NPCIL		
KAPPS	**18.02**	**12.11**
TAPP 3&4	**66.38**	**71.47**
UI Purchase		**23.56**
Total	**2,103.34**	**2,126.33**

Accordingly, the T&D losses based on the approved sales and the interstate losses results to 12.40% (based on the actuals submitted by the Petitioner). The calculation for the same is given in the table below.

Table 6.6.2 : T&D loss analysed by the Commission for FY 2010-11

Particulars	S. NO	UoM	Petitioner submission	Actual
Energy at Generator end	A	MU	2103.34	2126.33
Interstate losses	B	%	5.70%	4.61%
Interstate losses	C=A*B	MU	119.89	97.97
UI Sale	D	MU	139.00	139.00
Energy Available for retail supply	E=A-C-D	MU	1844.45	1889.35
Energy Sales	F	MU	1655.00	1655.00
T&D losses	G=E-F	MU	189.45	234.35
T&D losses	H=G/E*100	%	10.27%	12.40%

It may be observed that the achieved T&D losses basis the actuals are higher than the losses target at 11% for FY 2010-11. 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 2010-11, 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 11.00% as approved in the tariff order for FY 2010-11 as reasonable and approves the same for the provisional true up for FY 2010-11.

6.7 Energy Requirement

Petitioner's submission

The petitioner has submitted the energy requirement for FY 2010-11, based on the actual sales, power purchase quantum and actual losses for FY 2010-11.

Commission's analysis

The Commission has approved the T&D losses and the inter-state transmission losses as elaborated in the foregoing paragraphs. The Energy requirement for the FY 2010-11 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 2010-11 is shown in the table below, along with the energy requirement submitted by the petitioner in its truing up petition for ARR of FY 2010-11. The Commission while approving the energy balance has considered the T&D loss as approved in the Tariff order for FY 2010-11.

Table 6.7.1 : Energy Requirement approved by the Commission for FY 2010-11 (in Million Units)

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	Derived Actual FY 10-11*	Approved (FY 2010-11)
1	**Energy sales within the State/UT (in Mus)**	1540.50	1540.50	1655.00	1655.00	1655.00
2	**Distribution losses**					
I	%	11.00%	11.00%	10.27%	12.40%	11.00%
Ii	MU	190.40	190.40	189.45	234.35	204.55
3	**Energy required at State Periphery for Sale to Retail Consumers**	**1730.90**	**1730.90**	**1844.45**	**1889.35**	**1859.55**
4	**Add: Sales to common pool consumers/ UI (in Mus)**	**215.41**	**208.00**	**139.00**	**139.00**	**139.00**
5	**Total Energy Requirement for State**	**1946.31**	**1938.90**	**1983.45**	**2028.35**	**1998.55**
6	**Transmission losses**					
I	%	5.21%	5.70%	5.70%	4.61%	4.61%
Ii	MU	107.00	117.00	119.89	97.97	96.54
7	**Energy required to be purchased**	**2053.31**	**2055.90**	**2103.34**	**2126.33**	**2095.09**

*Derived based on actual as discussed at para 6.6 of this order

6.8 Power Purchase Quantum & Cost for FY 2010-11

Petitioner's submission

The petitioner has submitted that the actual power purchase for FY 2010-11 is Rs. 570.94 Crores to procure 2103.34 million units energy requirement for FY 2010-11, as against the power purchase cost of Rs. 541.22 Crores to procure 2056 million units as approved by the Commission in its ARR and tariff order dated November 1'2010.

The petitioner has submitted that short term power purchase to the tune of 23.56 million units out of 2103.34 million units for Rs. 8.86 Crores to meet its peak demand which has resulted in the increased power purchase cost as against that approved by the Commission.

Commission's analysis

The Commission had approved the Power purchase cost including transmission charges at Rs. 541.22 Crores for purchase of 2056 million units in its ARR and tariff order dated November 1'2010.

The petitioner in its true-up petition has submitted the actual Power purchase quantum of 2103.34 units at Rs. 570.94 Crores including transmission costs during FY 2010-11. However, on prudence check from REA accounts, the quantum of purchase has been found to be at 2126.33 MU after verification as discussed at Para 6.6 of this order. The petitioner has submitted that it has considered the source-wise Power purchase cost including transmission charges as per the audited accounts of FY 2010-11. The Commission has considered the power purchase corresponding to the energy requirement approved for the FY 2010-11 in the para 6.7 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 2010-11 as approved by the Commission after the truing up, is given in the following table:

Table 6.8.1 : Power Purchase Units approved by the Commission for FY 2010-11 (in Million Units)

Source (Rs. Crore)	Approved in T.O. of FY 10-11 dated 01.11.2010	Petitioner's claim in True-up petition of FY 2010-11	Actual FY 2010 basis the losses and units verified	Approved (FY 2010-11)
NTPC Stations	1232	1,244.35	1,244.48	1,244.48
NSPCL-Bhilai	762	774.59	774.71	774.71
NPCIL				
KAPPS	7	18.02	12.11	12.11
TAPP 3&4	55	66.38	71.47	71.47
UI Purchase			23.56	23.56
Transmission Charges				
PGCIL				
POSCO				
Less : Loss due to T&D under achievement				31.24
Total	2056	2103.34	2,126.33	2095.09

Table 6.8.2 : Actual Power Purchase Expenses submitted by the Petitioner for FY 2010-11 (Rs. Crores)

S. No.	Source	FY 2010-11 Approved in Tariff Order dated 01.11.2011	FY 2010-11 Actual as per submission on February 13' 2012
1.	Power Purchase from Approved Sources	506.27	529.82
2.	Transmission charges	34.95	32.25
3.	Power purchase from short term sources including UI overdrawl	0.00	8.86
4.	**Total (Rs. in Crores)**	**541.22**	**570.94**

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 23.56 million units through overdrawls under UI mechanism at an average price of Rs. 3.76

per unit. 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.

The Commission directs the licensee to separately show the date wise/time wise details alongwith the summary sheet of all short term Power purchases including quantum, rate & amount and grid frequency in case of U.I. over drawls/underdrawls along with their next ARR and tariff petition.

Table 6.8.3 : Summary of Actual Purchase from UI and Power Exchange for FY 2010-11 as submitted by the Petitioner (in Rs. Crores)

S. No.	Source	Energy Units (in MUs)	Amount (Rs. in Crores)
1	UI mechanism and power exchange	23.56	8.86
	Total	**23.56**	**8.86**

As can be observed from the above, the Petitioner has purchased 23.56 MUs of energy at an average rate of Rs. 3.76 per KWh during FY 2010-11. As per the reports generated by WRLDC on UI, it has been found that the Petitioner has overdrawn energy below 49.2 Hz frequency from April 2010 to May 2’2010 and below 49.5 Hz frequency from May 3’2010 to March 31’ 2011. Therefore as per the CERC (Unscheduled Interchange charges and related matters) Principle Regulations and its amendments thereof applicable for FY 2010-11 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. 1.74 Crores against the UI overdrawl below 49.2 Hz frequency from April 2010 to May 2’2010 and beyond 49.5 Hz frequency from May 3’2010 to March 31’ 2011, imposed on the utility as per the UI regulations of CERC (as amended from time to time) for overdrawl during the period when the frequency was below 49.2 (amended to 49.5 w.e.f. May 03’2010 and later on amended to 49.7 w.e.f. March 5’ 2012) and it will not be a pass through in the truing up of aggregate revenue requirement of the Petitioner for FY 2010-11. 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 1.74 Crores towards penal charges paid for UI overdrawl/underdrawl as discussed above, the approved Purchase from UI, and Power exchange for provisional Truing up of ARR for FY 2010-11 is given below:

Table 6.8.4 : Approved Purchase from UI and Power Exchange for provisional true-up FY 2010-11 (in Rs. Crores)

Sr. No.	Source	FY 2010-11 (Approved)	
		Purchase	
		Energy Units (in MUs)	Amount (Rs. in Crores)
1	UI mechanism	23.56	7.12
2	Power Exchange	-	-
3	**Total**	**23.56**	**7.12**

Transmission Charges

The transmission charges of Rs. 32.25 Crores as submitted by the petitioner for FY 2010-11 have been considered for the purpose of provisional truing up of ARR of FY 2010-11.

Summary of Power Purchase Quantum and Cost

The power purchase cost for FY 2010-11 has been considered as per the provisional audited accounts furnished after disallowing the UI/penal charges. The power purchase cost has been allowed corresponding to the energy requirement approved at Para 6.7 of this order in accordance with the merit order purchase principles. While considering the merit order dispatch the fixed charges have been allowed however the variable charges have been allowed as per the energy requirement.

The summary of power purchase quantum and costs, including transmission charges for FY 2010-11 as approved by the Commission for the purpose of this order is given in the following Table:

Table 6.8.5 : Summary of Power Purchase expenses approved by the Commission for FY 2010-11 (in Rs. Crores)

S. No.	Source	FY 2010-11		
		Approved in Tariff Order dated 01.11.2010	Actual as per true-up petition submitted on February 13' 2012	Approved (Provisional true-up)
1	Power Purchase from Approved Sources including transmission charges	541.22	562.07	562.07
2	Power purchase from other short term sources including UI overdrawl	0.00	8.86	7.12
3	Less: Losses due to underachievement of T&D loss			7.33
4	**Total (in Rs. Crores)**	**541.22**	**570.94**	**561.85**[2]

6.9 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. 8.61 Crores in its true-up petition for FY 2010-11 as compared to the Operation and Maintenance expenses of Rs. 9.29 Crores approved by the Commission in its ARR and tariff order dated November 1'2010.

The petitioner in its additional submission has submitted the detailed break-up of Operation and Maintenance expenses on each of the expenditure heads for consideration by the Commission.

Commission's analysis

<u>Employee Expenses</u>

The petitioner submitted that the actual employee expenses in FY 2010-11 was Rs 4.50 Crores as compared to the employee expenses of Rs. 5.09 Crores approved by the Commission in the ARR and tariff order dated November 1' 2010.

[2] Actual approved excluding non-admissible UI expenditure of Rs 1.74 Crores.

It is observed that the employee cost actuals for FY 2008-09 and FY 2009-10 have been Rs 3.67 Crores and Rs 4.85 Crores respectively, as recorder in the tariff order dated 01.11.2010 for FY 2010-11. In view of this, the submission of the Petitioner is considered reasonable and the same is as per the audited accounts.

As per the sub-regulation 2 (i) of regulation 8 of JERC tariff regulations 2009, **the Commission has considered the final figures of employee expenses of Rs 4.50 Crores as per the audited accounts as reasonable and approves the same for provisional truing up of FY 2010-11.**

Administration and General Expenses

The petitioner has submitted that the actual Administration and General expenses in FY 2010-11 was Rs. 0.25 Crores (including auditors remuneration) as compared to the Administration and General expenses of Rs. 2.00 Crores approved by the Commission in the ARR and tariff order dated November 1' 2010.

The Petitioner has not submitted the detailed break-up of the A&G expenses as required as per the regulatory formats. It is seen that there is a huge variation as compared to the earlier submission of the Petitioner as per the petition for FY 2010-11. In the tariff order dated November 1' 2010 the Commission had allowed only Rs 2.00 Crores against the Rs 3.68 Crores claimed by the Petitioner.

However, it is observed that the actual expenses for FY 2010-11 under A&G expenses are 0.25 Crores only, which is less than the approval of the Commission. Therefore, 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. 0.25 Crores as per the audited accounts as reasonable and approves the same for the purpose of provisional truing up of FY 2010-11.**

Repair and Maintenance Expenses

The petitioner has submitted that the actual Repair and Maintenance expenses in FY 2010-11 was Rs. 3.86 Crores as compared to the Repair and Maintenance expenses of Rs. 2.20 Crores approved by the Commission in the ARR and tariff order dated November 1' 2010.
The Petitioner has not submitted the detailed break-up of the R&M expenses as required as per the regulatory formats i.e. expenditure on capital assets capitalized and expenditure incurred on revenue account

The schedule 2 of the accounts submitted by the petitioner indicated the expenditure of Rs 3.86 Crores towards 'Stores and Spares Consumed' and no separate breakup for the R&M under this head has been mentioned.. The petitioner has not submitted any bifurcation of material issued from stores towards capital schemes and repair and maintenance activities. Therefore in the present circumstances and the accounts submitted by the petitioner do not conclusively indicate the exact amount of the R&M expenditure for the FY 2010-11. In view of this, the Commission has considered R&M expenses as approved in the earlier order for FY 2010-11 dated 01.11.2010 in the absence ofdetailed breakup of the R&M expenses.

Therefore, **the Commission has restricted its approval for repair and maintenance expense to Rs. 2.20 Crores and approves the same for provisional truing up of FY 2010-11.**

Summary of O&M Expenses approved for provisional true-up FY 2010-11

The O&M expenses approved are as below.

Table 6.9.1: Approved O&M expenses 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 (FY 2010-11)
1	Employee Expenses	5.09	5.09	4.50	4.50
2	A&G Expenses	3.68	2.00	0.25	0.25
3	R&M Expenses	2.20	2.20	3.86	2.20
4	Sub-Total	**10.97**	**9.29**	**8.61**	**6.95**
5	Less: Expenses Capitalized	-	-	-	-
6	**Total O&M Expenses**	**10.97**	**9.29**	**8.61**	**6.95**

6.10 Capitalization, GFA & Depreciation

Petitioner's submission

The Petitioner in its ARR and tariff petition for FY 2010-11 had proposed a capital expenditure of Rs. 21.53 Crores, out of which Rs. 12.92 Crores was proposed to be capitalized during FY 2010-11.

The Petitioner has computed the depreciation at Rs. 12.12 Crores as against the depreciation of Rs. 0.34 Crores approved by the Commission in its ARR and tariff order dated November 1'2010 for FY 2010-11. 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 2010-11 as given in the provisional audited annual accounts of Electricity Department of Daman & Diu for FY 2010-11.

Commission's analysis

The Commission had approved the capitalization of Rs. 12.92 Crores for the purpose of Aggregate Revenue Requirement in its ARR and tariff order dated November 01'2010.

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***

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. Since the addition to GFA for the year FY 2010-11 of Rs. 9.22 Crores has already been incurred, the Commission considers it admissible as an addition of 9.22 Crores in the gross block for the purpose of truing up of FY 2010-11. **In view of the above, the Commission provisionally considers the depreciation of Rs. 0.24 Crores for the purpose of provisional true up of ARR of FY 2010-11.**

Table 6.10.1: Depreciation for FY 2010-11

Sr. No.	Particulars	Value of assets at the beginning of FY 2010-11	Addition during FY 2010-11	Closing balance at the end of FY2010-11	Rate of Depreciation	Depreciation for FY 2010-11
1	Plant & Machinery	-	9.03	9.03	5.28%	0.24
2	Buildings	-	-	-	3.34%	-
3	Vehicles	-	-	-	9.50%	-
4	Furniture and Fixtures	-	0.05	0.05	6.33%	0.00
5	Computers and Others	-	0.14	0.14	6.33%	0.00
6	Land	-	-	-	0.00%	-
7	**Total**	**-**	**9.22**	**9.22**		**0.24**

6.11 Interest and Finance Charges

Petitioner's submission

The petitioner has claimed normative interest costs of Rs 21.07 Crores. The Petitioner has computed normative debt by applying the debt equity ratio of 70:30 on the opening GFA as on 1st April 2010 in accordance with the JERC (Terms and Conditions for Determination of Tariff Regulations) 2009. The interest cost has been applied at by applying the SBI PLR on the normative debt thus computed.

Commission's analysis

The Commission in its ARR and tariff order dated November 1'2010 for FY 2010-11 had not considered the notional interest charges projected by the petitioner. As the petitioner had not borrowed any loans to meet the capital expenditure for FY 2010-11, therefore the interest charges computed by the petitioner were on the basis of notional loan without any external borrowings. However as per Regulation 25 of JERC (Terms and Conditions for Determination of Tariff) Regulations, 2009 –
Quote"

1) *For existing loan capital interest and finance charges on loan capital shall be computed on the outstanding loans, duly taking into account the rate of interest and schedule of repayment as per the terms and conditions of relevant agreements.*

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

The 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 the FY 2010-11, wherein the Commission had determined Tariff in accordance with the JERC Tariff Regulation. The Commission has also perused the accounts certified by a chartered accountant submitted by the petitioner. It has been observed that the petitioner does not have any opening loan portfolio.

The Commission has analyzed the nature of expenses (interest charges on LC, bank charges etc.) amounting to Rs 0.74 Crores as mentioned in the audited accounts as part of Financial Charges and considering the reasonableness of the expenditure, considered them and allows for the purpose of truing of FY 2010-11. The Commission observed from the audited accounts that the petitioner had not taken any loan to meet the capital expenditure for FY 2010-11. As discussed in para 6.10 of this order, the Commission has considered the normative interest on the actual capital expenditure incurred during FY 2010-11 and has therefore considered as an allowable expense as a special case for the purpose of truing up of ARR of FY 2010-11. **The Commission therefore considers Rs. 1.13 Crores on account of Interest and Finance Charges as reasonable and approves the same for provisional truing up of FY 2010-11.**

6.12 Interest on Working Capital

Petitioner's submission

The petitioner has computed the interest on working capital for FY 2010-11 as Rs. 5.67 Crores as against Rs. 5.39 Crores approved by the Commission in its ARR and tariff order dated November 1'2010 for FY 2010-11.

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 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 31'2010 to meet the working capital required for FY 2010-11.

Since the utility has not furnished the quantum of security deposit available with it, the Commission has considered the consumer security deposit as available from the audited accounts. 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 2010-11. 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 6.13 of the order.

The SBI Advance Rate of 11.75% as on 1st April 2010 has been considered for in the calculation of the interest on working capital. The table below shows the interest on working capital approved for FY 2010-11.

Table 6.12.1 : Interest on Working Capital approved by the Commission for FY 2010-11 (in 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 (FY 2010-11)
1	Power Purchase Cost for one month	44.62	45.10	47.58	42.95
2	Employee Cost for one month	0.42	0.42	0.38	0.38
3	A&G Expenses for one month	0.31	0.17	0.02	0.02
4	R&M Expenses for one month	0.18	0.18	0.32	0.18
5	**Total Working Capital for one month**	**45.53**	**45.87**	**48.30**	**43.53**
6.	**Security Deposit**				**5.61**
7	**Net Working capital required after deduction of Security Deposit from Working Capital Requirement**	**-**	**-**		**37.92**
8	SBAR Rate	11.75%	11.75%		11.75%
9	**Interest on Working Capital**	**5.35**	**5.39**	**5.67**	**4.46**

The Commission accordingly approves the interest on working capital at Rs 4.46 Crores against the Rs 5.67 Crores claimed by the Petitioner as part of the provisional true-up for FY 2010-11.

6.13 Interest on Security Deposit

Petitioner's submission

The petitioner has not claimed the interest on security deposit from consumers for FY 2010-11.

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 during FY 2010-11. The Commission 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 1'2010 at the rate of 6% per annum and should explicitly mention the same as the 'Interest on security deposit for FY 2010-11' on the bills of the consumers. Since the utility has not furnished the quantum of security deposit available with it, the Commission has considered the consumer security deposit as available from the audited accounts and calculated the interest at the bank rate of 6% on it.

Table 6.13.1 : Interest on Consumer Security Deposit approved by the Commission for FY 2010-11 (in Rs. Crores)

S.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 (FY 2010-11)
1	Opening Security Deposit	NIL	NIL	NIL	5.61
2	Add: Deposits during the Year				NA
3	Less: Deposits refunded				NA
4	Closing Security Deposit				6.28
5	Bank Rate				6.00%
6	**Interest on Security Deposit**	**NIL**	**NIL**	**NIL**	**0.34**

The Commission considers it appropriate to allow Rs. 0.34 Crores as the interest on security deposits which is a must pay by the petitioner to the consumers in FY 2012-13 and has considered this as an expenditure in the ARR for the purpose of provisional truing up of ARR of FY 2010-11. The petitioner should confirm payment of this interest to eligible consumers in their next ARR and Tariff filing.

6.14 Return on Capital Base/Return on Equity

Petitioner's submission

The petitioner has computed the normative Return on Equity for FY 2010-11 at Rs. 12.30 Crores in the true-up for FY 2010-11.The petitioner has submitted that the normative equity has been computed by applying the debt-equity ratio of 70:30 on the opening GFA on April 1'2010 as given in the JERC (Terms and conditions for determination of tariff regulations) 2009. The return on equity has been computed by applying the rate of 16% on the normative debt as per the regulation 24 of the Tariff regulations.

Commission's analysis

The Commission in its ARR and 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.''

Having considered the submission of the petitioner with regard to audited accounts, the Commission is of the view that the petitioner as being an integrated utility in its present form is eligible for the return on capital base and it is entitled to return on capital base under the provisions of Schedule VI of the repealed Electricity (Supply) Act, 1948 vide provision under Regulation 23 of JERC (Terms and Conditions for Determination of Tariff) Regulations, 2009. The basic requirement for consideration of either return on capital base or return on equity for historical assets is the asset and depreciation registers besides other data. The petitioner has furnished the audited accounts, however the fixed asset and the depreciation registers have not been furnished. As discussed in foregoing para no. 6.10, the gross opening block in the fixed asset and audited accounts is based on assumptions and is not verified. **Therefore, the Commission has not considered the return on capital base for the purpose of provisional truing up of ARR of FY 2010-11 in the absence of audited opening GFA as on April 1'2010.**

The Commission therefore has not considered the return on capital for the purpose of provisional truing up of ARR for FY 2010-11.

