Reg. No. GR/RNP/GOA/32

RNI No. GOAENG/2002/6410

Panaji, 5th May, 2014 (Vaisakha 15, 1936)

SERIES I No. 5

OFFICIAL GAZETTE

GOVERNMENT OF GOA

PUBLISHED BY AUTHORITY

EXTRAORDINARY

GOVERNMENT OF GOA

Department of Power

Office of the Chief Electrical Engineer

Notification

120/03/JERC/ARR 2014-15/CEFE/Tech

The Electricity Department, Government of Goa filed its petition for the Review of ARR of FY 2013-14 and Determination of Aggregate Revenue Requirement and Retail Supply Tariff for FY 2014-15 according to the Regulation 10 of JERC (Conduct of Business) Regulations, 2009 and as per the procedures outlined in section 61, 62 & 64 of the Electricity Act, 2003 before the Hon'ble Joint Electricity Regulatory Commission for the State of Goa and Union Territories.

In exercise of the powers conferred under various sections of the Electricity Act, 2003, and all powers enabling therein on behalf of the Joint Electricity Regulatory Commission for the State of Goa and Union Territories has issued the Tariff Order dated 15th April, 2014 which is effective from 1st April, 2014 and shall remain valid till issuance of the next Order by Hon'ble JERC.

The above is hereby brought to the notice of the general public.

By order and in the name of the Governor of Goa.

S. Lekshmanan, Chief Electrical Engineer & ex officio Additional Secretary.

Panaji, 5th day of May, 2014.

FY 2014-15

TARIFF ORDER

Petition No. 122 of 2014

Determination of Aggregate Revenue Requirement and Retail Supply Tariff for FY 2014-15

&

Review of ARR of FY 2013-14

For

Electricity Department, Goa

JOINT ELECTRICITY REGULATORY COMMISSION
For the State of Goa and Union Territories
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15th April, 2014

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List of Abbreviations

Abbreviation		Full Form
A&G	:	Administration & General Expenses
Act	:	The Electricity Act, 2003
ARR	:	Aggregate Revenue Requirement
ABR	:	Average Billing Rate
CAGR	:	Compound Annualized Growth Rate
Capex	:	Capital Expenditure
CEA	:	Central Electricity Authority
CERC	:	Central Electricity Regulatory Commission
CGS	:	Central Generating Station
COD	:	Commercial Operation Date
Commission/JERC	:	Joint Electricity Regulatory Commission for the State of Goa and Union Territories
CKt. Km	:	Circuit Kilometer
Cr	:	Crore/Crores
DISCOM/ED-Goa	:	Electricity Department of Goa
CPSU	:	Central Public Sector Undertaking

Abbreviation		Full Form
D/C	:	Double Circuit
EA 2003	:	The Electricity Act, 2003
FC	:	Fixed Charges
FPPCA	:	Fuel & Power Purchase Cost Adjustment
FY	:	Financial Year
GFA	:	Gross Fixed Assets
HP	:	Horse Power
HT	:	High Tension
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
NFA	:	Net Fixed Assets
NTP/Tariff Policy	:	National Tariff Policy
O/H	:	Over head
O&M	:	Operation & Maintenance
PGCIL	:	Power Grid Corporation of India Ltd.
PLF	:	Plant Load Factor
PX	:	Power Exchange
RoE	:	Return on Equity
RPO	:	Renewable Purchase Obligation
R&M	:	Repair & Maintenance
RE	:	Revised Estimates
REA	:	Regional Energy Accounting
RLDC	:	Regional Load Dispatch Centre
SCL	:	Sanctioned Connected Load
S/C	:	Single Circuit
SLDC	:	State Load Dispatch Centre
SBI CAPS	:	SBI Capital Market Limited
SBI PLR/SBAR	:	SBI Prime Lending Rate/State Bank Advance Rate
T&D	:	Transmission & Distribution
UI	:	Unscheduled Interchange
VAR	:	Volt Ampere Reactive
VC	:	Variable Charges

Before the

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

Gurgaon

CORAM
S. K. Chaturvedi (Chairperson)
Petition No. 122/2014

In the matter of

Petition filed by Electricity Department, Goa for Review of FY 2013-14 and approval of Aggregate Revenue Requirement for FY 2014-15 .... Petition No.122/2014.

And in the matter of

Electricity Department,

Goa.. Petitioner.

ORDER

Date: 15th April, 2014

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 of Goa*:— The Electricity Department of Goa herein called ED-Goa, a deemed licensee under Section 14 of the Electricity Act, 2003, is carrying on the business of transmission, distribution and retail supply of electricity in the State of Goa. The Goa Electricity Department (ED-Goa) is functioning as an integrated distribution licensee for the State of Goa.

Goa, a tiny emerald land on the west coast of India, the 25th State in the Union of States of India, was liberated from Portuguese rule in 1961. It was part of Union territory of Goa, Daman & Diu till 30 May, 1987 when it was carved out to form a separate State. Goa covers an area of 3702 square kilometres and comprises of two Revenue district viz North Goa and South Goa.