6.15 Provision for bad and doubtful debts

Petitioner's submission

The petitioner has claimed Rs. 0.49 Crores as against the provision of bad and doubtful debts in its true-up petition for FY 2010-11.

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 2010-11. The Commission therefore has not considered any bad and doubtful debts for provisional truing up of FY 2010-11.

The Commission has, therefore, not considered any expenses on account of bad & doubtful debt for provisional truing up of ARR for FY 2010-11.

6.16 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. 8.72 Crores as actual non-tariff income as against the approved value of Rs. 11.22 Crores for FY 2010-11.

Commission's analysis

As per the sub-regulation 2 (i) of regulation 8 of JERC tariff regulations 2009, **Commission has considered the final figures of Non-tariff Income of Rs. 8.72 Crores as per the audited accounts as reasonable and approves the same for provisional truing up of ARR of FY 2010-11.**

6.17 Revenue from Sale of Surplus Power

Petitioner's submission

The petitioner has submitted that surplus power available was sold under the UI mechanism. The revenue earned by the Petitioner from actual sale of surplus power during FY 2010-11 is Rs. 46.43 Crores.

Commission's analysis

The Commission observed that the Petitioner had sold/under-drawl power under UI earning Rs 46.43 Crores through the under-drawal of power under UI mechanism.

Table 6.17.1 : Summary of Sale from UI and Power Exchange for FY 2010-11 (in Rs. Crores

Sr. No.	Source	FY 2010-11 (Actual)	
		Sale	
		Energy Units (in MUs)	Amount (Rs. in Crores)
1	UI mechanism	139	46.43
2	Power Exchange	-	-
3	**Total**	**139**	**46.43**

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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 2010-11 at Rs. 46.43 Crores for sale of 139 million units as reasonable and approves the same for provisional truing up of FY 2010-11.**

6.18 Revenue at retail tariff for FY 2010-11

Petitioner's submission

The petitioner has submitted the actual revenue of Rs. 518.36 Crores from the sale of power for FY 2010-11 as per the audited accounts within the state.

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. 518.36 Crores from the sale of power within the state as per audited accounts as reasonable and approves the same for provisional truing up of FY 2010-11.**

6.19 Aggregate Revenue Requirement and Revenue Surplus/Deficit for provisional truing up of FY 2010-11

Petitioner's submission

The petitioner has submitted the net revenue requirement of Rs. 622.48 Crores for FY 2010-11 and has estimated the revenue gap of Rs. 57.69 Crores during FY 2010-11.

Commission's analysis

The Commission has considered and approved the provisional truing up of ARR for FY 2010-11 based on the items of expenditure discussed in the preceding Chapters and the same has been summarized in the table below vis-à-vis petitioner's claim in the true-up petition for FY 2010-11.

As per the sub-regulation 2 (i) of regulation 8 of JERC tariff regulations 2009, the **Commission has provisionally considered the figures as per audited accounts and regulations for the purpose of provisional truing up of FY 2010-11.**

Table 6.19.1 : Aggregate Revenue Requirement approved for truing up of FY 2010-11 (in 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 (FY 2010-11)
1	Power Purchase Cost	535.44	541.22	570.94	561.85
2	Employee costs	5.09	5.09	4.50	4.50
3	Administration and General Expenses	3.68	2.00	0.25	0.25
4	Repair and Maintenance Expenses	2.20	2.20	3.86	2.20
5	Depreciation	15.76	0.34	12.12	0.24
6	Interest and Finance charges	16.91	-	21.07	1.13
7	Interest on working capital	5.35	5.39	5.67	4.46
8	Interest on security deposit	NIL	NIL	NIL	0.34
9	Return on NFA	23.14	-	12.30	-
10	Provision for Bad Debt	6.08	0.18	0.49	-
11	Incentive on achievement of norm of T&D loss	-	-	-	
12	**Total Revenue Requirement**	**613.65**	**556.42**	**631.20**	**574.97**
13	Less: Non Tariff Income	5.25	11.22	8.72	8.72
14	**Net Revenue Requirement**	**608.40**	**545.20**	**622.48**	**566.25**

The approved gap has been mentioned in the following table.

Table 6.19.2 : Estimated (Surplus)/gap for truing up of FY 2010-11 (in 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 (FY 2010-11)
1	**Net Revenue Requirement**	**608.40**	**545.20**	**622.48**	**566.25**
2	Less: Revenue from Retail Sales at Existing Tariff	458.35	495.75	518.36	518.36
3	Less: Revenue from Surplus Power Sale/UI			46.43	46.43
4	**Net Gap/(Surplus)**	**150.05**	**49.45**	**57.69**	**1.46**
5	Carrying Cost	-	-	-	0.09
6	**Total gap (4+5)**	**150.05**	**49.45**	**57.69**	**1.55**

Commission considers the estimated gap of Rs. 1.55 Crores as reasonable and approves the same for provisional truing up of FY 2010-11. This estimated revenue gap is carried over to the next year and has accordingly been considered in the Review of FY 2011-12.

Review of Aggregate Revenue Requirement (ARR) for FY 2011-12

7. Review of ARR for FY 2011-12

7.1 Background

The Commission had approved the Aggregate Revenue Requirement for FY 2011-12 vide its ARR and tariff order dated October 3'2011 as per the provisions of the JERC tariff regulations 2009. As brought out in the previous Chapters of this order, the Commission has deliberated upon the directions of the Hon'ble APTEL regarding redetermination of the tariff for FY 2011-12 as discussed in detail in chapter 5 of this order. The petitioner has submitted the revised estimates of sale of electricity, income and expenditure of FY 2011-12 for the review of ARR of FY 2011-12 which includes the actuals of first half of FY 2011-12 and estimates of the balance year as per the Regulation 8 of JERC Tariff Regulations 2009, in ARR and tariff petition for FY 2012-13 on November 30'2011.

A Pre-admission hearing was necessitated as the petition for FY 2012-13 was not submitted as per the JERC regulatory norms/formats & audited accounts. In the pre-admission hearing on January 20' 2012, the Commission directed the Petitioner to file an affidavit for compliance of tariff order passed by the Commission for FY 2011-12 alongwith the requisite information so that review and true-up of earlier ARRs could also be carried out.

The Petitioner vide letter dated February 13' 2012 submitted the part compliance of the tariff order passed by the Commission for FY 2011-12, true-up petition for FY 2010-11, Review for FY 2011-12 (till December 2011) alongwith the audited accounts for FY 2010-11.

The petition for Review of FY 2011-12 submitted to the Commission on February 13' 2012 containsthe actual category wise sales, power purchase cost, O&M expenses, capital expenditure and non-tariff income from April 2011 to December 2011. The petition for Review of FY 2011-12 dated February 13' 2012 states -

Quote '*The expenses like Depreciation, Return on Equity and Interest on long term loans have not been included in this Review as these are computed at the end of the financial year'* ***Unquote***

Table 7.1.1 : Series of updation in the data for Review of FY 2011-12

Sr. No.	Particulars	Revised estimates of FY 2011-12 submitted in FY 12-13 petition on November 30'2011	Actuals as submitted by the petitioner on August 9'2012	Actuals submitted on August 16' 2012
1	2	3	4	5
1	Cost of power purchase for full year	679.15	802.13	809.32
2	Employee costs	5.16	5.16	5.16
3	Administration and General Expenses	2.17	2.17	2.17
4	Repair and Maintenance Expenses	6.51	6.51	6.51
5	Depreciation	15.13	15.13	15.13
6	Interest and Finance charges	0	0.00	0.00
7	Interest on working capital & Interest on Security Deposit	8.52	8.52	8.52
8	Return on NFA /Equity	0	0	0.00
9	Provision for Bad Debt	6.84	6.84	6.84
10	Non-Tariff Income	9.41	9.41	9.41
11	Revenue from Surplus Power Sale/UI	38.83	48.98	48.98
12	Revenue from Retail Sales at Existing Tariff	683.99	674.28	674.28
13	Energy sales (MU) to retail consumers	1740.82	1710.52	1,710.52
14	Units Purchased from the Power generators	2074.36	2,200.24	2,191.39

The petitioner in his submission has provided the provisional figures of FY 2011-12 for the following:

a. Power Purchase Quantum and Cost

b. Category wise sales & revenue, number of consumers and connected load

c. Non-Tariff Income

The Commission for this Review of FY 2011-12 has considered the following:

a. Actual Performance in FY 2010-11 (audited figures);

b. Actual Power Purchase Quantum and Cost for FY 2011-12

c. Actuals of category wise sales & revenue, consumers and connected load for FY 2011-12

d. Revised estimates of FY 2011-12 of O&M expenses, capital expenditure based on 9 month actuals of FY 2011-12

e. Non-Tariff Income

f. 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.

7.2 Review for FY 2011-12

The review of aggregate revenue requirement requires assessment of quantum of energy sales, energy loss as well as various cost elements like power purchase cost, O&M expenses, interest cost and depreciation etc. This has been done based on actual data for 12 months for power purchase cost, and sales, and revised estimates of FY 2011-12 based on nine months actuals for O&M expenses, interest and depreciation submitted by the petitioner. 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 Capitalisation

iv. Gross Fixed Assets;

v. Depreciation;

vi. Interest on Long Term Loans;

vii. Interest on Working Capital & Security Deposits;

viii. Return on Capital Base/ Net Fixed Assets;

ix. Provision for Bad and Doubtful Debts

x. Other expenses.

xi. Non-Tariff Income

7.3 Consumers, Connected Load and Energy Sales

Petitioner's Submission

The petitioner had initially submitted the category wise actual sales from the month of April to December 2011 and based on the actual sales of 9 months had submitted the revised estimates for FY 2011-12. The petitioner in its additional submission submitted the actual category wise sales, consumers and the connected load for the full financial year FY 2011-12 on August 9 '2012.

Commission's Analysis

The petitioner's submission did not provide the category wise and slab wise connected load and the no. of consumers' along with the petition for FY 2012-13. The Commission had called for the information of the connected load category wise from the petitioner which was responded by the petitioner vide its letter dated December 24' 2011. In the said letter the petitioner had submitted the connected load growth for the last three years i.e. FY 2008-09, FY 2009-10 and FY 2010-11 and had submitted the seven months actual of FY 2011-12 (from April'11 to October'11) in their reply to the queries raised by the Commission's office vide Commission's letter dated December 9'2011. However, the sub-category and slab-wise information was still not provided.

As the FY 2011-12 is already over the Commission finds merit in considering the actual of entire year submitted by the petitioner for revenue/sales. It was noted that the submission of the petitioner was again void of the details with regard to the connected load and no of consumers in each sub category/ slab, which affected the processing of data for this order. The Commission had again called for the details with respect to the connected load and no of consumers for the FY 2011-12 which were responded by the petitioner but again void of sub-category/slab wise connected load & no. of consumers on August 9 ’2012.

As discussed above, the Commission noted that the data submitted in the formats was incomplete, which affected the processing of this order. In this regard, the Petitioner is directed that for the subsequent filings of ARR petition, all formats and information required as per the JERC Tariff Regulations 2009 should be furnished at the very first instance.

The approved sales, connected load and number of consumers for the FY 2011-12 have been shown in the table below:

Table 7.3.1 : Category wise Sales approved by the Commission for FY 2011-12 (in million units)

S.No.	Consumer Category	FY 2011-12				
		Proposed in petition-FY 12	Approved in T.O. of FY 11-12 dated 30.10.2011	Revised Estimates (Petition FY 13)	Actuals (submitted on 9th August’12)	Approved
1	**Domestic**	66.1	66.1	66.00	64.53	64.53
2	**Low Income Group**	0.1	0.1	0.10	0.10	0.10
3	**NRS/Commercial**	29.6	29.6	31.00	30.22	30.22
4	**Agriculture**	2.5	2.5	2.74	2.64	2.64
5	**LT Industrial**	141.8	141.8	154.61	150.47	150.47
6	**Public Lighting**	4.8	4.8	4.75	5.02	5.02
7	**Public Water Works**	0.9	0.9	0.92	0.90	0.90
8	**HT/EHT Industry**	1469.1	1469.1	1480.00	1456.14	1456.14
9	**Temporary Supply**	-	-	0.70	0.50	0.50
10	**TOTAL**	**1714.90**	**1714.90**	**1740.82**	**1710.52**	**1710.52**

Table 7.3.2 : Category wise Connected Load approved by the Commission for FY 2011-12 (in KW)

S.No.	Consumer Category	FY 2011-12	
		Actuals (submitted on 9th August'12)	Approved
1	Domestic	55440	55440
2	Low Income Group*	-	-
3	NRS/Commercial	35214	35214
4	Agriculture	5056	5056
5	LT Industrial	170583	170583
6	Public Lighting	1624	1624
7	Public Water Works	675	675
8	HT Industrial	369685	369685
9	Temporary Supply	-	-
10	TOTAL	638277	638277

* Details not submitted by the petitioner

Table 7.3.3 : Category wise number of consumers approved by the Commission for FY 2011-12 (in numbers)

S.No.	Consumer Category	FY 2011-12				
		Proposed in petition-FY 12	Approved in T.O. of FY 11-12 dated 30.10.2011	Revised Estimates (Petition FY 13)	Actuals (submitted on 9th August'12)	Approved
1	Domestic	46202	46202	46023	46023	46023
2	Low Income Group					
3	NRS/Commercial	9467	9467	9274	9236	9236
4	Agriculture	1829	1829	1701	1705	1705
5	LT Industrial	3538	3538	3682	3675	3675
6	Public Lighting	217	217	185	188	188
7	Public Water Works	86	86	77	77	77
8	HT Industrial	904	904	840	827	827
9	Temporary Supply	-	-	-	-	-
10	TOTAL	62243	62243	61782	61731	61731

7.4 Intra-State Transmission & Distribution Loss

Petitioner's Submission

The petitioner has considered the T&D loss level of 9.95% for FY 2011-12 as per the petition dated 30th November 2011 for ARR of FY 2012-13 and Review of FY 2011-12.

Commission's Analysis

The Commission in its ARR and tariff order for FY 2011-12 had approved the targeted T&D loss level of 9.75%. The petitioner has not furnished the actual T&D loss for the FY 2011-12. However 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 13.00%.

The Commission observes that the actual T&D loss levels for FY 2009-10 and FY 2010-11 (basis the actuals) 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 the FY 2011-12, 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 2011-12 dated October 3, 2011 of 9.75% and approves the same for review of FY 2011-12.

7.5 Inter-State Transmission Loss

Petitioner's Submission

The petitioner has considered the loss level of 3.90 % for FY 2011-12 for estimating the power availability at the periphery as per the submission in the petition dated November 30' 2011.

Commission's Analysis

The petitioner in its supplementary submission dated August 9, 2012 has submitted the average pooled losses for FY 2011-12 of the Western region at 3.61%. The Commission in its ARR and tariff order for FY 2011-12 dated October 3'2011 had approved the loss level of 4.16%. The Commission considers the actual figures of regional pool losses of 3.61% during FY 2011-12 as the inter-state loss and approves the same for review of ARR of FY 2011-12.

7.6 Energy Balance

Petitioner's Submission

The petitioner has submitted that the sales have been estimated to have increased by 6.61% during FY 2011-12. Thus, the overall energy requirement at the state periphery for FY 2011-12 has been projected to be 1933 MU and the total power purchase is going to be 2074 MU after the deduction of inter-state transmission losses as per the submission dated November 30' 2011. But, the total power purchase quantum and the sales had been revised to be 2200.24 MU and 1710.52 MU as per the submission of the petitioner during the technical validation session held on July 23' 2012 as per the actual for the year. The power purchase quantum was further revised to 2191.39 MU as per the submission dated August 16' 2012.

Commission's Analysis

The Commission has approved the sales as explained above at 1710.52 MU, and approved the internal loss of 9.75% resulting in a net energy requirement of 1895.31 MU for the territory.

The Commission has allowed the sales outside the state/UI sales at 110.16 MU (net of under drawl and over drawl) resulting in the net energy requirement at the periphery of 2005.47 MU.

Assuming the external losses of 3.61% to be reasonable, the gross energy purchase approved by the Commission is 2080.58 MU.

Table 7.6.1 : Energy Balance approved for FY 2011-12

S. No.	Particulars	Proposed in petition of FY 2011-12	Approved in T.O. of FY 11-12 dated 3.10.2011	Revised estimates of FY 12 in FY 12-13 petition	Actual analysed by the Commission as per the actual submitted by the Petitioner on August 16' 2012	Approved
A	**ENERGY REQUIREMENT** (in Mus)					
1	Energy sales within the State/UT (in Mus)	1714.90	1714.90	1740.82	1710.52	1710.52
2	**Distribution losses**					
i	%	10.50%	9.75%	9.95%	13.00%*	9.75%
ii	MU	201.19	185.27	192.35	255.59	184.79

S. No.	Particulars	Proposed in petition of FY 2011-12	Approved in T.O. of FY 11-12 dated 3.10.2011	Revised estimates of FY 12 in FY 12-13 petition	Actual analysed by the Commission as per the actual submitted by the Petitioner on August 16' 2012	Approved
3	**Energy required at State Periphery for Sale to Retail Consumers**	**1916.09**	**1900.17**	**1933.17**	**1966.11**	**1895.31**
4	**Add: Sales to common pool consumers/ UI (in Mus)**	**0.00**	**0.00**	**141.19**	**110.16**	**110.16**
A	Sales outside state/UT : UI/Under drawal (in Mus)	0.00	0.00	141.19	110.16	110.16
B	Sales (in Mus)	0.00	0.00	0.00	0.00	0.00
	a) To electricity traders (in Mus)					
	b) Through PX (in Mus)					
C	Sales to other distribution licensees	0.00	0.00	0.00	0.00	0.00
	a) Bilateral Trade (in Mus)					
	b) Banking Arrangement (in Mus)					
5	**Total Energy Requirement for State**	**1916.09**	**1900.17**	**2074.36**	**2076.27**	**2005.47**
6	**Transmission losses**					
i	%	5.85%	4.16%	3.90%	3.61%	3.61%
Ii	MU	119.00	82.48	83.48	77.76	75.11
7	**Energy required to be purchased**	**2035.09**	**1982.65**	**2157.84**	**2154.03****	**2080.58**

*NOTE: The Petitioner has not submitted the actual T&D losses for the year. The 13% distribution loss is a derived figure based on the actuals of sales and power purchase quantum submitted by the Petitioner.

** The quantum of 2154.03 MU is after analysis of the power purchase quantum and cost by the Commission after verification from bills and as per the REA. This does not include the UI quantum of 56.05 MU.

Table 7.6.2 : Variation Analysis of Power Purchase Quantum of FY 2011-12

Sr. No.	Particulars	Approved in T.O. of FY 11-12 dated 3.10.2011	Approval as part of the review for FY 2011-12	Difference
A)	**ENERGY REQUIREMENT** (in Mus)			
1	Energy sales within the State/UT (in Mus)	1714.9	1710.52	4.38
2	Distribution losses	185.27	184.79	0.48
3	Sales outside state/UT : UI/Under drawl (in Mus)	0	110.16	(110.16)
4	**Total Energy Requirement for UT**	**1900.17**	**2005.47**	(105.30)
B)	**ENERGY AVAILABILITY**			
1	Power Purchased (in Mus)			
a	NTPC	1204	1,238.41	(34.41)
b	NSPCL	666	694.90	(28.90)
c	NPCIL	99	136.66	(37.66)
d	NTPC - KHSTPP – II (Eastern Region)	14	10.62	3.38
e	Renewable Energy Sources	-	0	
f	UI over-drawal (Buy)	0	0	
3	**Gross power purchase (in MUs)**	**1983**	**2,080.58**	**(97.58)**
4	Inter-State Transmission Losses	82.48	75.11	7.37
5	**Net Energy Availability**	**1900.17**	**2,005.47**	**(105.30)**

The difference between the total power purchase quantum approved in the tariff order for FY 2011-12 vis-à-vis review in this order is 105.3 MU (in monetary terms, Rs 175.08 Crores) which is mainly due to the following factors:

1. Past arrears on account of revision in the tariff of Power stations.
2. Increase in fuel cost
3. UI underdrawal (sales) of 110.16 MUs

Since the expense is already incurred, it is admissible in Review subject to the true-up .

7.7 Power Purchase Quantum and Cost

Petitioner's Submission

The petitioner had furnished the summary of Power purchase quantum of 2200.24 million units and cost of Rs 802.13 Crores for FY 2011-12 on the basis of power purchase bills submitted by the petitioner during technical validation session held on July 23'2012. However, the same was revised to 2191.39 MU and Rs 809.32 Crores as per the submission dated August 16' 2012. In the latest submission, the Petitioner has considered arrears of Rs 41.24 Crores in the total power purchase cost. The same is summarized below.

Table 7.7.1 : Summary Sheet: Actual Power Purchase Quantum and Cost submitted by the petitioner for FY 2011-12

Sr.No.	Source	Capacity (MW)	Licensee share (%)	Purchase (MU)	VC (Ps/ Unit)	FC (Rs. Cr)	VC (Rs. Cr)	Others (Rs. Cr)	Total (Rs. Cr)	Per unit cost(Rs./k wh)	Arrears (Rs. Cr)	Net Payable (Rs. Cr)
1	2	3	7	8	9	10	11	12	13			
I	**NTPC Stations**											
1	KSTPP	2,100	2.48%	340.99	89	14.18	30.24	1.39	45.81	1.34	(0.92)	44.89
2	VSTPP-I	1,260	1.09%	105.08	157	5.49	16.45	0.48	22.42	2.13	8.94	31.37
3	VSTPP-II	1,000	1.00%	76.92	149	4.85	11.46	0.38	16.69	2.17	0.93	17.62
4	VSTPP- III	1,000	1.21%	100.22	150	9.73	15.00	0.66	25.40	2.53	1.94	27.33
5	KAWAS	656	4.72%	212.79	351	17.61	74.72	0.83	93.17	4.38	5.29	98.46
6	JGPP	657	4.76%	213.90	315	24.02	67.38	0.85	92.26	4.31	7.94	100.20
7	Bhilai Unit-I &II(NTPC)	500	18.30%	680.63	229	110.57	155.87	3.88	270.32	3.97	0.00	270.32
8	KSTPP-III	500	1.18%	39.06	78	6.02	3.05	0.11	9.18	2.35	(0.15)	9.03
9	Sipat	1,660	0.85%	119.12	91	13.63	10.88	0.77	25.28	2.12	7.18	32.46
10	Misc (Past arrears, debit and Credit URS)			0.00		0.00	0.00	0.00	0.00	0.00	7.50	7.50
	Subtotal	**9,334**		**1,888.72**	**204**	**206.09**	**385.06**	**9.36**	**600.51**	**3.18**	**38.66**	**639.17**
II	**Eastern Region**											
1	KHSTPP-II	1,000	0.13%	10.57	249	1.26	2.64	0.01	3.91	3.69	0.06	3.96
2	KHSTPP-I			0.00	0.00	0.00	0.00	(0.17)	(0.17)	0.00	0.63	0.46
3	FSTPS			0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.40	0.41
4	RSTPS			0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.03
5	TSTPS			0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.37	0.37
	Subtotal	**1,000**		**10.57**	**249**	**1.26**	**2.64**	**(0.16)**	**3.74**	**3.54**	**1.48**	**5.22**
III	**NPCIL**											
1	KAPPS	440	1.47%	58.40	220	0.00	12.83	0.00	12.83	2.20	0.00	12.83
2	TAPP 3&4	1,080	1.18%	78.25	285	0.00	22.34	0.02	22.36	2.86	1.09	23.45
	Subtotal	**1,520**		**136.65**	**257**	**0.00**	**35.17**	**0.02**	**35.19**	**2.58**	**1.09**	**36.28**
IV	**Others**											
1	Ratnagiri	**1,967**	**2.00%**	102.17	**257**	20.08	26.25	0.00	**46.34**	**4.54**	0.00	**46.34**
V	**Power purchase from Other Sources**											
1	Bilateral											
2	Pow er purchase from Indian E. Exchange											
3	Banking											
4	UI			53.27	0		22.67	0.00	22.67	0.00	0.00	22.67
5	Solar											
6	Non Solar											
	Subtotal			**53.27**	**0**		**22.67**	**0.00**	**22.67**	0.00	**0.00**	22.67
	Power Purchase Cost			**2,191.39**	**967.52**	**227.44**	**471.78**	**9.23**	**708.44**	**3.23**	**41.24**	**749.68**
V	**Other Charges**											
1	PGCIL CHARGES								54.27		0.00	54.27
2	Open Access Charges								3.41		0.00	3.41
3	WRLDC								0.51		0.00	0.51
4	MSTCL								1.44		0.00	1.44
	Grand Total of Charges			**2,191.39**					**768.08**	**3.50**	**41.24**	**809.32**

Commission's Analysis

As brought out in the section on energy balance, the power purchase quantum approved by the Commission in its last Tariff Order dated 3.10.2011 for FY 2011-12 is 1983 MU at an approved power purchase cost of Rs. 556.89 Crores including arrears of PGCIL and NTPC on account of revision in the tariff specified by CERC.

As discussed in the section on energy balance in para 7.6, the power purchase quantum approved is 2080.58 MU. 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).

The Commission as part of prudence check verified the station-wise Power purchase bills shown by the petitioner for FY 2011-12 on random selection basis. Commission considered the submissions made by the petitioner after random verification of power purchase bills of Jan., Feb. and March 2012. Commission noticed errors at multiple places and therefore has verified the actual quantum of Power purchase from the REA reports. As such, the linking and calculation errors are the only reason for variation of power purchase cost and quantum of power purchased, between the summary sheet submitted by the petitioner and the summary sheet verified and approved by the Commission.

It is observed that the petitioner has under-drawn 110.16 million units (net off of underdrawl and overdrawl) under UI mechanism for meeting the energy demand of consumers of ED-DD. 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.

The Commission directs the Petitioner to enforce long term PPAs in line with their base load requirements so as to avoid short term power purchases beyond the prudent level so as to minimize the impact on ARR.

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 2% of total power purchase from renewable sources for FY 2011-12 consisting 0.30% from Solar and 1.70% from Non-Solar sources. The Commission has observed that as per the actual power purchase cost and quantum furnished by the Petitioner, it has not procured power from renewable sources of energy and hence not meeting its RPO obligations for the year.

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 2011-12 is mentioned below:

Table 7.7.2 : Actual Power Purchase Quantum and Cost excluding UI Approved for FY 2011-12 (as per merit order principles)

Sr. No.	Source	Purchase (MU)	VC (Ps/ Unit)	FC (Rs. Cr)	VC (Rs. Cr)	Others (Rs. Cr)	Total (Rs. Cr)	Arrears (Rs. Cr)*	Net Payable (Rs. Cr)
I	**NTPC Stations**								
1	KSTPP-III	39.07	77.94	6.00	3.05	0.12	9.17	(0.15)	9.02
2	KSTPP	340.99	88.85	14.18	30.30	1.35	45.83	(0.92)	44.91
3	Sipat	119.07	91.47	13.64	10.89	0.75	25.28	7.18	32.46
4	VSTPP-II	76.92	149.25	5.18	11.48	0.58	17.23	0.93	18.16
5	VSTPP- III	100.22	150.04	9.74	15.04	0.62	25.40	1.94	27.33
6	VSTPP-I	105.08	156.96	5.48	16.49	0.69	22.67	8.94	31.61
7	Bhilai Unit-I &II(NTPC)	694.90	224.31	110.57	155.87	3.44	269.88	0.00	269.88
8	JGPP	213.63	315.43	24.02	67.39	0.70	92.10	7.94	100.04
9	KAWAS	141.25	347.99	17.61	49.15	0.69	67.45	5.29	72.74
	Misc (Past arrears, debit and Credit URS)							7.50	7.50
	Subtotal	1,831.13	1,602.24	206.41	359.66	8.937	575.00	38.66	613.67
II	**Eastern Region**								
1	KHSTPP-II	10.62	256	1.25	2.72	0.01	3.98	1.48	5.46
	Subtotal	10.62	256	1.25	2.72	0.01	3.98	1.48	5.46
III	**NPCIL**								
	N.P.C.								
1	KAPPS	58.40	220	0.00	12.83	0.00	12.83	0.00	12.83
2	TAPP 3&4	78.26	285	0.00	22.34	0.00	22.34	1.09	23.43
	Subtotal	136.66	257	0.00	35.16	0.00	35.16	1.09	36.26
IV	**Others**								
1	Ratnagiri	102.17	256.94	19.90	26.25	0.00	46.15	0.00	46.15

Sr. No.	Source	Purchase (MU)	VC (Ps/ Unit)	FC (Rs. Cr)	VC (Rs. Cr)	Others (Rs. Cr)	Total (Rs. Cr)	Arrears (Rs. Cr)*	Net Payable (Rs. Cr)
V	**Power purchase from Other Sources**								
1	Solar								
2	Non Solar								
	Subtotal	0.00	0		0.00	0.00	0.00	0.00	0.00
	Power Purchase Cost	**2,080.58**	**2,372.38**	**227.56**	**423.79**	**8.95**	**660.30**	**41.24**	**701.53**
VI	**Other Charges**								
1	PGCIL CHARGES						54.27	0.00	54.27
2	Open Access Charges						3.41	0.00	3.41
3	WRLDC						0.51	0.00	0.51
4	MSTCL						1.44	0.00	1.44
	Grand Total of Charges	**2,080.58**					**719.93**	**41.24**	**761.17**

*Arrears of generating plants as per the CERC orders

7.8 Operation and Maintenance Expenses

Petitioner's Submission

The petitioner has submitted that the Operation and Maintenance expenses comprise of the following heads:

- **Employees Expenses** which includes the salaries, dearness allowances, dearness pay, other allowances and retirement benefits paid to the staff;
- **Repair and Maintenance (R&M) Expenses**, which include all expenditure incurred on the maintenance and upkeep of transmission and distribution assets; and
- **Administrative and General Expenses**, which include all expenditure incurred in operating a business such as telephone charges, regulatory and consultancy fees such as energy auditing and chartered accountant fees, conveyance and travel expenses, water charges etc.

The Petitioner has submitted the following:

Quote

'' …it has not maintained segregation between the three cost elements for the purpose of accounting and had booked all cost including salaries, medical expenses, office expenses, domestic traveling expenses, and other charges towards repairs and supply of materials under the operation and maintenance expense head. However, efforts have been made by ED-DD to segregate the O&M

expenses under commercially accepted principles. In this regard a specialized accounting firm has been appointed by ED-DD. The specialized firm has already identified and segregated all the elements of cost to be covered under the three broad categories of O&M expenses from FY 08-09 to FY 10-11. The said work will be finalized soon and output of the same will be submitted to the Hon'ble Commission.''

Unquote

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

Table 7.8.1: Operation & Maintenance Expense of previous years (Rs. Crore)

Year	O&M Expenses
	Actual
FY 06-07	7.02
FY 07-08	6.47
FY 08-09	8.47
FY 09-10	9.35
FY 10-11	11.17

The total Operation & Maintenance expense for FY 2010-11 as per the latest actuals submitted for true-up has been Rs 8.61 Crores against the Rs 11.17 Crores shown in the above table as per the submission in the petition dated 30.11.2011.

7.8.1 Employee Expenses

Petitioner's Submission

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

Based on the various expenses related to employee cost booked during six months of FY 11-12, ED-DD had estimated the total employee cost for full year of FY 11-12 at Rs. 5.16 Crores. Further, the petitioner in its Petition for Review for FY 2011-12 had submitted the nine months actuals of employee expenses from April to December at Rs. 5.05 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.*

The Commission observes that the employee expenses approved for FY 2010-11 as per the audited accounts is Rs. 4.50 Crores as part of the true-up exercise in this tariff order. The Commission has analyzed the past trends, the employee expenses approved in the tariff order dated October 3' 2011 for FY 2011-12 and is of the view that the actual audited data of FY 2010-11 shows true depiction of expenses incurred by the utility. The Commission has therefore considered the actuals of FY 2010-11 as a revised base for calculating the employee cost for FY 2011-12. The escalation factor used by the Commission is 8.76% per annum. The WPI index upto 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 average of WPI index from FY 2010-11 to FY 2011-12. The employee expenses approved for FY 2010-11 have been escalated by the WPI factor of 8.76% to determine the employee expenses for FY 2011-12. This results in the employee expenses of Rs 4.89 Crores against the Rs 5.16 Crores submitted by the Petitioner. 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 provisionally considers the employee cost of Rs. 4.89 Crores as reasonable and approves the same for Review of ARR of FY 2011-12, subject to true-up of FY 2011-12.

7.8.2 Repair and Maintenance Expenses

Petitioner's Submission

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

The estimates of R&M expense for FY 11-12 is Rs. 6.51 Crores as per the petition dated November 30' 2011 as against the earlier approval as per tariff order dated October 3' 2011 of Rs 6.26 Crores
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.

Further, the Petitioner in its Petition for Review for FY 2011-12 has submitted the nine months actuals of Repair and Maintenance expenses from April 2011 to December 2011 as Rs. 4.22 Crores.

Commission's Analysis

As discussed in the Para 6.9 of this order the Commission has approved the Repair and maintenance expenses at Rs 2.20 Crores for FY 2010-11. The Commission has analyzed the past trends, the repair and maintenance expenses of Rs. 6.26 Crores approved in the tariff order dated October 3' 2011 for FY 2011-12 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 considered the year 2010-11 as the base year of the R&M expenses.

The Commission has applied the escalation factor of 8.76%[3] per annum for estimation of the increase in the R&M expenses approved for FY 2010-11 for the approval of R&M expenses for FY 2011-12. This results in the R&M expenses of Rs 2.39 Crores.

Therefore, the Commission considers the Repair and Maintenance expenses of Rs. 2.39 Crores as reasonable and approves the same for Review of ARR of FY 2011-12. 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.

7.8.3 Administration and General Expenses

Petitioner's Submission

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

- Telephone, postage & telegrams charges;
- Travel and conveyance expenses;
- Consultancy and regulatory fees; and
- Consumer indexing fee

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

ED-DD has considered the revised estimates of A&G expense as Rs. 2.17 Crores for FY 11-12. The Commission had approved Rs. 2.17 Crores for FY 11-12 against the Rs 2.19 Crores projected by ED-DD in the earlier tariff order for FY 2011-12 dated 03.10.2011.

Commission's Analysis

The Commission in its order dated October 3, 2011, had approved the A&G expenses for the FY 2011-12 at Rs 2.17 Crores. In the said order the Commission had recognized the actual of FY 2010-11 at 0.28 Crores towards A&G expenses. The Commission had considered the petitioners claim for higher A&G expenses for FY 2011-12 due to inclusion of provisions towards regulatory and consultancy fees, energy audit and consumer indexing (as set out in para 5.13.3 of the order dated October 3, 2011). The petitioner has submitted the revised estimates of A&G expenses at Rs 2.17 Crores for FY 2011-12 which is same as the A&G approved in the order dated October 3, 2011. The Commission finds merit in considering the A&G at Rs 2.17 Crores in view of the foregoing.

The Commission therefore considers the Administration and General Expenses of Rs. 2.17 Crores as reasonable and approves the same for Review of ARR of FY 2011-12.

7.8.4 Summary of Operation and Maintenance Expenses

The overall summary of O&M expenditure estimated by the petitioner vis-à-vis approved by the Commission in its previous tariff order for FY 2011-12 and revised estimates submitted by the Petitioner for review for FY 2011-12 are given below:

Table 7.8.2 : Summary of Operation & Maintenance Expenses (in Rs. Crores)

Sr. No.	Particulars	Proposed in petition of FY 2011-12	Approved in T.O. of FY 11-12 dated 3.10.2011	Revised estimates of FY 2011-12	Approved (Review)
1	Employee Expenses	5.97	5.18	5.16	4.89
2	A&G Expenses	2.20	2.17	2.17	2.17
3	R&M Expenses	6.26	6.26	6.51	2.39
4	Sub-Total	**14.43**	**13.61**	**13.84**	**9.46**
5	Less: Expenses Capitalized	-	-	-	-
6	**Total O&M Expenses**	**14.43**	**13.61**	**13.84**	**9.46**

7.9 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. Due to lower allocation of funds from the Government of India as compared with the requested funds, the actual capital expenditure has been lower than the planned capital expenditure in the previous years. Therefore, the capital expenditure for the subsequent years is higher as it includes the schemes for which the funds were not allocated in the previous capital expenditure proposal. The petitioner has proposed the capital expenditure of Rs. 31 Crores, out of which the petitioner has projected the addition of Rs. 28.15 Crores in the Gross Fixed Assets during FY 2011-12.

Commission's analysis

The Commission observes that the capital expenditure and the capitalization submitted by the petitioner for FY 2011-12 is required to maintain the 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 and has not given the present status of the capital expenditure incurred/capitalized. However, for the purpose of this ARR computation, **the Commission provisionally approves the capital expenditure of Rs 31 Crores and capitalization of Rs. 28.15 Crores proposed by the petitioner for Review of ARR for FY 2011-12.** A detailed statement of the capital expenditure incurred quarterly, the asset capitalized and added in the gross fixed assets upto 31.03.2012 on different dates during the year be provided for true-up.

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

7.10 GFA and Depreciation

Petitioner's submission

The petitioner in ARR and tariff petition for FY 2012-13 has submitted an Opening Gross Fixed Assets (GFA) of Rs. 288.52 Crores in FY 11-12. ED-DD has further proposed capital expenditure of Rs. 31.00 Crore during FY 11-12.

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

Further the Petitioner has submitted the audited accounts for FY 2010-11 containing the audited value of opening gross fixed assets as on April 1'2010 along with the true-up petition for FY 2010-11.

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 7.10.1: Depreciation rate specified by CERC

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

Depreciation for the FY 11-12 is determined by applying aforesaid category-wise assets depreciation rates on the opening balance of Gross Fixed assets and addition during the year projected for FY 11-12, thereby arriving at the average GFA for the asset categories.

Commission's Analysis

As discussed in para 6.10 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 is computed the approved capitalization of FY 2010-11 including approved capitalization during FY 2011-12.

The Regulation 26 of JERC (Terms and Conditions for Determination of Tariff) Regulations, 2009 specifies that depreciation for the assets shall be calculated annually at the rates specified by CERC from time to time. The depreciation rates for distribution assets as specified by CERC vide Appendix-III (Depreciation schedule of CERC (Terms and Conditions of Tariff) Regulations, 2009 has been used to calculate the depreciation. The depreciation for the FY 2011-12 has been worked out at Rs. 1.23 Crores.

Table 7.10.2 : GFA & Depreciation submitted by the petitioner and approved in the review for FY 2011-12 (in Rs. Crores)

Sr. No.	Particulars	Proposed in petition of FY 2011-12	Approved in T.O. of FY 11-12 dated 3.10.2011	Revised estimates of FY 2011-12	Approved
1	Opening Value of Assets at the beginning of the year	296.95	11.15	288.52	9.22
2	Additions during the year	57.11	51.56	28.15	28.15
3	Gross Fixed Assets at the end of year	354.07	62.71	316.66	37.37
4	Average Assets	**325.51**	**36.93**	**302.59**	**23.30**
5	**Depreciation for the year**	**16.34**	**1.95**	**15.13**	**1.23**

Table 7.10.3 : Calculation of Depreciation for FY 2011-12 (in Rs. Crores)

Sr. No.	Particulars	Value of assets at the beginning of FY 2011-12	Addition during FY 2011-12	Closing balance at the end of FY2011-12	Rate of Depreciation	Depreciation
1	Plant & Machinery	9.03	28.15	37.18	5.28%	1.22
2	Buildings	-	-	-	3.34%	-
3	Vehicles	-	-	-	9.50%	-
4	Furniture and Fixtures	0.05	-	0.05	6.33%	0.00
5	Computers and Others	0.14	-	0.14	6.33%	0.01
6	Land	-	-	-	0.00%	-
7	**Total**	**9.22**	**28.15**	**37.37**		**1.23**

Commission considers the depreciation of Rs. 1.23 Crores as reasonable and approves the same for Review of ARR of FY 2011-12.

7.11 Interest on Loan

Petitioner's submission

The petitioner in ARR and tariff petition for FY 2012-13 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 upto FY 10-11. 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 has been assumed that ED-DD would work as a separate commercial utility and therefore would be utilizing the debt facilities from FY 2011-12 onwards.

Further the petitioner has not included the Interest on long term loans in the Petition for Review for FY 2011-12; as submitted by the petitioner these are computed at the end of the financial year.

Commission's analysis

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

Quote"

(1) For existing loan capital interest and finance charges on loan capital shall be computed on the outstanding loans, duly taking into account the rate of interest and schedule of repayment as per the terms and conditions of relevant agreements.

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

The 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 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. Similarly, the petitioner has not proposed any external borrowing during FY 2011-12 in the ARR and tariff petition for FY 2012-13. Further the petitioner has not claimed the interest on loans in its Petition for Review of FY 2011-12.

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

Quote

"23. Debt-Equity Ratio

For the purpose of determination of tariff, debt-equity ratio in case of existing, ongoing as well as new projects commencing after the date of notification of these Regulations shall be 70:30. Where equity employed is more than 30%, the amount of equity for the purpose of tariff shall be limited to 30% and the balance amount shall be considered as loan. Where actual equity employed is less than 30%, the actual debt and equity shall be considered for determination of tariff:
Provided that the Commission may, in appropriate cases, consider equity higher than 30% for the purpose of determination of tariff, where the generating company or the licensee is able to establish to the satisfaction of the Commission that deployment of equity more than 30% is in the interest of the general public: .

(2) The debt and equity amounts arrived at in accordance with sub-regulation (1) above shall be used for all purposes including for determining interest on loan, return on equity, Advance against Depreciation and Foreign Exchange Rate Variation.
Provided that in the case of an Integrated Utility, till the time it remains Integrated Utility, it shall be entitled to return on its capital base as per Schedule VI to the repealed Electricity (Supply) Act, 1948." ***Unquote***

The above stated regulations mandate the debt equity ratio for assets deployed, post the commencement of the JERC Tariff Regulations. It is pertinent to mention here that the first application filed by the petitioner before this Commission under the above stated regulation was for the FY 2010-11, wherein the Commission had determined tariff 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. 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 6.10 of this order, the normative interest under the JERC Tariff Regulations could therefore be considered on the assets created during the year FY 2010-11 onward excluding the opening capital base as projected by the petitioner in FY 2010-11. The Commission has 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%. The Commission has considered the capitalization of assets as proposed by the petitioner at Rs 28.15 Crores during FY 2011-12. The Commission for the purpose of funding of the capitalization has considered the normative debt equity ratio of 70:30, whereby it has considered the normative loan at Rs 19.71 Crores for the FY 2011-12. The calculation of the interest on the normative loan is given below:

Table 7.11.1 : Normative Interest on Loan approved in the review 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	19.71
3	Less: Normative Repayment	0.65
4	Closing Normative Loan	25.51
5	Average Normative Loan	15.98
6	Rate of Interest (@SBAR rate)	13.00%
7	**Interest on Normative Loan including bank charges, if any**	**2.08**

Accordingly, the Commission has considered the Normative Interest on loans at Rs. 2.08 Crores as reasonable and approves the same for review of FY 2011-12.

7.12 Interest on Working Capital

Petitioner's submission

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

A rate of interest of 14.75% has been considered for FY 11-12 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 11-12 as per the revised estimates has been claimed at Rs. 8.52 Crores in the petition for ARR determination of FY 2012-13.

Commission's analysis

The Commission has considered the actuals of power purchase expenses of FY 2011-12 and approved O&M expenses to work out the normative working capital required for FY 2011-12 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. Commission has considered the security deposit available with the Petitioner as a source to meet working capital requirements and has deducted this amount from the working capital requirement considered for interest for review of FY 2011-12. Further, Commission clarifies that SBI PLR rate has now been substituted as SBI Advance Rate. The Commission has considered the SBI advance rate of 13%[4] as on 1st April 2011 for Review of ARR of FY 2011-12. The detailed calculation of the calculation of interest on working capital is as mentioned below:

Table 7.12.1 : Interest on working capital approved for Review of FY 2011-12 (in Rs. Crores)

Sr. No.	Particulars	Proposed in petition of FY 2011-12	Approved in T.O. of FY 11-12 dated 3.10.2011	Revised estimates of FY 2011-12	Approved (Review)
1	Power Purchase Cost for one month	51.94	45.10	56.60	61.00
2	Employee Cost for one month	0.50	0.43	0.43	0.41
3	A&G Expenses for one month	0.18	0.18	0.18	0.18
4	R&M Expenses for one month	0.52	0.52	0.54	0.20
5	**Total Working Capital for one month**	**53.14**	**46.23**	**57.75**	**61.79**
6	**Security Deposit**	**0.00**	**0.00**	**0.00**	**6.28**
7	**Net Working Capital required after deduction of Security Deposit from Working Capital Requirement**	**53.14**	**46.23**	**57.75**	**55.51**
8	SBAR Rate	12.25%	13.00%	14.75%	13.00%
9	**Interest on Working Capital**	**6.51**	**6.01**	**8.52**	**7.22**

The Commission considers Rs. 7.22 Crores as Interest on Working Capital as reasonable and approves the same for Review of ARR for FY 2011-12.

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

7.13 Interest on Security Deposit

Petitioner's submission

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

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 2011-12. 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 1'2011 at the rate of 6% per annum (Being the Bank Rate as on 1st April 2011) and should explicitly mention the same as the 'Interest on security deposit for FY 2011-12' on the bills of the consumers. The Commission has considered the security deposit from consumers available with the petitioner as on March 31'2011 as per the audited accounts of FY 2010-11. The security deposit amount of Rs 6.28 Crores has been considered for the calculation of the interest on security deposit.

In view of the above, the Commission has allowed Rs. 0.38 Crores as interest on security deposits as expenditure in the ARR in Review for FY 2011-12. This should be paid to the eligible consumers and actual expenditure be shown at the time of true up.

7.14 Return on Capital Base

Petitioner's submission

The petitioner has not claimed the return on equity/capital base in its revised estimates of ARR of FY 2011-12, in the ARR and tariff petition 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. The basic requirement for consideration of either return on capital base or return on equity for historical assets is the basic information in the form of the assets and depreciation registers besides other data.

As discussed in para 6.10 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. 0.27 Crores as a 3% return on net block of approved assets/capitalization at the beginning of the FY 2011-12.

The Commission considers the Return on Capital Base of Rs. 0.27 Crores as reasonable and approves the same for FY 2011-12.

7.15 Provision for Bad and Doubtful debts

Petitioner's submission

The petitioner had considered the provision of 1% of the receivables in the revenue requirement for FY 2011-12.

Table 7.15.1: Provision for Bad & Doubtful debts for FY 2011-12

Provision for Bad & Doubtful Debts (in Rs. Crores)	FY 11-12
	Revised Estimate
Provision for Bad &Doubtful Debts as 1% of Receivables	1%
Provision for Bad & Doubtful Debts	**6.84**

Commission's analysis

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

Quote

"28. Bad and Doubtful Debts

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

Format -18

S.No.	*Particulars*	*Amount (Rs. in Crores)*
1.	*2.*	*3.*
1.	*Amount of receivable bad and doubtful debts (audited)*	
2.	*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 from the retail sales for FY 2011-12 as bad and doubtful debt at Rs 2.53 Crores as reasonable and approves the same for Review of ARR for FY 2011-12.

7.16 Non-Tariff Income

Petitioner's submission

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

The revised estimates of non-tariff income is Rs. 9.41 Crores for FY 11-12 as submitted by the petitioner in the ARR and tariff petition for FY 2012-13. Further the petitioner has submitted the 9 months actuals of non-tariff income at Rs 4.58 Crores for FY 2011-12 in its petition for Review for FY 2011-12.

Commission's analysis

The Commission observes that the non tariff income approved in the tariff order for FY 2011-12 dated October 3' 2011 was Rs 9.41 Crores and the Petitioner has submitted the same estimates for the year as approved earlier. The Commission, therefore, considers the Non-Tariff Income of Rs. 9.41 Crores as submitted by the petitioner as reasonable and approves the same for Review of ARR of FY 2011-12.

7.17 Revenue from Sale of Surplus Power

Petitioner's submission

The petitioner has not submitted the details of sale of surplus power during FY 2011-12 in the petition for Review for FY 2011-12. However, the petitioner in its ARR petition for FY 2012-13 has submitted the following:

Quote

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

Unquote

Further the petitioner submitted the details of transactions under UI mechanism to be considered as only source for sale of surplus power. The petitioner had projected Rs. 38.83 Crores towards the revenue from sale of surplus power, which has been revised to Rs 48.98 Crores, as per submission dated August 9' 2012

Commission's analysis

As can be observed from the approved Energy Balance for FY 2011-12 in para 7.6 of this order, the energy availability is more than the required amount for sale to the retail consumers in the state. The petitioner as per the latest submission dated August 9, 2012 has submitted the transactions under UI mechanism. The Commission has considered the submissions made by the petitioner and after a prudence check of UI transactions, has noticed the net under-drawl of 110.16 million units at a total cost of Rs. 26.27 Crores.

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, the Commission is mandated to disallow the additional UI charges of Rs. 2.93 Crores against the UI over-drawl/below 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 (amended to 49.7 w.e.f. 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 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. 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 alongwith the summary sheet of the same

Thus, the Commission considers the net impact of UI transaction as net underdrawl for FY 2011-12 at Rs. 29.20 Crores (including disallowed additional UI charges of Rs2.93 Crores) for net sale of 110.16 million units as reasonable and approves the same for Review of ARR for FY 2011-12, subject to true-up.

7.18 Revenue at approved retail tariff of FY 2011-12

Petitioner's submission

The petitioner has submitted the actual revenue of Rs. 674.35 Crores for FY 2011-12 in its additional submission. The petitioner in the petition for ARR & tariff determination for FY 2012-13 had submitted the estimates of revenue from existing tariff of Rs 683.99 Crores (inclusive of the fuel price surcharge). The fuel purchase adjustment surcharge is being levied to the Commercial, LT and the HT consumers @ 0.99 paise per unit; the domestic, agriculture and the BPL categories have been exempted from the same.

Commission's analysis

The Commission has accepted the actual revenue submitted by the Petitioner for FY 2011-12 on the basis of actual energy sales during that period. The Commission has noticed that the actual revenue of FY 2011-12 includes the additional charge on account of PPCA from the consumers of DD. The petitioner has provided the total amount of Rs 168.57 Crores as PPCA billed in the FY 2011-12.

In view of the APTEL order in the matter of Appeal no. 169 of 2011, the Commission has analyzed the options for treatment of PPCA charged during FY 2011-12. The same has been discussed in the Chapter 5 of this order. Accordingly, the Commission keeping in view interest of the utility and the consumer has considered the **option b** as a reasonable option and has accordingly reviewed the ARR of FY 2011-12 and (surplus)/deficit thereof to be carry forward for FY 2012-13 in this order.

The Commission had approved the power purchase cost of Rs 556.89 Crores for FY 2011-12 in the order dated October 3' 2011, however the approved power purchase cost in this order after review is considered at Rs 731.97 Crores (Net of UI under/over drawl). The variation in the power purchase cost therefore comes to Rs 170.11 Crores (i.e. Rs 731.97 Crores minus Rs 556.89Crores) against which the utility has collected Rs 168.57 Crores. The petitioner has thus collected an amount which is lower than the net impact of the power purchase cost variation.

Accordingly, the Commission considers the actual revenue of Rs 674.28 Crores including Rs 168.57 Crores (PPCA billed during FY 2011-12) as revenue from existing tariff for the purpose of this review.

7.19 Review of Aggregate Revenue Requirement for FY 2011-12

The Commission has considered and approved the review of ARR for FY 2011-12 based on the items of expenditure discussed in the preceding Chapters and the actuals submitted by the petitioner of Power purchase costs, revenue and sales and the same has been summarized in the table below:

Table 7.19.1 : Aggregate Revenue Requirement approved for review of FY 2011-12

(in Rs. Crores)

Sr. No.	Particulars	Proposed in petition of FY 2011-12	Approved in T.O. of FY 11-12 dated 3.10.2011	Revised estimates of FY 2011-12 submitted in FY 12-13 petition	Approved (Review)
1	Power Purchase Cost	623.24	556.89	679.15*	761.17
2	Employee costs	5.97	5.18	5.16	4.89
3	Administration and General Expenses	2.20	2.17	2.17	2.17
4	Repair and Maintenance Expenses	6.26	6.26	6.51	2.39
5	Depreciation	16.34	1.95	15.13	1.23
6	Interest and Finance charges	2.33	-	-	2.08
7	Interest on working capital	6.51	6.01	8.52	7.22
8	Interest on security deposit	NIL	NIL	NIL	0.38

Sr. No.	Particulars	Proposed in petition of FY 2011-12	Approved in T.O. of FY 11-12 dated 3.10.2011	Revised estimates of FY 2011-12 submitted in FY 12-13 petition	Approved (Review)
9	Return on NFA	1.37	-	-	0.27
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**
12	Less: Non Tariff Income	9.41	9.41	9.41	9.41
13	**Net Revenue Requirement (11-12**	**661.42**	**569.45**	**714.07**	**774.92**

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

The estimated gap has been mentioned including the carrying cost in the following table:

Table 7.19.2 : Estimation of Deficit considered for review of FY 11-12 (in Rs. Crores)

Sr. No.	Particulars	Proposed in petition of FY 2011-12	Approved in T.O. of FY 11-12 dated 3.10.2011	Revised estimates of FY 2011-12 submitted in FY 12-13 petition	Approved (Review)
1	**Net Revenue Requirement**	**661.42**	**569.45**	**714.07**	**774.92**
2	Less: Revenue from Retail Sales at Existing Tariff	559.58	554.61	683.99	505.71
3	Less: Revenue from Surplus Power Sale/UI	-	-	38.83	29.20
4	**Net Gap/(Surplus) (1-2-3)**	**101.84**	**14.84**	**(8.75)**	**240.00**
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**
7	Refunds to consumers on account of excess recovery of PPCA variations	-	-	-	-
8	Refund due to revision in tariff of FY 12	-	-	-	
9	**Net Gap after refund to the Consumers (6+7+8)**	**101.84**	**14.84**	**(8.75)**	**71.43**
10	Gap for the previous year	12.26			1.55
11	Carrying Cost				4.84

Sr. No.	Particulars	Proposed in petition of FY 2011-12	Approved in T.O. of FY 11-12 dated 3.10.2011	Revised estimates of FY 2011-12 submitted in FY 12-13 petition	Approved (Review)
12	Past Arrears/Refunds to Consumers				
13	**Total gap (9+10+11+12)**	**114.10**	**14.84**	**(8.75)***	**77.82**

*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 actuals 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.

As can be observed there was a revenue gap of Rs. 240 Crores at the end of FY 2011-12 without considering the PPCA recovery.

The Hon'ble Aptel in its judgment dated February 29' 2012 in appeal no. 169/2011 observed that as FY 2011-12 was about to end shortly, the Commission is at liberty to decide the treatment of the PPCA for FY 2011-12. The compliance of the judgment 169/2011 and the treatment of the PPCA for FY 2011-12 has been discussed in para 5.3 of the order.

The utility has recovered Rs. 168.57 Crores on account of PPC variations. A net gap of Rs. 71.43 Crores not considering the previous year gap and carrying cost has been considered; Further, considering the gap of previous years and carrying cost, the estimated revenue gap of Rs. 77.82 Crores is considered to be reasonable and approves the same for Review of FY 2011-12.

Aggregate Revenue Requirement (ARR) of FY 2012-13

8. Aggregate Revenue Requirement (ARR) of FY 2012-13

8.1 Background

The Petitioner has submitted the ARR & Tariff Petition for FY 2012-13 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 2012-13. In this chapter, the Commission has analyzed the petition of ED-DD based on the provisions mentioned in the regulations, audited figures for FY 2010-11 and revised estimates/actuals of FY 2011-12 submitted by the petitioner. The Commission has taken into consideration the following:

1. Performance in FY 2010-11 (Audited[5] Figures);
2. ARR of FY 2011-12 to arrive at the gap of FY 2011-12 to be considered in FY 2012-13 as per order dated October 3' 2011
3. Revised estimates for FY 2011-12 submitted with the petition for FY 2012-13 dated November 30' 2011
4. Revised estimates of FY 2011-12 including the category wise sales, Power Purchase cost, O&M expenses, Capital Expenditure and Non-Tariff Income from April 2011 to December 2011 submitted on February 13' 2012
5. Actual sales/revenue and power purchase cost submitted by the petitioner for FY 2011-12 in its additional submission on August 9' 2012
6. Impact of 're-determination of tariff' of FY 2011-12.

8.2 Analysis of Aggregate Revenue Requirement of FY 2012-13

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

- Assessment of Energy Requirement
  - i. Sales Projections

[5] Audited Accounts of FY 2010-11 provided by the Petitioner.

ii. Loss Trajectory

iii. Energy Balance

iv. Power Purchase Sources

- Assessment 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

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. "

8.3 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 have grown at approximately 10% p.a., mainly contributed by increase in the domestic, commercial and Industrial HT/EHT sales.

The petitioner is of the view that the factors affecting the actual consumption of electricity are numerous and often beyond the control of the utility including factors such as Government Policy, economic climate, weather conditions and force majeure events like natural disasters, etc. the petitioner, therefore for projecting the category-wise consumption for the FY 11-12[6] and FY 12-13 has considered the past growth trends in each of the consumer category including growth trend in number of consumers and connected load.

As submitted by the petitioner in its petition -

Quote

'' 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 2011-12. Since the energy sales in each category depends upon a number of factors like growth in economy, climate, Government policies, etc., normalization in sales has been undertaken in order to remove any wide fluctuations.

For FY 11-12, the actual five months energy sales have been analyzed. The energy sales for the remaining seven months has been arrived at by considering the five months sale as well as the past years growth trend in each consumer category.

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

For the HT/EHT category, large variations have been seen in the growth on a year-to-year basis with variations in sale ranging from 2.90% to 17.51%. A CAGR of 7.78% is observed in the growth in energy consumption of HT/EHT category over past four years. Therefore, for FY 12-13, a growth rate of 7.78%

[6] Corrected from FY 2010-11 as per the petition

has been considered for projecting the sales HT/EHT consumers in view of load enhancement of existing consumers as well as addition of new consumers.''

Unquote

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

Table 8.3.1 : CAGR(%) for estimation of Sales for FY 12-13 considered by petitioner

Sales	Adjusted CAGR
Domestic	6.66%
LIGH	4.56%
Commercial	4.71%
Agriculture	2.60%
LT Industry	1.67%
HT/EHT Industry	7.78%
Public Lighting	1.82%
Public Water Works	0.00%
Temp. Supply	11.93%

Source: Table 3 of Petition for FY 2012-13 submitted by ED-DD

Table 8.3.2 : Category wise Energy Sales projected for FY 2012-13 (in MUs)

S.No.	Category/Consumption Slab	FY 2012-13 (Petitioner's submission)
A	Domestic	70.40
B	LIGH	0.10
C	Commercial	32.46
D	Agriculture	2.82
E	LT Industry	157.19
F	HT/EHT Industry	1595.18
G	Public Lighting	4.84
H	Public Water Works	0.92
I	Temporary Supply	0.78
Total		**1864.68**

Source: Table 4 of Petition for FY 2012-13 submitted by ED-DD

Further, the petitioner has submitted the actual audited sales of FY 2010-11 and actual sales of FY 2011-12 in its additional submission for consideration of the Commission.

Commission's Analysis

The Commission has considered the actuals of FY 2010-11 & actuals figures of FY 2011-12 for projecting the category wise connected load, number of consumers and energy sales for FY 2012-13.

The modified CAGR (%) of five years (from FY 2006-07 to FY 2011-12) for different consumer categories has been applied by the Commission on the actuals of FY 2011-12 (as submitted by the petitioner) to assess the Energy Sales for FY 2012-13 except for the estimation of Energy Sales for the Low Income Group, Agriculture and temporary category as the aberrations are seen in the past year trends, where the submission of the Petitioner is considered reasonable and hence approved.

For estimation of the number of consumers, modified five years CAGR (from FY 2006-07 to FY 2011-12) has been used to assess the number of consumers 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 2012-13. For estimation of the connected load, the modified three year CAGR (from FY 2008-09 to FY 2011-12) has been used on the actuals of FY 2011-12 (as submitted by the petitioner) to assess the connected load for FY 2012-13 except for the HT/EHT Industry category, where the year-on-year growth of FY 2011-12 over FY 2010-11 has been considered to be reasonable in view of the large variation in the past trends and hence the same growth rate has been applied on the actuals of FY 2011-12 to assess the load for FY 2012-13.

Table 8.3.3 : Modified CAGR(%) considered by the Commission for estimation of Sales, Consumer Base and Connected load for FY 12-13

S. No.	Consumer Category	Sales	Consumers	Connected Load
1	Domestic	13.07%	2.59%	2.07%
2	Low Income Group	0.00%		-
3	NRS/Commercial	7.82%	2.17%	0.73%
4	Agriculture	6.82%	2.82%	1.41%
5	LT Industrial	1.44%	2.40%	1.49%
6	Public Lighting	0.00%	3.41%	2.37%
7	Public Water Works	7.74%	0.00%	0.55%
8	HT/EHT Industry	7.30%	1.97%	4.68%

Table 8.3.4 : No. of Consumers approved by the Commission for FY 2012-13 (in numbers)

S.No.	Consumer Category	FY 2012-13 Submission	FY 2012-13 Approved
1	Domestic	47215	47214
2	Low Income Group		
3	NRS/Commercial	9514	9436

S.No.	Consumer Category	FY 2012-13 Submission	FY 2012-13 Approved
4	Agriculture	1745	1753
5	LT Industrial	3777	3763
6	Public Lighting	854	194
7	Public Water Works	77	77
8	HT/EHT Industry	854	843
9	**TOTAL**	**64036**	**63282**

Table 8.3.5 : Connected Load approved by the Commission for FY 2012-13 (in KW)

S.No.	Consumer Category	FY 2012-13 Approved
1	Domestic	56589
2	Low Income Group	
3	NRS/Commercial	35470
4	Agriculture	5127
5	LT Industrial	173126
6	Public Lighting	1662
7	Public Water Works	679
8	HT/EHT Industry	386994
9	**TOTAL**	**659648**

*Table 8.3.6 : Energy Sales approved by the Commission for FY 2012-13 (in Million Units)**

S.No.	Consumer Category	FY 2012-13 Submission	FY 2012-13 Approved
1	**LT-D/Domestic**		
	Up to 50 units	17.63	18.24
	51-200 units	17.63	18.24
	201-400 units	21.86	22.62
	401 units and above	13.40	13.86
	Total Domestic	**70.50**	**72.96**
2	**Low Income Group**	**0.10**	**0.10**
3	**LT-C/Commercial**		
	0-100 units	14.93	14.99
	Beyond 100 units	17.53	17.59
	Total Commercial	**32.46**	**32.58**
4	**LT- Ag/Agriculture**		
	Upto 10 HP per unit		
	Beyond 10 HP per unit	**2.82**	**2.82**
	Total Agriculture		
5	**LTP Motive Power**		
	Upto 20 HP of connected load	4.72	4.58
	Above 20 HP of connected	152.47	148.06

S.No.	Consumer Category	FY 2012-13 Submission	FY 2012-13 Approved
	load		
	Total	**157.19**	**152.64**
6	**LT-PL/Public Lighting**	**4.84**	**5.00**
7	**LT-Public Water Works**		
	Upto 20 HP of connected load		
	Above 20 HP of connected load	**0.92**	**0.97**
	Total Public Water Works		
8	**HT Industrial**		
	HT (A) General		
	0-50000	385.90	377.79
	50000-5 lakh	816.34	799.17
	Above 5 lakh	282.01	276.08
	HT (B) Furnace		
	0-300 units per kVA	0.04	0.05
	301-500 units per kVA	0.03	0.03
	Above 500 units per kVA	111.65	109.29
	Total HT Industrial	**1595.97**	**1562.41**
9	**Temporary Supply**	**0.78**	**0.78**
	TOTAL	**1864.68**	**1830.28**

*NOTE: The Commission has considered the actuals sales figures for FY 2011-12 as submitted by the Petitioner on August 9’ 2012 for computation of the 5 year modified CAGR, consequently for certain categories the estimates of the Commission for FY 2012-13 are higher than submitted by the Petitioner

8.4 Intra-State Transmission & Distribution Loss

Petitioner’s submission

The petitioner has submitted that significant reduction in transmission & distribution losses is achieved. The petitioner further submitted that the system improvement works executed every year under the plan schemes as well as increase in energy sales quantum at higher voltages has resulted in the reduction of T & D losses.

The petitioner has considered the T&D loss of 9.95% for FY 2011-12 as against the target of 9.75% approved by the Commission as per submission dated November 30’ 2011 in the petition for ARR & tariff determination of FY 2012-13. The petitioner has submitted that the reduction of T&D below 10% involves significant amount of capital expenditure and the utility has endeavored to bring it below 10% in the subsequent years. The petitioner proposes to reduce the T&D losses to 9.70% for FY 2012-13.

Considering the proposed capital expenditure in transmission and distribution network during FY 12-13, the petitioner expects to reduce the losses by approximately 0.25% in FY 2012-13. 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 9.95% estimated for FY 11-12. 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 observes that the submission made by the Petitioner for FY 2012-13 is lower than was approved in tariff order for FY 2011-12 dated October 3' 2011. Further, the Petitioner has submitted that system improvement works are going on and it expects to reduce the losses by approximately 0.25% in FY 2012-13.

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 the year FY 2011-12 in the order dated October 3, 2011 the Commission had considered the following:

Quote

"The Abraham Committee in its Report on RAPDRP suggested reduction of distribution losses at 2% per annum for losses between 20% to 30% and at 1% per annum, where the losses are less than 20%. Keeping this in view, ***the Commission approves the T&D loss for ED-DD at 9.75% for FY 2011-12."Unqoute***

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 Dadar 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 Dadar 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.**

8.5 Inter-State Transmission Loss

Petitioner's submission

The petitioner has submitted that the actual external transmission losses (PGCIL losses) on power purchase for FY 10-11 was 4.61% and six months of FY 11-12 was 3.61% of gross power purchase. The Petitioner would like to submit to the Commission that the Petitioner has little control over the PGCIL losses, therefore has considered the loss level of 3.90% for FY 2012-13 for estimating the power availability at the periphery.

Commission's analysis

Commission has considered the recent 52-week moving average of regional losses available and found the inter-state transmission losses to be 3.56% for FY 2012-13.

The Commission considers inter-state transmission losses for FY 2012-13 of 3.56% as reasonable and approves the same for FY 2012-13.

8.6 Energy Requirement

Petitioner's submission

The petitioner has submitted the energy requirement for FY 2012-13, based on the projected sales power purchase quantum and estimated losses for FY 2012-13.

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 2012-13 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 2012-13 is as shown in the table below.

Table 8.6 8.6.1 : Energy Requirement approved by the Commission for FY 2012-13 (in Million Units)

Sr. No.	Particulars	Petitioner Submission (FY 2012-13)	Approved (FY 2012-13)
1	**Energy sales within the State/UT (in Mus)**	1864.69	1830.28
2	**Distribution losses**		
i	%	9.70%	9.25%
ii	MU	200.30	186.56
3	**Energy required at State Periphery for Sale to Retail Consumers**	**2064.99**	**2016.84**
4	**Add: Sales to common pool consumers/ UI (in Mus)**	**99.85**	**0.00**
i	Sales outside state/UT : UI/Under drawal (in Mus)	99.85	0.00
ii	Sales (in Mus)	-	
	a) To electricity traders (in Mus)		
	b) Through PX (in Mus)		
iii	Sales to other distribution licensees	-	
	a) Bilateral Trade (in Mus)		
	b) Banking Arrangement (in Mus)		
5	**Total Energy Requirement for State**	**2164.84**	**2016.84**
6	**Transmission losses**		
i	%	3.90%	3.56%
ii	MU	87.85	74.45
	ENERGY REQUIRED AT GENERATOR END	**2252.69**	**2091.29**

8.7 Energy Balance

Petitioner's submission

Based on the data on estimated & projected sales and purchase obtained, an Energy Balance has been prepared for FY 2012-13 as shown below.

Commission's analysis

Based on the Energy requirement, Energy availability and Transmission & Distribution Losses for FY 2012-13 as approved in the earlier paras, the energy balance for FY 2012-13 is presented below.

Table 8.7.1 : Energy Balance for FY 2012-13 as approved by the Commission

Sr. No.	Particulars	Petitioner Submission (FY 2012-13)	Approved (FY 2012-13)
1	**Energy sales within the State/UT (in Mus)**	1864.69	1830.28
2	**Distribution losses**		
i	%	9.70%	9.25%
ii	MU	200.30	186.56
3	**Energy required at State Periphery for Sale to Retail Consumers**	**2064.99**	**2016.84**
4	**Add: Sales to common pool consumers/ UI (in Mus)**	**99.85**	**0.00**
i	Sales outside state/UT : UI/Under drawal (in Mus)	99.85	0.00
ii	Sales (in Mus)	-	0.00
	a) To electricity traders (in Mus)		
	b) Through PX (in Mus)		
iii	Sales to other distribution licensees	-	0.00
	a) Bilateral Trade (in Mus)		
	b) Banking Arrangement (in Mus)		
5	**Total Energy Requirement for State**	**2164.84**	**2016.84**
6	**Transmission losses**		
i	%	3.90%	3.56%
ii	MU	87.85	74.46
7	**Energy required to be purchased (at Generator end)**	**2252.69**	**2091.29**
B)	**ENERGY AVAILABILITY**		
1	**Net Generation (Share from CGS) (in MUs)**		
A	**NTPC**	**1408.63**	**1264.93**
2	**Power Purchased from (Other Sources) (in Mus)**		
A	**NSPCL**	**656.46**	**612.38**

Sr. No.	Particulars	Petitioner Submission (FY 2012-13)	Approved (FY 2012-13)
B	NPCIL	102.71	148.38
C	KHSTPP – II	7.07	10.69
E	Renewable Energy Sources	65.82	54.91
F	PXIL	12.00	0
3	Net power purchase after considering MOD principles (in MUs)	2252.69	2091.29

8.8 Power Purchase Quantum and Cost

Petitioner's submission

Power Purchase Quantum

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 12-13 has considered the following sources of power:

- NTPC Western Region Generating Stations
- NTPC Eastern Region Generating Stations
- NSPCL (NTPC-SAIL Power Company Ltd)
- Nuclear Power Corporation of India Limited
- Private Sector Power Generating Companies
- Renewable energy sources – Solar and Non-Solar
- Other market sources

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

Daman & Diu has firm and infirm[7] 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 12-13, EDDD has considered average allocation of firm and infirm power from the western region generation stations (NTPC and NPCIL) as per the allocation specified in the notification no's. WRPC/Comml-I/6/Alloc/2011/ dated 28 October 2011 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 12-13. Additional allocation of 39MW of power from Ratnagiri Gas and Power Private Limited has also been considered while estimating the power purchase from October 2011 to March 2012.

Table 8.8.1: Energy Allocation from Central Generating Stations as submitted by the petitioner

Source	FY 12-13 (Projected)	
	DD Allocation (MW)	Avg DD Allocation (%)
Western Region		
KSTPP	52.61	2.51%
VSTPP-I	14.42	1.14%
VSTPP-II	10.60	1.06%
VSTPP- III	12.70	1.27%
KAWAS	30.99	4.72%
JGPP	31.31	4.76%
NSPCL – Bhilai	91.50	18.30%
KSTPP-III	6.24	1.25%
Sipat	15.00	0.90%
Ratnagiri	39.34	2.00%
Subtotal	**304.71**	
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	**21.69**	
Grand Total	**328.40**	

[7] 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 12-13 has been calculated based on the installed capacity of each plant and by applying the average of previous four and half years (FY 08 to FY 11, FY 12 first six months) PLF as mentioned in the REA to calculate the plant-wise gross generation. For NSPCL, an average PLF of 90% has been considered in line with the actual PLF for the first six months of FY 11-12. For gas based generating stations i.e. Kawas (KGPP) and Gandhar (GGPP) weighted average PLF of FY 08-09, FY 09-10, FY 10-11 and FY 11-12 (for the first six months) have been taken into account.

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

The petitioner has also made the provision of power purchase from the renewable sources (solar and non-solar) for FY 12-13 as specified in JERC's Procurement of Renewable Energy Regulations, 2010 as well as approved by the Commission in the Tariff order for FY 11-12.

The petitioner has submitted that actual external transmission losses (PGCIL losses) on power purchase for the period March 2011 to September 2011 was 3.61%. Transmission losses for FY 10-11 were recorded as 4.61%. The Petitioner has further submitted that it has little control over the PGCIL losses. Therefore, for computing the power availability at the periphery, 3.90% weighted average external transmission losses have been applied on the gross power purchase for FY 2011-12 and FY 2012-13. The below mentioned table lists down station wise estimated power purchase for FY 12-13.

Table 8.8.2: Power Purchase Quantum for FY 12-13 as submitted by the petitioner (in million units)

Source (MUs)	FY 12-13 Projected
Western Region	
KSTPP	393.17
VSTPP-I	103.36
VSTPP-II	77.35
VSTPP- III	94.15
KAWAS	161.36
JGPP	181.06
NTPC-SAIL Bhilai	656.46
KSTPP-III	20.94
Sipat	109.81
RGPPL	267.42
Subtotal	**2065.09**
Eastern Region	
KHSTPP-II	7.07
Subtotal	**7.07**

Source (MUs)	FY 12-13 Projected
NPCIL	
KAPPS	31.33
TAPP 3&4	71.38
Subtotal	**102.71**
Power purchase - Other Sources	
Power purchase from Indian E. Exchange	12.00
UI	
Solar	8.78
Non Solar	57.04
Subtotal	**77.82**
Transmission Losses	87.85
Total Power Purchase	**2164.83**

Power Purchase Cost

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

- Fixed cost for FY 12-13 has been projected considering a 10% escalation over the estimated fixed cost for various stations for FY 11-12. The escalation has been considered based on impact of new Tariff Regulations FY 2009-14 issued by CERC for computation of tariff for Central Generating Stations
- Variable cost (inclusive of FPA Charges) for each NTPC generating stations for FY 12-13 have been projected based on the actual average variable cost and fuel price adjustment per unit for the first six months of FY 11-12. An escalation of 16% has been assumed for projecting the variable cost for FY 12-13 keeping in view of the escalation of approximately 16% on the actual variable cost of power purchase over the first six months of FY 11-12. The actual average variable cost (NTPC, NPCIL & KHSTPP II) for FY 10-11 was Rs. 1.51 per unit as against Rs. 1.76 per unit for the first six months of FY 11-12.
- The ED-DD has projected other charges for FY 12-13 at similar level as estimated for full year of FY 11-12.
- For nuclear plants i.e. KAPS and TAPP Units 3 & 4, single part tariff with 11% escalation on the actual per unit charges for FY 11-12 have been considered for FY 12-13.
- For NTPC-SAIL Bhilai unit 1 & 2; fixed, variable and other charges have been projected for the entire FY 11-12 based on the actual cost for the first six months of FY 11-12. An escalation of 16% for

increase in fuel cost has been taken into consideration for projecting the power purchase cost from the said plant.

- For power purchase from renewable energy sources, Commission's approved tariff for solar and non-solar power in the Tariff Order has been taken into account for the remaining six months of FY 11-12 and for the entire period of FY 12-13.
- Based on the short-term purchase rate in the past years, the short term purchase from Indian E. Exchange for FY 12-13 has been assumed at Rs. 4.32/unit

The petitioner has submitted to the Commission that ED-DD has recently received communication from NTPC and PGCIL regarding anticipated arrears to be paid in FY 12-13. Thereof, EDDD has separately estimated arrears of Rs. 28 Crs (NTPC Rs. 25 Crs & PGCIL Rs 3 Crs) in the power purchase cost of FY 12-13.

The total power purchase cost from the various sources for FY 12-13 as projected by the Petitioner is summarized in the table below:

Table 8.8.3: Power Purchase Cost for FY 12-13 submitted by the Petitioner (in Rs. Crore)

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

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

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 11-12 based on the actual transmission charges for six months of FY 11-12 and pro-rata allocation of the same for remaining six months.

For projecting the PGCIL transmission charges for FY 2012-13, an escalation of 15% over the estimated FY 11-12 transmission charges has been considered in view of the increase in transmission charges. Further, 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.

Table8.8.4: Total Power Purchase Cost for FY 12-13 as submitted by the Petitioner (in Rs. Crore)

Particulars	FY 12-13 (Projected)		
	Energy available at DD Periphery (MUs)	Total Cost (Rs. Cr)	Per Unit Cost (Rs/kWh)
Gross Power Purchase Cost	2164.83	737.87	3.41
PGCIL charges		43.79	
Open access charges		0.15	
Other charges		3.95	
Total Power Purchase Cost (including Transmission Cost)	**2164.83**	**785.76**	**3.63**

Commission's Analysis of Power Purchase Quantum and Cost

Power Purchase Quantum and Cost for FY 2012-13

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

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/2012/684 dated May 24, 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 second unit of SIPAT STPS - I, Unit# 2 has attained COD from May' 25 2012, therefore the availability from this station has been considered on pro-rata basis from the date of COD. It would have been inappropriate to consider one month PLF for the station, therefore 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 2012-13 from the NTPC stations:

- **Fixed Charges:** The fixed charges are considered based on the formula specified for the stations in the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009-14. 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 January 2012 to March 2012 submitted by the petitioner for consideration of the per unit variable charges for the FY 2012-13. Accordingly, the Commission approves the following availability from NTPC stations based on the merit order dispatch principles.

Table 8.8.5: Approved Power purchase quantum from NTPC stations under merit order dispatch

Sr. No.	Source	Capacity (MW)	Average PLF	Weighted Average		Gross Generation (MUs)	Auxiliary Consumption (%)	Purchase (MUs)	PGCIL Losses (MUs)	Energy Available at Periphery (MUs)
				%	MW					
1	2	3	4	5	6	7	8	9	10	11
A	**Central Sector Power Stations**									
I	**NTPC**									
	KORBA - III (KSTPS - VII)	*500*	86.13	1.25%	6.24	3,772.49	6.50%	44.02	*1.57*	42.45
	KSTPS	*2,100*	86.13	2.50%	52.60	15,844.47	8.50%	363.11	*12.93*	350.18
	SIPAT Stage 2	*1,000*	95.23	1.17%	11.69	8,342.15	6.50%	91.17	*3.25*	87.92
	SIPAT - Stage I	*1,320*	85.00	1.33%	17.58	9,155.52	8.50%	111.56	*3.97*	107.59
	VSTPS - II	*1,000*	92.50	1.06%	10.59	8,102.56	6.50%	80.23	*2.86*	77.37
	VSTPS -III	*1,000*	92.50	1.27%	12.69	8,102.56	6.50%	96.13	*3.42*	92.70
	VSTPS - I	*1,260*	92.50	1.14%	14.41	10,209.23	6.50%	109.19	*3.89*	105.31
	KGPP	*656*	69.10	4.72%	30.99	3,972.36	3%	181.97	*6.48*	175.49
	GGPP	*657*	70.50	4.76%	31.31	4,059.73	3%	187.56	*6.68*	180.88
	RGPPL	*1967*	91.67	2.00%	39.34	15795.58	3%	0	0	0
II	*Eastern Region*									
	KHSTPP - II	*1,500*	66.91	0.13%	1.95	8,791.97	6.50%	10.69	*0.38*	10.31

*RGPPL falls out of the merit order principles

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

Table 8.8.6: Approved Power purchase Cost from NTPC stations for FY 2012-13

Sr. No.	Source	Purchase (MUs)	Fixed Charges (Rs Crores)	Variable Charges (Ps/kWH) - Average of Jan,Feb. and March 2012	Variable Charges (RS Crores)	Total Cost (Rs Crores)
1	2	3	4	5	6	7
I	**NTPC**					
	KORBA - III (KSTPS - VII)	44.02	6.47	73.39	3.23	9.70
	KSTPS	363.11	21.57	74.44	27.03	48.60
	SIPAT Stage 2	91.17	10.96	93.70	8.54	19.50
	SIPAT - Stage I	111.56	15.37	93.70	10.45	25.83
	VSTPS - II	80.23	6.09	133.67	10.72	16.81
	VSTPS -III	96.13	10.82	134.86	12.96	23.78
	VSTPS - I	109.19	6.54	142.51	15.56	22.10
	KGPP	181.97	25.10	257.34	46.83	71.93
	GGPP	187.56	28.59	265.35	49.77	78.35
	RGPPL	0	39.17	0	0	39.17
II	***Eastern Region***					
	KHSTPP - II	10.69	1.44	234.96	2.51	3.95

- **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 have considered the following assumption:

- **Allocation of Share**: The Commission has considered the firm allocation and allocation from the unallocated quota from the above stations as per the notification of the Western Region Power Committee vide WRPC/Comml-I/6/Alloc/2012/684 dated May 24, 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 2012-13:

- **Variable Charges:** The Commission has considered the average variable cost for the period January 2012 to March 2012 submitted by the petitioner for consideration of the per unit variable charges for the FY 2012-13.

- **Merit order Dispatch**: The Commission has considered the nuclear plants as must run and has not subjected them for merit order dispatch.

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

Table8.8.7: 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	97.99	1.89%	8.30	3,776.93	10%	3,399.23	64.10	*2.28*	61.81
2	*TAPS*	1,080	79.81	1.24%	13.40	7,550.66	10%	6,795.60	84.28	*3.00*	81.28

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

Table8.8.8: Approved Power purchase Cost for NPCIL Stations

Sr. No.	Source	Purchase (MUs)	Fixed Charges (Rs. Crores)	Variable Charges (Ps/kWH) - Average of Jan,Feb. and March 2012	Variable Charges (Rs. Crores)	Total Cost (Rs. Crores)
1	2	3	4	5	6	7
A	**Central Sector Power Stations**					
	NPCIL					
	KAPS	64.10	0	227.54	14.58	14.58
	TAPS	84.28	0	293.97	24.78	24.78

- **NSPCL**

The petitioner has firm allocation from the following station of NSPCL

- NSPCL - Bhilai

The Commission has considered the following assumptions to arrive at the Power purchase cost for the FY 2012-13 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 January 2012 to March 2012 submitted by the petitioner for consideration of the per unit variable charges for the FY 2012-13.
- **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 8.8.9: Approved Power purchase quantum and Cost from NSPCL-Bhilai

Sr. No.	Source	Capacity (MW)	Average PLF	Weighted Average		Gross Generation (MUs)	Auxiliary Consumption (%)	Purchase (MUs)	PGCIL Losses (MUs)	Energy Available at Periphery (MUs)
				%	MW					
1	2	3	4	5	6	7	8	9	10	11
1	*NSPCL-Bhilai*	500	91.15	18.30%	91.50	3,992.37	9.00%	612.38	*21.80*	590.58

Note: Partial availability is considered because of merit order dispatch

Sr. No.	Source	Purchase (MUs)	Fixed Charges (Rs. Crores)	Variable Charges (Ps/kWH) - Average of Jan, Feb. and March 2012	Variable Charges (Rs. Crores)	Total Cost (Rs. Crores)
1	2	3	4	5	6	7
I	**NSPCL – Bhilai**	612.38	101.48	271.35	166.17	267.65

- **Renewable Energy Obligation**

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

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

The Petitioner has to purchase 3% of total energy purchase for sale to the consumers in its area as power purchase from renewable sources for FY 2012-13 including 0.40% for Solar and 2.60% for Non-Solar. The petitioner in its petition has submitted that 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 8.8.10: 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**			
	(2.60% for - Non Solar)	47.59	19.03	19.03
	(0.40% for Solar)	7.32	6.59	6.59

- **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 31.03.2012 applicable from April 2012 to September 2012 for approving the Transmission charges for the FY 2012-13. Accordingly the Transmission charges for usage of PGCIL network is approved at Rs 73.63 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 0.15 **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 2012-13 including SLDC Charges, WRLDC charges amounting to **Rs 3.95 Crores**.

Accordingly the total Transmission charges approved for the FY 2012-13 is Rs. 77.73 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 8.8.11: Power Purchase cost approved for FY 2012-13 after considering MOD principles

Sr. No.	Source	Energy Available at Periphery (MUs)	Fixed Charges (Rs. Crores)	Variable Charges (Ps/kWH) - Average of Jan,Feb. and March 2012	Variable Charges (Rs. Crores)	Total Cost (Rs. Crores)
1	2	3	4	5	6	7 = 4+6
A	**Central Sector Power Stations**					
I	**NTPC**	**1,230.21**	**172.11**		**187.61**	**359.72**
	KORBA - III (KSTPS - VII)	42.45	6.47	73.39	3.23	9.70
	KSTPS	350.18	21.57	74.44	27.03	48.60
	SIPAT Stage 2	87.92	10.96	93.70	8.54	19.50
	SIPAT - Stage I	107.59	15.37	93.70	10.45	25.83
	VSTPS - II	77.37	6.09	133.67	10.72	16.81
	VSTPS -III	92.70	10.82	134.86	12.96	23.78
	VSTPS - I	105.31	6.54	142.51	15.56	22.10
	KHSTPP - II	10.31	1.44	234.96	2.51	3.95

Sr. No.	Source	Energy Available at Periphery (MUs)	Fixed Charges (Rs. Crores)	Variable Charges (Ps/kWH) - Average of Jan,Feb. and March 2012	Variable Charges (Rs. Crores)	Total Cost (Rs. Crores)
1	2	3	4	5	6	7 = 4+6
	KGPP	175.49	25.10	257.34	46.83	71.93
	GGPP	180.88	28.59	265.35	49.77	78.35
II	***RGPPL***		**39.17**			**39.17**
III	**NPCIL**					
	KAPS	61.81		227.54	14.58	14.58
	TAPS	81.28		293.97	24.78	24.78
B	**Other Generating Stations**					
I	**NSPCL**					
	Bhilai	**590.58**	**101.48**	271.35	166.17	267.65
C	**Renewable Energy Sources**					
	(2.60% for - Non Solar)	45.89		400	19.03	19.03
	(0.40% for Solar)	7.06		900	6.59	6.59
D	**OTHER CHARGES**					
	PGCIL Transmission Charges (POC Charges WR + SR)					73.63
	SLDC Charges, WRLDC charges					0.15
	OPTCL - Wheeling Charges, WRPC, WRTM, Congestion charges, reactive charges, reactive charges (GETCO), others, misc. incentives					3.95
E	**Total**	**2016.84**	**274**		**419**	**770.09**

Further, any variation on account of Fuel and Power Purchase cost shall be calculated as per the formula specified by the Commission separately and any impact shall be passed directly to the consumers. The formula is applicable from FY 2012-13.

The licensee will compute fuel and power procurement cost variations on quarterly basis and adjustment shall be made in consumer bills starting after a month following the end of the quarter based on the Fuel & Power Purchase Cost Adjustment (FPPCA) formula notified separately by the Commission 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 378 paisa per unit for FY 2012-13**. The approved per unit cost of power purchase for FY 2012-13 to be considered in the FPPCA formula excludes transmission charges of PGCIL,SLDC charges, RLDC charges and charges for reactive energy.

8.9 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.

In the past, the Petitioner has not maintain segregation between the three cost elements for the purpose of accounting and had booked all cost including salaries, medical expenses, office expenses, domestic traveling expenses, and other charges towards repairs and supply of materials under the operation and maintenance expense head. However, efforts have been made by ED-DD to segregate the O&M expenses under commercially accepted principles. In this regard a specialized accounting firm has been appointed by ED-DD. The specialized firm has already identified and segregated all the elements of cost to be covered under the three broad categories of O&M expenses from FY 08-09 to FY 10-11. The said work will be finalized soon and output of the same will be submitted to the Commission during the processing of ARR petition of FY 12-13.

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

Table 8.9.1: Operation & Maintenance Expense of previous years (Rs. Crore)

Year	O&M Expenses
	Actual
FY 06-07	7.02
FY 07-08	6.47
FY 08-09	8.47
FY 09-10	9.35
FY 10-11	11.17

The total O&M expense for FY 10-11 was Rs. 11.17 Crore as compared with FY 09-10, where total O&M expense of Rs. 9.35 Crore, an increase of over Rs 1.82 Crores as per the petition for FY 2012-13. The actual O&M expenses for FY 2010-11 have been revised to Rs 8.61 Crores as per the true-up submission for FY 2010-11. The increase in operation and maintenance cost in FY 10-11 was primarily due to the increase in R&M expenses during FY 10-11 as submitted by the Petitioner.

Commission's Analysis

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

8.9.1 Employee Expenses

Petitioner's Submission

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

Based on the various expense head related to employee booked during six months of FY 11-12, ED-DD has estimated the total employee cost for full year of FY 11-12 as Rs. 5.16 Crore and Rs. 5.50 Crores for FY 2012-13. The petitioner has used five year monthly average growth rate of the WPI published by the Office of the Economic Advisor, Government of India at 6.69% for FY 2012-13.

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 7.8.1, Commission has considered Employee cost as Rs. 4.89 Crores for Review of ARR for FY 2011-12 for reasons explained therein. Taking Rs. 4.89 Crores for FY 2011-12 and applying the escalation of 8.76%[8], employee Cost for FY 2012-13 works out to Rs. 5.32 Crores. The latest WPI index till March 2012 has been used as available on the

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

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.

The Commission considers the employee cost of Rs. 5.32 Crores as reasonable and approves the same for FY 2012-13.

8.9.2 Repair and Maintenance Expenses

Petitioner's Submission

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

The actual R&M expense for FY 10-11 for ED-DD at Rs. 6.20 Crores as per the petition for FY 2012-13 has been revised to Rs 3.86 Crores as per the latest submission of the true-up for FY 2010-11. The revised estimate of R&M expense for FY 11-12 is Rs. 6.51 Crore. The petitioner has projected 5% increase in the R&M expenses for FY 2012-13, resulting in the estimate of Rs 6.84 Crores for FY 2012-13.

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 7.8.2, Commission has considered R&M expenses as Rs. 2.39 Crores for Review of ARR for FY 2011-12 for reasons explained therein. In line with the JERC Tariff Regulations 2009, taking Rs. 2.39 Crores for FY 2011-12 and applying escalation of 8.76%, the R&M expense works out to at Rs. 2.60 Crores for FY 2012-13.

The Commission considers the R&M expenses of Rs. 2.60 Crores as reasonable and approves the same for FY 2012-13.

8.9.3 Administration and General Expenses

Petitioner's Submission

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

- Telephone, postage & telegrams charges;
- Travel and conveyance expenses;
- Consultancy and regulatory fees; and
- Consumer indexing fee

The actual A&G expense for FY 10-11 was Rs. 2.00 Crores as per the petition for FY 2012-13, but the same has been revised to Rs 0.25 Crores as per the latest submission for the true-up of FY 2010-11.

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

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

Commission's Analysis

As may be seen from para 7.8.3, Commission has considered A&G expenses as Rs. 2.17 Crores for Review of ARR for FY 2011-12 for reasons explained therein. Taking Rs. 2.17 Crores as base for FY 2011-12 and applying escalation of 8.76%, the A&G expense works out to Rs. 2.36 Crores for FY 2012-13.

The Commission considers the A&G expenses of Rs. 2.36 Crores as reasonable and approves the same for ARR of FY 2012-13.

8.9.4 Summary of Operation and Maintenance Expenses

The overall summary of O&M expenditure estimated by the petitioner vis-à-vis approved by the Commission for FY 2012-13 is given below:

Table 8.9.2: Summary of Operation & Maintenance Expenses (in Rs. Crores)

Sr. No.	Particulars	Petitioner Submission (FY 2012-13)	Approved (FY 2012-13)
1	Employee Expenses	5.50	5.32
2	A&G Expenses	2.39	2.36
3	R&M Expenses	6.84	2.60
4	Sub-Total	**14.73**	**10.28**
5	Less: Expenses Capitalized	-	-
6	**Total O&M Expenses**	**14.73**	**10.28**

8.10 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 EDDD in handling increased load but would also ensure better quality of supply and network reliability to the consumers. Though, EDDD T&D loss levels are very low, the capital expenditure would help in maintaining the low T&D loss levels and further reduction in the same."

The petitioner further submits that each year they draft an Annual Plan for the capital investment for new schemes and continuing schemes which it plans to incur in the ensuing year. Due to lower allocation of funds from the Government of India as compared with the requested funds, the actual capital expenditure has been lower than the planned capital expenditure in the previous years. Therefore, the capital expenditure for the subsequent years is higher as it includes the schemes for which the funds were not allocated in the previous capital expenditure proposal. The petitioner has proposed the capital expenditure of Rs. 40.55 Crores for FY 2012-13, out of which the petitioner has projected the addition of Rs. 33.46 Crores in the Gross Fixed Assets during FY 2012-13.

Commission's analysis

Commission observes that the capital expenditure and the capitalization submitted by the petitioner for FY 2012-13 is required to maintain the reliable supply for the consumers of UT of 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 had not submitted the capital investment plan as per the regulations and did not give the present status of the capital expenditure incurred/capitalized during past years. As discussed in para 6.10 of this order, for the purpose of this ARR computation, the **Commission provisionally approves the capital expenditure of Rs. 40.55 Crores and corresponding capitalization of Rs 33.46 Crores as proposed by the petitioner for ARR of 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 and meeting the loss reduction targets

8.11 GFA and Depreciation

Petitioner's submission

The petitioner in ARR and tariff petition for FY 2012-13 has submitted that they had Rs. 316.66 Crores of Opening Gross Fixed Assets (GFA) in FY 12-13. ED-DD has further proposed capital expenditure of Rs. 40 Crores for FY 2012-13 out of which Rs 33.46 Crores have been estimated to be capitalized.

Further, the Petitioner has submitted the audited accounts for FY 2010-11 containing the audited value of opening gross fixed assets as on April 1'2010 along with the true-up for FY 2010-11.

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 8.11.1: 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 of Rs. 16.76 Crores for the FY 12-13 is determined by applying aforesaid category-wise assets depreciation rates on the average Gross Fixed Assets projected for FY 12-13.

Commission's Analysis

As discussed in para 6.10 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. Since historical assets are on an assumption basis, therefore the additions during each year i.e. FY 2010-11 and FY 2011-12 including the addition for FY 2012-13 has been considered for FY 2012-13. The Commission as discussed at Para 8.10 of this order has allowed the capitalization for FY 2012-13 at Rs 33.46 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) has been used to calculate the depreciation. The depreciation for FY 2012-13 has been worked out at Rs. 2.86 Crores.

Table 8.11.2 : GFA & Depreciation approved for FY 2012-13 (in Rs. Crores)

Sr. No.	Particulars	Petitioner Submission (FY 2012-13)	Approved (FY 2012-13)
1	Opening Value of Assets at the beginning of the year	316.66	37.37
2	Additions during the year	33.46	33.46
3	Gross Fixed Assets at the end of year	350.12	70.83
4	Average Assets	**333.39**	**54.10**
5	**Depreciation for the year**	**16.76**	**2.86**

Table 8.11.3 : Calculation for working out the Depreciation for FY 2012-13(in Rs. Crores)

Sr. No.	Particulars	Value of assets at the beginning of FY 2012-13	Addition during FY 2012-13	Closing balance at the end of FY 2012-13	Rate of Depreciation	Depreciation for FY 2012-13
1	Plant & Machinery	37.18	33.46	70.64	5.28%	2.85
2	Buildings	-	-	-	3.34%	-
3	Vehicles	-	-	-	9.50%	-
4	Furniture and Fixtures	0.05	-	0.05	6.33%	0.00
5	Computers and Others	0.14	-	0.14	6.33%	0.01
6	Land	-	-	-	0.00%	-
7	Total	**37.37**	**33.46**	**70.83**		**2.86**

Commission considers the depreciation of Rs. 2.86 Crores as reasonable and approves the same for ARR of FY 2012-13.

8.12 Interest on Loan

Petitioner's submission

The petitioner in ARR and tariff petition for FY 2012-13 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 from FY 2011-12 onwards.

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

Further, the department has engaged a specialized CA firm for preparing the Accounts and Asset Depreciation Register and will also maintain proper audited accounts for any long term loans availed during the ensuing years.

Interest rate of 14.75% has been considered for computation of interest cost for long-term loans which is similar to the prevailing SBI Prime Lending Rate.

Commission's analysis

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".*

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 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 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 6.10 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. 25.51 Crores and normative debt of 70% of addition to GFA of Rs. 23.42 Crores during the FY 2012-13 and has calculated the normative interest as per the regulations which amount to Rs 5.30 Crores. Accordingly, the **Commission has considered the Normative Interest on loans as Rs. 5.30 Crores as reasonable and approves the same for ARR for FY 2012-13.** The calculation is given below:

Table 8.12.1 : Normative Interest on Loan approved in the ARR for FY 2012-13(in Rs. Crores)

Sr. No.	Particulars	Petitioner Submission (FY 2012-13)	Approved (FY 2012-13)
1	Opening Normative Loan	-	25.51
2	Add: Normative Loan during the year	23.42	23.42
3	Less: Normative Repayment	1.17	2.62
4	Closing Normative Loan	**22.55**	**46.32**
5	Average Normative Loan	11.12	35.92
6	Rate of Interest (@SBAR rate)	14.75%	14.75%
7	**Interest on Normative Loan**	**1.64**	**5.30**

8.13 Interest on Working Capital

Petitioner's submission

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

Rate of interest of 14.75% has been considered for FY 12-13 for the interest on working capital, 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 as per the Petitioner amounts to Rs. 9.84 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.

As per the regulation 29 of JERC tariff regulations

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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 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%[9] as on 1st April 2012 for ARR of FY 2012-13. The detailed calculation of the interest on working capital is as mentioned below:

Table 8.13.1 : Interest on working capital approved in ARR of FY 2012-13 (in Rs. Crores)

S.No.	Particulars	Petitioner Submission (FY 2012-13)	Approved (FY 2012-13)
1	Power Purchase Cost for one month	65.48	64.17
2	Employee Cost for one month	0.46	0.44
3	A&G Expenses for one month	0.20	0.20
4	R&M Expenses for one month	0.57	0.22
5	**Total Working Capital for one month**	**66.71**	**65.03**
6	**Less: Consumer Security Deposit**		**4.36**
7	**Total WC after deduction of Security Deposit from Working Capital Requirement**	**-**	**60.67**
8	SBAR Rate	14.75%	14.75%
9	**Interest on Working Capital**	**9.84**	**8.95**

The Commission considers Rs. 8.95 Crores as Interest on Working Capital as reasonable and approves the same for ARR for FY 2012-13.

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

8.14 Interest on Security Deposit

Petitioner's submission

The petitioner has not claimed interest on security deposit in the petition for ARR & tariff determination for FY 2012-13.

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 through email dated 9th August 2012 has submitted the amount of consumer security deposit held with the Petitioner as on 31st August 2012 of Rs 4.36 Crores. This security deposit amount has been considered for the computation of the interest on security deposit for FY 2012-13.

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, that the petitioner must pay the interest on consumer security deposit for FY 2012-13 (at the Bank Rate i.e. 9.50[10]% 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.**

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[10] 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.

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 1st 2010 irrespective of the constraints.

In view of the above, the Commission allows Rs. 0.41 Crores as the interest on security deposits and considered as expenditure in ARR for FY 2012-13.

8.15 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 would like to submit that Distribution Business is perceived to be a higher risk business as compared with Generation and Transmission Business. Therefore, a higher RoE should be provided for the Distribution Business given that ED-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 in its Petition.

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.

Return on equity for ED-DD has been computed as Rs. 0.80 Crores for FY 12-13.

Table 8.155.1: Return on Equity claimed by the Petitioner for FY 2012-13 (in Rs Crores)

Return on Equity	FY 12-13
	Projected
Opening Equity	0.00
Addition in Equity	10.04
Closing Equity Amount	**10.04**
Average Equity Amount	5.02
Rate of Return on Equity	16.00%
Return on Equity	**0.80**

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. ED-DD has not provided the required asset and depreciation registers till March 31'2011.

As discussed in para 6.10 of this order, Commission has therefore considered return on capital base in accordance with Regulation 23 of JERC (Terms and Conditions for Determination of Tariff) Regulations, 2009 and has considered Rs. 1.08 Crores as a 3% return on net block at the beginning of the FY 2012-13.

The Commission considers the Return on Capital Base of Rs. 1.08 Crores as reasonable and approves the same for ARR of FY 2012-13.

8.16 Provision for Bad and Doubtful debts

Petitioner's submission

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

Table 8.16.1: Provision for Bad & Doubtful debts as submitted by Petitioner for FY 2012-13

Provision for Bad & Doubtful Debts (in Rs. Crores)	FY 12-13
	Projected
Receivables	580.79
Provision for Bad &Doubtful Debts as % of Receivables	1%
Provision for Bad & Doubtful Debts	**5.81**

Commission's analysis

As can be observed from the audited accounts, there was no bad & doubtful debt in FY 2010-11. 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 from the retail sales for FY 2012-13 as bad and doubtful debt at Rs 3.00 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 and auditor's certificate of write off of bad and doubtful debts is furnished.

8.17 Non-Tariff Income

Petitioner's submission

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

For FY 12-13, an increase at 5% p.a. has been considered over the estimated FY 11-12 non-tariff income and has been estimated at Rs. 9.88 Crores.

Commission's analysis

The Commission has considered the approved figure for review of FY 2011-12 and has escalated the same by 5% to arrive at the approved non tariff income for FY 2012-13 at Rs 9.88 Crores, same as that claimed by the Petitioner.

The Commission considers Non-Tariff Income of Rs. 9.88 Crores as reasonable and approves the same for ARR of FY 2012-13.

8.18 Revenue from Sale of Surplus Power

Petitioner's submission

ED-DD has projected a surplus energy for FY 12-13 and has considered the revenue of Rs. 27.46 Crores through sale of surplus power. The Petitioner has considered the rate of Rs 2.75 per unit, same as the average rate achieved during the first six months of FY 2011-12.

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 is available for sale outside the territory. The Commission, therefore, has not considered the revenue earned from outside sales for FY 2012-13 and the same will be considered at the time of true-up once the actual sale and revenue data becomes available

8.19 Revenue at 'Re-determined retail tariff of FY 2011-12' for FY 2012-13

Petitioner's submission

The petitioner has submitted that the revenue from sale of power for FY 12-13 is 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 approved tariff is estimated to be Rs. 580.79 Crores in FY 2012-13. Further, ED-DD has computed the revenue for the entire FY 12-13 based on the tariff notified by the Commission in the Tariff Order for FY 11-12 dated 3th October, 2011. ED-DD has not considered any revenue on account of fuel price adjustment charge during FY 12-13.

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

Table 8.19.1: Revenue from Sale of Power at Existing Tariff as submitted by the Petitioner for FY 2012-13 (Rs. Crores)

Revenue at Existing Tariff (Rs Crores)	FY 12-13 Projected
Domestic	8.95
LIG	0.01
Commercial	8.35
Agriculture	0.34
LT Industry	43.01
HT/EHT Industry	518.75
Public Lighting	0.62
Public Water Works	0.32
Temp. Supply	0.43
Total Revenue from existing tariff	**580.79**

Commission's analysis

Based on the estimates of sales, consumers and connected load approved by the Commission for FY 2012-13, the Commission has arrived at the revenue from existing tariff (re-determined tariff for FY 2011-12 in this order) of Rs. 600.54 Crores.

Table 8.19.2: Revenue from Sale of Power at 're-determined tariff of FY 2011-12' approved by the Commission for FY 2012-13 (Rs. Crores)

S.No.	Category/Consumption Slab	FY 2012-13 Revenue at re-determined tariff of FY 2011-12
1	**LT-D/Domestic**	
	Up to 50 units	1.82
	51-200 units	2.92
	201-400 units	4.52
	401 units and above	3.12
	Total Domestic	**12.39**
	Low Income Group	**-**
2	**LT-C/Commercial**	
	0-100 units	3.37
	Beyond 100 units	5.72
	Total Commercial	**9.09**
3	**LT- Ag/Agriculture**	
	Upto 10 HP per unit	0.08
	Beyond 10 HP per unit	0.12
	Total Agriculture	**0.20**
4	**LTP Motive Power**	
	Upto 20 HP of connected load	1.14

S.No.	Category/Consumption Slab	FY 2012-13 Revenue at re-determined tariff of FY 2011-12
	Above 20 HP of connected load	45.25
	Total Agriculture	**46.39**
5	**LT-PL/Public Lighting**	**1.67**
6	**LT-Public Water Works**	
	Upto 20 HP of connected load	0.01
	Above 20 HP of connected load	0.27
	Total Public Water Works	**0.28**
7	**HT Industrial**	
A	**HT (A) General**	
	0-50000	118.93
	50000-5 lakh	263.56
	Above 5 lakh	92.43
B	**HT (B) Furnace**	
	0-300 units per kVA	0.02
	301-500 units per kVA	0.01
	Above 500 units per kVA	55.03
	Total HT Industrial	**529.97**
8	**Temporary Supply**	**0.56**
	Total	**600.54**

8.20 Aggregate revenue Requirement and Revenue Surplus/Deficit for FY 2012-13

Petitioner's submission

The petitioner estimated the Aggregate Revenue Requirement for FY 2012-13 to be Rs. 825.46 Crores.

Commission's analysis

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

Table 8.20.1 : Aggregate Revenue Requirement (ARR) approved for FY 2012-13

(in Rs. Crores)

Sr. No.	Particulars	Petitioner Submission (FY 2012-13)	Approved (FY 2012-13)
1	Power Purchase Cost	785.76	770.09
2	Employee costs	5.50	5.32
3	Administration and General Expenses	2.39	2.36
4	Repair and Maintenance Expenses	6.84	2.60
5	Depreciation	16.76	2.86
6	Interest and Finance charges	1.64	5.30
7	Interest on working capital	9.84	8.95
8	Interest on security deposit	NIL	0.41
9	Return on NFA	0.80	1.08
10	Provision for Bad Debt	5.81	3.00
11	Incentive on achievement of norm of T&D loss	-	
12	**Total Revenue Requirement**	**835.34**	**801.98**
13	Less: Non Tariff Income	9.88	9.88
14	**Net Revenue Requirement (12-13)**	**825.46**	**792.10**

The estimated gap has been mentioned including the carrying cost in the following table:

Table 8.20.2 : Estimation of Deficit approved for FY 12-13 (in Rs. Crores)

Sr. No.	Particulars	Petitioner Submission (FY 2012-13)	Approved (FY 2012-13)
1	**Net Revenue Requirement**	**825.46**	**792.10**
2	Less: Revenue from Retail Sales at Existing Tariff i.e.re-determined tariff of FY 2011-12	580.79	600.54[11]
3	Less: Revenue from Surplus Power Sale/UI	27.46	-
4	**Net Gap/(Surplus) at existing tariff i.e. re-determined tariff of FY 2011-12**	**217.22**	**191.55**
5	Gap for the previous year/ (Surplus)	(8.75)*	77.82
6	Past Arrears/Refunds to Consumers	-	-
7	**Total Gap (4+5+6)**	**208.47**	**269.38**

*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 (as per the actual for the year), the Petitioner is in deficit.

[11] On the basis of re-determined tariff of FY 2011-12

As can be observed there is a revenue gap of **Rs 269.38 Crores** at the end of FY 2012-13, 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 2012-13 and is discussed in detail in chapter 10 of this order.

Directives

9. Directives

9.1 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 October 3'2011 for FY 2011-12 have not been fully complied with by ED-DD. The Commission in the tariff order for FY 2011-12 dated October 3' 2011 had not issued any fresh set of directives as the earlier directives of the tariff order for FY 2010-11 dated November 1' 2010 had not been fully complied with by ED-DD.

Compliance of Directives issued by the Commission in the tariff order for FY 2011-12 dated October 3' 2011

1. Annual Statement of Accounts

The Commission had directed ED-DD to prepare and maintain their annual accounts on commercially accepted principles for the regulated business and get them audited as required under JERC (Terms and Conditions for Determination of Tariff) Regulations 2009 (10/2009). The Commission in the last year's tariff order for FY 2011-12 had further directed the Petitioner to submit the same alongwith the tariff petition for FY 2012-13.

Compliance/Action Taken

Petitioner's submission

Quote '*EDDD has submitted the Audited Annual Accounts for FY 2010-11 along with the Truing-up petition for FY 2010-11 to the Hon'ble Commission in the month of February 2012.'* ***Unquote***

Commission's Comments

Action taken is noted and the submission is accordingly considered for the purpose of provisional truing up of FY 2010-11. The Commission has taken a proactive approach as the licensee is in the process of learning and developing the data required for regulatory requirements.

2. Preparation of Asset and Depreciation Register

The Electricity Department was directed to arrange for the preparation of assets and depreciation registers function wise, and asset classification wise. Till such time the above registers are prepared and got audited, the Commission cannot consider the gross fixed assets and accumulated depreciation over the years to arrive at the capital base and allow the return thereon as per JERC (Terms and Conditions of Determination of Tariff) Regulations, 2009.

The Commission in the last year's tariff order for FY 2011-12 had further directed the Petitioner to submit the same alongwith the tariff petition for FY 2012-13.

Compliance/Action Taken

Petitioner's submission

Quote '*The function wise and classification wise actual assets of EDDD has been submitted in the Schedule for "Depreciation on Fixed Assets" along with the audited accounts for FY 2010-11*.' **Unquote**

Commission's Comments

The Commission had elaborated during the hearing that all the assets included in the gross block as recorded in the book of accounts are not deployed for rendering service to the consumer for which tariff is being charged. Some assets which are damaged, become unusable, stolen, not traceable, obsolete etc. remain in the book of accounts in the account system followed by the Government Department, these are not effectively used for rendering services to the consumer for which tariff is being is charged. These assets are not written off, but remain a part of the gross block in the book of accounts; for such assets, the depreciation cannot be recovered from the consumer in the tariff.

The Commission is of the view that fixed asset and depreciation registers are required to be submitted, function wise and asset classification wise. The Petitioner is directed to submit quarterly progress report and the completion date of the preparation of the asset and depreciation registers function wise after getting them audited.

3. Management Information System (MIS)

The ED-DD was directed to take steps to build credible and accurate data base and management information system to meet the requirements for filing ARR & Tariff Petition as per regulatory requirement and also suit the Multi Year Tariff principles which the Commission may consider at the appropriate time under Regulation 11 of JERC (Terms and Conditions for determination of Tariff) Regulations 2009. The formats of software and hardware may synchronize with the Regulatory Information and Management System (RIMS) circulated by Central Electricity Regulatory Commission (CERC). The ED-DD should get a study conducted on computerized database, on electronic media and shall give a proposal as to how the department proposes to achieve this. The Commission in the tariff order for FY 2011-12 had directed the Petitioner to submit the status of implementation of the software to the Commission by March' 2012.

Compliance/Action Taken

Petitioner's submission

Quote '*With the assistance of the NIC (National Information Commission) of Daman, EDDD has implemented the software named RACE (Revenue Administration through Computerized Energy System) for the HT category of consumers from the month of April 2012 and is in the process implement the said software to other categories of consumers such as Domestic, Commercial, LT Industries, Agriculture, Public Lighting, Water works etc. Once fully operational, EDDD will be able to maintain the database to meet the requirements for filing ARR and Tariff petition as per the regulatory requirement.'* **Unquote**

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.

4. Billing Efficiency / Collection Efficiency

The ED-DD was directed to improve the energy billing efficiency to 100%. The ED-DD shall submit a time bound action plan to achieve 100% billing efficiency.

Compliance/Action Taken

Petitioner's submission

Quote '*EDDD would like to highlight that the department has taken a number of initiatives to improve the collection efficiency. One of such initiative is introduction of "Net Banking System" for online payment of bills. This facility has been available for the HT consumers from April 16th 2012 onwards. The said facility will be extended to other categories of consumers soon '***Unquote***

Commission's Comments

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

5. Collection of Arrears

The ED-DD was directed to prepare an age wise analysis and initiate measures to liquidate the arrears and shall submit an action plan in this respect by 31.12.2011.

Compliance/Action Taken

Petitioner's submission

Quote *' EDDD has taken a number of steps for collections of past arrears such as publishing the list of defaulters in its website to inform the defaulting consumers and regular follow-up with the defaulting consumers to pay their arrears on urgent basis. Through this method EDDD has managed to collect the past arrears from a number of defaulting consumers. EDDD would further like to highlight that most of the arrear amount are with the Government agencies, ED-DD has initiated recovery through fund transfer from fund allocated to the Government body. This has been implemented and many payments have been recovered through this means.'* **Unquote**

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.

6. Pilferage of Energy

The Commission had observed that the Department has not segregated the losses into technical and commercial losses. It is feasible that the losses projected may include commercial losses on account of pilferage. The Commission had directed that an energy audit through an accredited agency be carried out in order to find out the actual losses and remedial measures required to be taken as a result thereof and submit an action plan including scope of work for energy audit.

The Petitioner in the last year's submission had stated that ED-DD had invited bids for the energy audit exercise and various bids were received by the ED-DD, however M/s Cospower Engineering had been selected for the energy audit. The Commission had further directed that the status of the study shall be reported by December 2011.

Compliance/Action Taken

Petitioner's submission

No response received.

Commission's Comments

The Commission directs the Petitioner to submit the results of the energy audit exercise by September 30' 2012 failing which the same would be treated as non compliance of Commission's order and appropriate action would be initiated.

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

It had been observed that LIGH category of consumers is not metered and the consumption of the consumers with 2 lamps is charged on flat rate basis. Under section 55 (1) of Electricity Act, 2003, no licensee shall supply electricity after expiry of two years from the appointed date except through installation of correct meter in accordance with the regulation to be made in this behalf by the Authority. Accordingly metering is required to be done in line with Central Electricity Authority (installations and operation of meters) Regulations 2006 to all consumers. Electricity Department of Daman & Diu was directed to provide meters to all such consumers such as LIGH consumer with 2 lamps etc., which are not metered for supply of electricity at present.

ED-DD was further directed to submit an action plan for installation of appropriate meters to the consumers of all categories by 31-12-2011 for the approval of the Commission.

Compliance/Action Taken

Petitioner's submission

Quote *'The ED-DD has provided all the LIG consumers with meters and for non-functional / defective meters have been replaced according to the Regulations.'* **Unquote**

Commission's Comments

Action taken is noted.

8. Augmentation of Transmission and Distribution System

The Commission had observed that it is necessary for the Department to augment the transmission and distribution system to meet the demand from new consumers to improve the quality of supply to existing consumers and reduce the losses.

The Commission had directed the department to conduct a load flow study for optimization of the system and to prepare detailed project report for augmentation of the transmission and distribution system with cost benefit analysis, phasing of expenditure etc.

The Petitioner in last year's submission had stated that ED-DD has appointed M/S Techlabs (Trident Techlabs Pvt. Ltd) for preparing a report of augmentation of Transmission and Distribution System till 2017 under which the steps are to be formulated for preparation of scheme based on the report. The Commission had further directed the Department that the present status of the study being conducted by M/s Techlabs and the time schedule for submission of the report shall be reported to the Commission by December, 2011. Pending augmentation of the transmission and distribution system, ED-DD shall ensure to release supply to new consumers from the existing system. The Commission felt that no consumer shall be denied supply for want transformer capacity etc., particularly small industrial consumers.

Compliance/Action Taken
Petitioner's submission
Quote '*EDDD would furnish the report prepared by M/S Techlabs upon completion of the study for augmentation of the Transmission and Distribution System of EDDD*'. **Unquote**

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.

9. Consumers Bills

The Commission had observed there was a need of reformatting the electricity bills served on the consumers to accommodate data and information as considered essential by the Commission. A draft format be prepared and submitted to the Commission by 31.12.2011.

The Petitioner in the last year's submission for FY 2011-12 had submitted that the format for HT consumer had been revised and the same format had been proposed for all the consumers. The Commission had noted the action taken as regards to HT billing and had directed similar action to be taken for LT billing.

Compliance/Action Taken
Petitioner's submission
Quote *'ED-DD has revised the consumer bill format for all the categories and the same has been implemented for all the consumers.'* **Unquote**

Commission's Comments
Action taken is noted.

10. Demand Side Management (DSM) and Energy Conservation

The Commission had observed that demand side management and energy conservation measures should be encouraged in order to reduce consumption of electricity. Therefore, Commission had directed that a study be conducted by ED-DD through an accredited agency for the efficient use of electricity by various means. The Petitioner in the last year's submission had stated that it is in the process of finalization of the scope of work and the same shall be shared with the Commission. The Commission had directed to submit the report by December 2011.

Compliance/Action Taken

Petitioner's submission

Quote '*ED-DD is in the process of finalization of scope of work and the same shall be shared with the Commission.*' **Unquote**

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.

11. Power Factor Improvement Incentives

The Commission had observed that presently a penalty is being levied for causing poor power factor. As per Commission's Regulation on Supply Code a licensee is to incentivise these consumers who help to improve the power factor. ED-DD shall examine the issue and put up a proposal for providing incentive for those consumers who help improving power factor beyond 90% as per the Commission Regulations.

The Petitioner in last year's tariff order had stated that it is in the process of implementation of new software and only after the implementation of the new system, the Petitioner would be able to analyze the details of the power factor of all HT consumers. The Commission had further directed ED-DD to submit the detailed proposal with the ARR & tariff petition for FY 2012-13.

Compliance/Action Taken

Petitioner's submission

Quote '*ED-DD has already submitted its proposed Power Factor Improvement Incentives schemes in its ARR Tariff Petition for FY 2012-13 for the kind consideration of the Hon'ble Commission.*' **Unquote**

Commission's Comments

The submission of the Petitioner is noted and Commission has dealt this appropriately for the consumer classes in the Chapter 12: 'Tariff Schedule' of this tariff order.

Fresh Directives for FY 2012-13

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.

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.

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.

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.

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.

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.

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.

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.

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

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.

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.

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.

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

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

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.

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.

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 overdrawl/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.

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[12]% 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.**

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

12 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.

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.

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.

Tariff Philosophy and category-wise tariffs for FY 2012-13

10. Tariff Philosophy and category-wise tariffs for FY 2012-13

10.1 Preamble

The Commission in determining the aggregate revenue requirement and retail supply tariff for the financial year 2012-13 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 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. As per Notification no. 23/1/2008-R&R (Vol-IV) issued by Ministry of Power, Government of India on the opinion from Ministry of Law & Justice on the Operationalization of Open Access in Power Sector, M/o Law & Justice in consultation with Ld. Attorney General of India has opined that all 1 MW and above consumers are deemed to be open access consumers and the regulator has no jurisdiction for fixing the electricity tariff for them.

Accordingly, the relationship between the 'subsidizing' consumers and the 'subsidized' consumers must be seen in the emerging situation of the 'Open Access' and its implications for all consumers, the licensee, the tariff determination process and the 'subsidized' consumers.

Consumers consuming more than 1 MW of electricity be subject to open access process i.e. they will be free to determine their tariff with the supplier of electricity and their tariff not be determined by the appropriate Commission. In such an eventuality, next year or thereafter, approximately 94 % of the 'subsidizing' consumers of DD may not contribute to the ARR to the extent they are doing now. Therefore the 'subsidized' consumers have to stand on their own and move towards paying for the cost of supplying electricity to them to meet the average cost of supply obligations of the licensee. The wheeling charges, cross subsidy surcharge etc. may or may not provide the financial resources to maintain the existing level of cross-subsidy.

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 should move progressively towards reducing the cross subsidy in such a manner that:

a. Subsidizing class is able to economically, financially and commercially able to sustain the cross subsidy

b. The subsidized class do not become too much dependent on the cross subsidy by the subsidizing class especially in the context of the open access.

When open access is implemented, the subsidizing class will progressively move out of the purview of the tariff determination by the Commission, which means the shrinking of the subsidizing class, which was subsidizing the revenue. The wheeling charge, cross subsidy surcharge etc. fixed by the Commission will bridge this gap but to what extent cannot be determined or forecasted today.

Therefore, the retail consumer in general will have to be mentally prepared to progressively pay a tariff close to average cost of supply of power over a period of time.

10.2 Revenue Gap for FY 2012-13 and Recovery

The petitioner in its ARR Petition for FY 2012-13 has projected a revenue gap of Rs. 217.22 crore for FY 2012-13 at the tariffs approved in the Commission's tariff order dated October 3'2011..

As elaborated in para 8.20 of this Order, the Commission has estimated the cumulative revenue gap at the end of FY 2012-13 would be Rs. 269.38 Crores after considering the gap created after the provisional truing-up of ARR of FY 2010-11 (Rs 1.55 Crores) and review of ARR of FY 2011-12 (Rs 77.82 Crores).

In order to recover the cumulative revenue gap of Rs. 269.38 Crores, the average tariffs have to be increased by around 39 % to recover the same during FY 2012-13. 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 156.19 Crores as additional revenue from the increased tariffs in FY 2012-13 and the remaining revenue gap of Rs 113.19 Crores to be treated as regulatory asset to be amortised over a period of three years starting from FY 2013-14.

10.3 Tariff Proposal

Petitioner's submission

The petitioner has proposed substantial increase in the tariff charged from HT/EHT consumers and has also proposed a higher consumption slab "600 units and above" in the domestic consumer category with tariff rate of Rs. 3.00/unit as against the existing tariff rate of Rs. 3.25/unit and at the same time has requested to keep the retail tariffs determined for domestic and agriculture consumers same as that applicable during FY 2010-11.

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

Table 10.3.1: Existing and Proposed Tariff for FY 2012-13 proposed by the Petitioner (in Rs.)

Tariff Structure	Existing (FY 2011-12)		Proposed (FY 2012-13)		
	Energy Charges (Rs/kWh)	Fixed Charges	Energy Charges ((Rs/kWh)	Fixed Charges	
Low Income Group		Rs. 24/connection /month		Rs. 10/connection /month	
LT-D/Domestic					
Ist 50 Units	1.60		1.00		
51 to 200 Units	2.25		1.60		*
201 to 400 Units	3.00		2.00		
401 to 600 Units	3.25		2.25		
601 units and above	3.25		3.00		
LT-C/Commercial					
1st 100 Units	2.25		2.25		
Beyond 100 Units	3.25		3.25		
LT- Ag/ Agriculture					
Upto 10 HP per unit	2.50		0.55		*
Beyond 10 HP per unit	2.65		0.85		
LTP Motive Power(Including Public Water Work)					
Upto 20 HP of Connected Load	2.50		3.55		
Above 20 HP Connected Load	2.60	Rs. 25/HP	3.65	Rs. 25/HP	
LT-PL/Public Lighting					
Public Lighting	3.32		3.32		
HT					
HTC General Industrial / Motive Power 11KV or 66KV having CMD above 100KVA					

Tariff Structure	Existing (FY 2011-12)		Proposed (FY 2012-13)		
	Energy Charges (Rs/kWh)	Fixed Charges	Energy Charges ((Rs/kWh)	Fixed Charges	
50000 units	2.95	Rs. 60 /KVA	4.21	Rs.120 / KVA	For connected load >500KVA, Rs.500/KVA
50000 to 5 lakh units	3.10	Rs. 60 /KVA	4.36	Rs.120 /KVA	
Beyond 5 lakh units	3.15	Rs. 60 /KVA	4.41	Rs. 120 /KVA	
Penal Charges for exceeding contracted demand	8.00	Rs. 180/KVA	8.00	Rs. 360/KVA	Beyond 500 KVA Rs. 1500/KVA
HT Industrial(Ferro Metallurgical / Steel Melting/ Steel Rerolling Power Intensive)					
First 300 Units per KVA	2.05	Rs. 450/KVA	3.31	Rs. 600/KVA	
Next 200 units per KVA	3.05	Rs. 450/KVA	4.31	Rs. 600/KVA	
Above 500 units per KVA	3.55	Rs. 450/KVA	4.81	Rs. 600/KVA	
Penal Charges for exceeding contracted demand	8.00	Rs. 900/KVA	8.00	Rs. 900/KVA	
Temporary Supply					
	Fixed / Demand charges (if any) plus energy charges (for relevant slab if any) under corresponding permanent supply category plus 50% of both				

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

Commission's analysis

The Commission has determined the retail tariff for FY 2012-13 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:

6. *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.*

7. *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.

8. *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*

9. *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.

10. *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 39.01% for all consumer categories to recover the revenue gap of FY 2012-13 over the entire financial year 2012-13 (applicable from August 1' 2012) which computes to an overall increase in revenue of 26% for the financial year 2012-13. The revenue gap is to be recovered from the new tariff within 8 months from August 1' 2012 to March 31' 2012. The tariff would be applicable for part period in FY 2012-13 therefore the revenue recovery from new tariff would be lower.

It is observed that the average cost of supply has gone up from Rs 3.14/kWh in FY 2010-11 to Rs 4.36/kWh in FY 2011-12 as per the values approved in this tariff order. Further, it is noted that the ACOS for FY 2012-13 is Rs 4.33/kWh (as approved in this tariff order) which is 30.33% higher than the approved ACOS of Rs 3.32/kWh for FY 2011-12 as determined in the previous tariff order of DD dated October 3' 2011. So, the tariff in general would have to be increased by atleast 30% from the levels set out in the order dated October 3'2011 in order to meet the higher cost of supply obligations of the licensee. (Keeping in mind the now 'Re-determined tariff of FY 2011-12' where lower tariff levels have been re-determined for some consumer categories).

The Commission while determining the tariffs for the various consumer categories has kept the consumer mix of ED-DD in view i.e. 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.

The Commission has observed that even though the consumer mix of DD and DNH (two licensees under a common administrator except for Diu which is a small island area) are very similar, yet their average cost of supply vary considerably.

The approved ACOS for FY 2012-13 for DD is Rs 4.33/kwh vis-à-vis Rs 3.89/kWh for ED-DNH for FY 2012-13, being 11.32% higher than DNH. Even though the Commission has tried to keep the tariffs identical in both the utilities as both have similar geographic conditions and are under the control of the same administrator except for Diu; approximately 11% difference in the ACOS compels that if increase in average tariff in ED-DNH is 20%, the increase in tariff for FY 2012-13 for ED-DD will have to be (20% +11% =31%) approximately 31%.

In view of the above stated factors and guiding principles, the Commission has determined the retail tariff. Due to the gap created out of the provisional truing up exercise of FY 2010-11 and review of FY

2011-12; the assessed cumulative gap is Rs. 269.38 Crores for FY 2012-13; the Commission has therefore considered an average hike of 39% in tariff from 're-determined tariff of FY 2011-12' to FY 2012-13 as reasonable and appropriate in the interest of the consumers and the Electricity Department of UT of Daman & Diu (to recover the revenue gap in eight months of FY 2012-13). The Commission's approved tariff for FY 2012-13 is given below:

Table 10.3.2 : Commission's Approved Tariff for FY 2012-13

S.No.	Category/Consumption Slab	Approved Tariff for FY 2012-13 (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[13] for FPPCA formula for FY 2012-13
1	**LT-D/Domestic**				
	Up to 50 units		1.10	1.10	*
	51-200 units		1.70	1.70	
	201-400 units		2.10	2.10	
	401 units and above		2.45	2.45	
	Low Income Group	10.00	-		-
2	**LT-C/Commercial**				
	0-100 units		2.50	2.50	0.55
	Beyond 100 units		3.50	3.50	0.77
3	**LT- Ag/Agriculture**				
	Upto 10 HP per unit		0.60	0.60	-
	Beyond 10 HP per unit		0.90	0.90	-
4	**LTP Motive Power**				
	Upto 20 HP of connected load		3.55	3.55	0.78
	Above 20 HP of connected load	25.00	3.65	4.11	0.90
5	**LT-PL/Public Lighting**	-	4.00	4.00	0.88
6	**LT-Public Water Works**				
	Upto 20 HP of connected load		3.55	3.55	0.78
	Above 20 HP of connected load	25.00	3.65	3.93	0.86
7	**HT Industrial**				
A	**HT (A) General**				
	0-50000	100.00	4.20	4.53	0.99
	50000-5 lakh	100.00	4.35	4.68	1.03
	Above 5 lakh	100.00	4.55	4.88	1.07
B	**HT (B) Furnace**				

[13] 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.

S.No.	Category/Consumption Slab	Approved Tariff for FY 2012-13 (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[13] for FPPCA formula for FY 2012-13
	0-300 units per kVA	550.00	3.30	5.11	1.12
	301-500 units per kVA	550.00	4.00	5.81	1.27
	Above 500 units per kVA	550.00	4.25	6.06	1.33

Fixed Charge of HT (A) has not increased since 2009-10 i.e. past 3 years and has remained at Rs. 60/kVA per month where ACOS of DD has increased from Rs. 3.14/kWh for FY 2010-11 to Rs. 4.33/kWh for FY 2012-13.
** 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

* NOTE: As spelt out in section 4.2.7 of this order and as stated by Daman Industries Association, HT consumers of Daman are voluntarily willing to bear the FPPCA charges for FY 2012-13 of the domestic consumers. The Commission has no objection to this. Accordingly, FPPCA charges would be zero for the domestic consumers of Daman & Diu. The value of K factor for determination of FPPCA for domestic consumers – upto 50 units will be 0.24, 51-200 units will be 0.37, 201-400 units will be 0.46 and 401 units and above will be 0.54 for calculation purposes.

10.4 Average Cost of Supply

The Commission observes that the Average Cost of Supply (ACoS) has gone up from Rs. 3.14/kWh[14] as per trued up ARR of FY 2010-11 to Rs. 4.33/kWh approved for FY 2012-13. The Petitioner has sought a huge tariff increase over the existing tariff in FY 2012-13. Considering the cumulative gap, the Commission is of the view that the approved increase in tariff of 39 % for FY 2012-13 is reasonable and justifiable to recover the revenue gap of FY 2012-13.

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. 4.33. /- per unit approved in this tariff order for FY 2012-13 is as shown in the table below.

[14] Considering the trued up Aggregate Revenue Requirement of FY 2010-11 as discussed in Chapter 6 of this order

*Table 10.4.1 : Comparison of average revenue realization with ACOS for FY 2012-13 ***

S. No.	Category/Consumption Slab	Avg revenue realization at re-determined tariff of FY 2011-12 as %age of approved ACOS of FY 2011-12 as per order 03.10.2011	Average revenue realization at re-determined tariff of FY 2011-12 for FY 2012-13	Average revenue realization at re-determined tariff of FY 2011-12 as a percentage of ACOS of FY 2012-13	Average revenue realization at new tariff of FY 2012-13	Average revenue realization at new tariff of FY13 as a percentage of ACOS of FY 2012-13
1	**LT-D/Domestic**					
	Up to 50 units	30%	1.00	23%	1.10	25%
	51-200 units	48%	1.60	37%	1.70	39%
	201-400 units	60%	2.00	46%	2.10	49%
	401 units and above	68%	2.25	52%	2.45	57%
	Low Income Group					
2	**LT-C/Commercial**					
	0-100 units	68%	2.25	52%	2.50	58%
	Beyond 100 units	98%	3.25	75%	3.50	81%
3	**LT- Ag/Agriculture**					
	Upto 10 HP per unit	17%	0.55	13%	0.60	14%
	Beyond 10 HP per unit	26%	0.85	20%	0.90	21%
4	**LTP Motive Power**					
	Upto 20 HP of connected load	86%	2.50	58%	3.55	82%
	Above 20 HP of connected load		3.06	71%	4.11	95%
5	**LT-PL/Public Lighting**	100%	3.32	77%	4.00	92%
6	**LT-Public Water Works**					
	Upto 20 HP of connected load	78%	2.50	58%	3.55	82%
	Above 20 HP of connected load		2.88	67%	3.93	91%
7	**HT Industrial**					
A	**HT (A) General**					
	0-50000	100%	3.15	73%	4.53	105%
	50000-5 lakh		3.30	76%	4.68	108%
	Above 5 lakh		3.35	77%	4.88	113%
B	**HT (B) Furnace**					
	0-300 units per kVA	119%	3.53	82%	5.11	118%
	301-500 units per kVA		4.53	105%	5.81	134%*
	Above 500 units per kVA		5.03	116%	6.06	140%*

* NOTE: For the HT(B) categories marked with asterisk, the revenue contribution is only 0.002% and 7.94% to the total revenue for FY 2012-13

** 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

The Commission has taken into consideration the percentage increase in tariff with respect to Average Cost of supply in previous years. For instance during FY 2010-11, the average revenue realization was Rs. 3.12/unit, while the average cost of supply was Rs. 3.12/unit, thus the tariff was 100% of ACOS; for FY 2011-12 as per 're-determined tariff', the average revenue realization worked out as Rs. 3.94/unit (as approved in this order), while the average cost of supply is Rs. 4.36/unit, thus the tariff is 90% of ACOS.

After revision of the tariff in FY 2012-13, as brought out in this order, the average revenue realisation would be Rs. 4.56/unit at the new tariff, while the average cost of supply would be Rs. 4.33/unit, thus the tariff would be 105.4% of ACOS. It may be observed that it is not materially different from the relative tariff in previous years, i.e. it does not distort the tariff structure, rather, it is a step towards achieving the tariff within +/- 20% of Average Cost of Supply as per the Tariff Policy. In the instant tariff order, the cross subsidy structure has not undergone any significant change. No category is adversely affected; vis-à-vis the average cost of supply and the relative benefit/burden of subsidized/subsidizing class has been maintained.

10.5 Applicability of Revised Tariffs

The revised tariffs shall be applicable from 1st August 2012. The Commission would like to highlight that the public hearing for ARR & tariff determination for FY 2012-13 took place on 15th and 17th May 2012 respectively at Daman & Diu and accordingly the tariff for FY 2012-13 would be applicable from 1st August 2012 as set out in this tariff order.

The public hearing in respect of the 'Re-determination of tariff for FY 2011-12' (resulting from judgment of the Hon'ble Aptel in appeal no. 35/2012 dated May 25' 2012) took place on 17th and 21st August 2012 respectively at Diu and Daman and the tariff so re-determined has been set out in Chapter 5 of this order.

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).

10.6 Estimated Revenue and Surplus/Deficit at approved Tariff for FY 2012-13

The estimated Revenue at approved tariff for FY 2012-13 works out to be as under.

Table 10.5.1 : Total Revenue estimated by the Commission at approved tariff for FY 12-13 (in Rs. Crores)

S.No.	Category/Consumption Slab	FY 2012-13 Revenue at approved tariff
1	**LT-D/Domestic**	
	Up to 50 units	1.95
	51-200 units	3.04
	201-400 units	4.67
	401 units and above	3.30
	Low Income Group	
2	**LT-C/Commercial**	
	0-100 units	3.62
	Beyond 100 units	6.01
3	**LT- Ag/Agriculture**	
	Upto 10 HP per unit	0.08
	Beyond 10 HP per unit	0.12
4	**LTP Motive Power**	
	Upto 20 HP of connected load	1.47
	Above 20 HP of connected load	55.61
5	**LT-PL/Public Lighting**	1.89
6	**LT-Public Water Works**	
	Upto 20 HP of connected load	0.01
	Above 20 HP of connected load	0.34
7	**HT Industrial**	
A	**HT (A) General**	
	0-50000	153.73
	50000-5 lakh	337.19
	Above 5 lakh	120.63
B	**HT (B) Furnace**	
	0-300 units per kVA	0.02
	301-500 units per kVA	0.02
	Above 500 units per kVA	62.53
8	**Temporary Supply**	0.50
	TOTAL	**756.74**

NOTE: The above revenue figures for FY 2012-13 have been calculated at the existing tariff of FY 2012-13 i.e 'Re-determined tariff of FY 2011-12' for 4 months of FY 2012-13 and at the new tariff i.e. the approved tariff of FY 2012-13 for the remaining 8 months, applicable from August 1' 2012.

The estimated gap/surplus after incorporating impact of revised tariff for FY 2012-13 from 1st August 2012 is as under:

Table 10.5.2 : Estimation of ARR Gap/Surplus at revised tariff for FY 12-13 (in Rs. Crores)

Sr. No.	Particulars	Approved (FY 2012-13) with tariff applicable from 1st August 2012
1	**Net Revenue Requirement**	792.10
2	Less: Revenue from Retail Sales at Existing Tariff i.e. the re-determined tariff of FY 2011-12	600.54
3	Less: Revenue from Surplus Power Sale/UI	-
4	**Net Gap/(Surplus)**	**191.55**
5	Gap for the previous year/ (Surplus)	77.82
6	Carrying Cost	**-**
7	Past Arrears/Refunds to Consumers	-
8	**Total Gap at the existing tariff i.e.re-determined tariff of FY 2011-12**	**269.38**
9	Additional Revenue from revised tariffs	156.19
10	**Revenue Gap after revised tariffs**	**113.19**

10.7 Creation of Regulatory Asset

Based on the data submitted by the Petitioner and its analysis by the Commission and followed by the Commission's decision, gap/surplus between the aggregate revenue requirement and revenue billed / recognized has been determined for FY 2010-11, FY 2011-12 and FY 2012-13.

The cumulative revenue gap approved by the Commission is Rs 269.38 Crores from FY 2010-11 to FY 2012-13 at the prevailing tariff for FY 2010-11 and 'Re-determined tariff of FY 2011-12' for FY 2011-12 and FY 2012-13 (existing tariff of FY 2012-13). The reason for this huge cumulative revenue gap is the increase in the power purchase cost of the licensee. Based on the actual submitted by the Petitioner, the Commission has approved the power purchase cost of Rs 761.17 Crores for FY 2011-12 against the earlier approved value of Rs 556.89 Crores in the tariff order dated October 3' 2012 for FY 2011-12.

The Commission has considered an average hike of 39.01% for all consumer categories to recover the revenue gap of FY 2012-13 (applicable from August 1' 2012) which computes to an overall increase in revenue of 26% to recover the revenue gap of FY 2012-13 over the financial year 2012-13. The tariff would be applicable for part period in FY 2012-13 therefore the revenue recovery from new tariff would be lower.

The tariff hike has been approved to minimize the revenue gap of ED-DD. Any further increase in tariff would have caused undue hardship to the consumers. The option to liquidate the whole revenue gap would result in huge tariff increases for each of the consumer categories, which may not be in the best interest of the consumers and the licensee.

The Commission is of the view that creation of regulatory asset is unavoidable in view of the accumulation of the revenue gap from the period FY 2010-11 to FY 2012-13 due to load growth, increase in power purchase costs and increase in other costs.

The gap for FY 2012-13 along with the approved revenue gap of the previous years from FY 2010-11 to FY 2011-12 of Rs 113.19 Crores (considering additional revenue from the revised tariffs applicable from August 1' 2012) is considered as Regulatory Asset to be amortized in the subsequent years.

The regulatory asset calculated in this order is an estimate because the provisions for the FY 2012-13 are based on estimates. The exact regulatory asset would be known when the true-up of FY 2011-12 and FY 2012-13 is undertaken.

In line with the JERC Tariff Regulations, the proposed regulatory asset alongwith the carrying cost would be amortized over a period of three years starting from FY 2013-14.

11. Conclusion of Commission's Order

The Tariff Order is in compliance of the judgments of Hon'ble APTEL on the following appeals:

1. No. 169 of 2011 dated 29 February 2012
2. No. 35 of 2012 dated 25 May 2012

The Commission has considered the 'ARR and tariff petition' for FY 2011-12 bearing no. 33/2011 of Electricity Department of Daman & Diu in compliance with the above mentioned judgments of the Hon'ble APTEL and has re-determined the retail tariff structure for FY 2011-12. It has also considered the submissions made by Electricity Department of Daman & Diu for Truing-up of Aggregate Revenue Requirement of FY 2010-11, Review of FY 2011-12 and Aggregate Revenue Requirement (ARR) and determination of retail tariffs for FY 2012-13 bearing petition no. 63/2012 and has accordingly approved the Aggregate Revenue Requirement (ARR) and the tariff structure for FY 2012-13.

1. The 're-determined tariff for FY 2011-12' of all the categories is given below (Petition no. 33/2011):

S.No.	Category/Consumption Slab	Re-determined Tariff for FY 2011-12 (Rs.)	
		Fixed Charges (Rs./KVA/Month or Rs. per consumer/ month) or (Rs./HP/month)	Variable Charges (Rs./KWh)
1	**LT-D/Domestic**		
	Up to 50 units	-	1.00
	51-200 units	-	1.60
	201-400 units	-	2.00
	401 units and above	-	2.25
	Low Income Group	10.00	
2	**LT-C/Commercial**		
	0-100 units	-	2.25
	Beyond 100 units	-	3.25
3	**LT- Ag/Agriculture**		
	Upto 10 HP per unit	-	0.55
	Beyond 10 HP per unit	-	0.85
4	**LTP Motive Power**		
	Upto 20 HP of connected load	-	2.50
	Above 20 HP of connected load	25.00	2.60
5	**LT-PL/Public Lighting**	-	3.32
6	**LT-Public Water Works**		
	Upto 20 HP of connected	-	2.50

S.No.	Category/Consumption Slab	Re-determined Tariff for FY 2011-12 (Rs.)	
		Fixed Charges (Rs./KVA/Month or Rs. per consumer/ month) or (Rs./HP/month)	Variable Charges (Rs./KWh)
	load		
	Above 20 HP of connected load	25.00	2.60
7	**HT Industrial**		
A	**HT (A) General**		
	0-50000	60.00	2.95
	50000-5 lakh	60.00	3.10
	Above 5 lakh	60.00	3.15
B	**HT (B) Furnace**		
	0-300 units per kVA	450.00	2.05
	301-500 units per kVA	450.00	3.05
	Above 500 units per kVA	450.00	3.55

2. The break-up of the Aggregate Revenue Requirement approved for Electricity Department of Daman & Diu for FY 2012-13 is given below.

Sr. No.	Particulars	Approved (FY 2012-13) (in Rs. Crores)
1	Power Purchase Cost	770.09
2	Employee costs	5.32
3	Administration and General Expenses	2.36
4	Repair and Maintenance Expenses	2.60
5	Depreciation	2.86
6	Interest and Finance charges	5.30
7	Interest on working capital	8.95
8	Interest on security deposit	0.41
9	Return on NFA	1.08
10	Provision for Bad Debt	3.00
11	Incentive on achievement of norm of T&D loss	-
12	Total Revenue Requirement	**801.98**
13	Less: Non Tariff Income	9.88
14	**Net Revenue Requirement**	**792.10**
15	Less: Revenue from Retail Sales at Existing Tariff	600.54

Sr. No.	Particulars	Approved (FY 2012-13) (in Rs. Crores)
16	Less: Revenue from Surplus Power Sale/UI	-
17	**Net Gap/(Surplus) for FY 2012-13**	**191.55**
18	Gap for the previous year/ (Surplus)	77.82
19	Carrying Cost	-
20	Past Arrears/Refunds to Consumers	-
21	**Total Gap (at the existing tariff of FY 2012-13 i.e. re-determined tariff of FY 2011-12)**	**269.38**
22	Additional Revenue from proposed tariffs	156.19
23	**Revenue Gap after proposed tariffs**	**113.19**

3. The approved retail tariff (as given below) for FY 2012-13 shall be in accordance with the tariff schedule specified in this order.

S.No.	Category/Consumption Slab	Approved Tariff by Commission for FY 2012-13 (Rs.)			
		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[15] for FPPCA formula for FY 2012-13
1	**LT-D/Domestic**				
	Up to 50 units		1.10	1.10	*
	51-200 units		1.70	1.70	
	201-400 units		2.10	2.10	
	401 units and above		2.45	2.45	
	Low Income Group	10.00	-		-
2	**LT-C/Commercial**				
	0-100 units		2.50	2.50	0.55
	Beyond 100 units		3.50	3.50	0.77
3	**LT- Ag/Agriculture**				
	Upto 10 HP per unit		0.60	0.60	-
	Beyond 10 HP per unit		0.90	0.90	-
4	**LTP Motive Power**				
	Upto 20 HP of connected load		3.55	3.55	0.78

[15] 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.

S.No.	Category/Consumption Slab	Approved Tariff by Commission for FY 2012-13 (Rs.)			
		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[15] for FPPCA formula for FY 2012-13
	Above 20 HP of connected load	25.00	3.65	4.11	0.90
5	**LT-PL/Public Lighting**	-	4.00	4.00	0.88
6	**LT-Public Water Works**				
	Upto 20 HP of connected load		3.55	3.55	0.78
	Above 20 HP of connected load	25.00	3.65	3.93	0.86
7	**HT Industrial**				
A	**HT (A) General**				
	0-50000	100.00	4.20	4.53	0.99
	50000-5 lakh	100.00	4.35	4.68	1.03
	Above 5 lakh	100.00	4.55	4.88	1.07
B	**HT (B) Furnace**				
	0-300 units per kVA	550.00	3.30	5.11	1.12
	301-500 units per kVA	550.00	4.00	5.81	1.27
	Above 500 units per kVA	550.00	4.25	6.06	1.33

* NOTE: As spelt out in section 4.2.7 of this order and as stated by Daman Industries Association, HT consumers of Daman are voluntarily willing to bear the FPPCA charges for FY 2012-13 of the domestic consumers. The Commission has no objection to this. Accordingly, FPPCA charges would be zero for the domestic consumers of Daman & Diu. The value of K factor for determination of FPPCA for domestic consumers – upto 50 units will be 0.24, 51-200 units will be 0.37, 201-400 units will be 0.46 and 401 units and above will be 0.54 for calculation purposes.

4. The approved tariff of FY 2012-13 shall come in force with effect from 1st August. 2012 and shall remain valid till 31st March 2013. 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.

5. 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 378 paisa per unit for FY 2012-13**.

6. 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: August 25’ 2012

12. Tariff Schedule

General Terms and Conditions:

1) The tariffs are exclusive of electricity duty, taxes and other charges levied by the Government or other competent authority from time to time which are payable by the consumers in addition to the charges levied as per the tariffs.

2) Unless otherwise agreed to, these tariffs for power supply are applicable for supply at one point only.

3) Supply to consumers having contracted load between 100 kVA to 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.

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.

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 lamps, fans, fuses, switches, low voltage domestic appliances and fittings, it shall not fall under theft of electricity.

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. Notice to this effect shall be printed on the bill of the consumer.

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

10) Delayed payment surcharge shall be applicable to all category of consumers. Delayed payment surcharge of 2% per month or part thereof shall be levied on all arrears of bills. Such surcharge shall be rounded off to the nearest multiple of one rupee. Amount less than 50 paise shall be ignored and amount of 50 paise or more shall be rounded off to next rupee. In case of permanent disconnection, delayed payment surcharge shall be charged only upto the month of permanent disconnection.

11) The adjustment on account of Fuel and Power Purchase Cost variation shall be calculated in accordance with FPPCA formula separately notified by the Commission under the Regulation. Such charges shall be recovered / refunded in accordance with the terms and conditions specified in the FPPCA formula.

12) The values of the ‘K’ factor applicable for the different consumer categories for use in the FPPCA formula shall be as specified in this Tariff Order for FY 2012-13. (Conclusion of Commission’s Order at point no. 3)

13) Schedule of other charges approved in this Tariff Order will remain in force until it is amended by the Commission.

The detailed tariff Schedule is outlined as under:

DETAILED TARIFF SCHEDULE

I. (A) Domestic Category

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

I. Energy Charges

Usage (Units/Month)	Energy Charge (Ps./Unit)
0-50 units	110
51-200 units	170
201-400 units	210
401 and above	245

(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	250
101 units and above	350

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	355
For loads above 20 HP	365

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 100.00/kVA/month or part thereof
In Excess of Contract Demand	Rs 200.00/kVA/month or part thereof

ii. Energy Charges

Usage (Units/Month)	Tariff (Ps./Unit)
1 - 50,000 units	420
50001 – 500000 Units	435
500001 and above	455

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

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

All High tension and Extra High Tension installations where the monthly average power factor is maintained above 0.95 lagging shall be eligible for an incentive in the form of rebate at the rate of 1% of the energy charge for every 0.01 improvement in power factor above 0.95 lagging in the energy charges billed in the month. The Power factor value will be rounded to two decimal places. For example 0.944 shall be treated as 0.94 and 0.946 shall be treated as 0.95. In case, any dispute arises about the applicability of any tariff for any particular class or service or as to the interpretation of any clause of these tariffs, the decision of the Commission shall be final and binding.

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 /- per kVA per month
In Excess of Contract Demand	Rs 1100./- per kVA per month

ii. Energy Charges

Usage	Tariff (Ps./Unit)
First 300 units / kVA	330
Next 200 units / kVA	400
Above 500 units / kVA and above	425

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

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

All High tension and Extra High Tension installations where the monthly average power factor is maintained above 0.95 lagging shall be eligible for an incentive in the form of rebate at the rate of 1% of the energy charge for every 0.01 improvement in power factor above 0.95 lagging in the energy charges billed in the month. The Power factor value will be rounded to two decimal places. For example 0.944 shall be treated as 0.94 and 0.946 shall be treated as 0.95. In case, any dispute arises about the applicability of any tariff for any particular class or service or as to the interpretation of any clause of these tariffs, the decision of the Commission shall be final and binding.

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	60
Beyond 10 HP and upto 99 HP sanctioned load	90

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	400

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