Boundaries of Goa State are defined in the North Terekhol River which separates it from Maharashtra, in the East and South by Karnataka State and West by Arabian Sea.

Goa, for the purpose of revenue administration is divided into two-district viz. North and South Goa with headquarters at Panaji and Margao respectively. The entire State comprises 11 talukas. For the purpose of implementation of development programs, the State is further divided into 12 community development blocks.

1.3 *JERC Tariff Regulations*:— The Commission, in exercise of the powers conferred upon it 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). For generation & transmission projects the JERC regulations provide for following CERC Regulations, principle methodologies as amended from time to time.

1.4 *Filing of Petition*:— The Electricity Department, Goa filed its petition for the Determination of Aggregate Revenue Requirement (ARR) for FY 2013-14 on January 13, 2014 according to the Regulation 10 of JERC (Conduct of Business) Regulations, 2009 and as per the procedures outlined in section 61, 62 & 64 of the Electricity Act, 2003.

1.5 *Admission of Petition*:— ED-Goa submitted its ARR Petition for FY 2014-15 (Petition No. 122/2014) based on the principles outlined in the JERC Tariff Regulations before the Commission.

After initial scrutiny and analysis of petition dated January 13, 2014 for FY 2013-14, the petition was admitted on January 16, 2014 subject to removal of infirmities to the extent possible. The Commission has taken up petition on record on with Petition numbered as 122/2014 on January 16, 2014. A copy of the Admission Order dated January 16, 2014 is annexed herewith as **Annexure 1** to this Order.

1.6 *Interaction with the Petitioner*:— The staff of the Commission interacted regularly with the Petitioner to seek clarifications, additional information and justification on the various issues essential for the analysis of the tariff petitions. The staff of the Commission and the Petitioner also discussed key issues related to the petitions, which included power purchase cost, estimated sales and revenue, etc. A validation session was conducted with the Petitioner during which discrepancies in the petitions and additional information required by the Commission were sought.

Accordingly, the following additional information/clarification from the petitioner were sought by the Commission vide letter dated January 17, 2014. The extract of the communication is presented below:

"

I. *EDG has stated that audit accounts for the period FY 2007-08 to FY 2012-13 is under preparation and would be available in mid-2014. For FY 2012-13 expenditure has been shown on actual basis, though power purchase expenses along with transmission charges has been shown month wise and the same can be verified. But EDG is silent on basis of other expenses. The rationale behind the same needs to be explained;*

II. *EDG needs to explain source document behind the energy input for H1 for FY 2013-14 as shown under Table 4-5;*

III. *The methodology behind adoption of different losses estimation methodology in FY 2013-14 vis.-a-vis. average loss method adopted in earlier petitions; As a result, distribution and PGCIL losses have increased as against approved.*

IV. *EDG for distribution losses has shown 12.48% as against 12.50% approved for distribution losses on actual basis for FY 2012-13. For FY 2013-14 it has shown 12.50% as against 12.00% approved. Further, for FY 2014-15 it has shown 12.25%. The said increase from previous years needs to be explained for FY 2013-14 and FY 2014-15;*

V. *Under the banking arrangement for FY 2013-14, EDG has purchased 76.80 MUs during July & August 2013 and has returned 83.45 MUs during October 2013. Treatment of the same needs to be shown and explained;*

VI. *The petitioner is required to provide the detailed sheet of computation of FPPCA and the final arrived FPPCA charge recovered from consumer & quarter wise – FY13 (actuals for whole year), FY14 (full year along with half yearly actuals);*

VII. *The petitioner needs to provide the Slab wise and category wise energy sales, No. of consumers and load to each consumer category for FY13 (H1 and H2 separately) & FY14 (Till Sep);*

VIII. *EDG is an integrated utility. O&M needs to be determined strictly under Tariff Regulations, 2009. Further, audit accounts are unavailable.*

a. *EDG has stated considered 20% increase in DA and 3% increment for revised estimation of employee expenses along with minimum rates of wages for Govt. department in FY 2013-14. But as it can be seen from Format 16, H2 employee expenses are same as in H1 of FY 2013-14; Further, in FY 2014-15 employee expenses has increased whereas No. of employees are on decreasing trend. Please explain the reason behind the same;*

b. *Increase in R&M for FY 2013-14 (H2) and simultaneously its effect in FY 2014-15 needs to be explained;*

c. *Increase in A&G for FY 2013-14 (H2) and simultaneously its effect in FY 2014-15 needs to be explained; Further, Legal and Professional Fees to the tune of Rs. 1 Crore in FY 2013-14 rationale along with proper justification needs to be provided;*

IX. *EDG needs to explain the methodology behind the opening balance of GFA, Loan, Equity, accumulated depreciation and security deposit in absence of audit accounts, depreciation and fixed assets register; JERC in the past have considered the same figures as submitted by EDG over the last three years, this methodology cannot continue in the future years in absence of any concrete evidence;*

X. *In the past EDG as well as JERC has adopted CAGR as the best method for projecting No. of consumers, connected load and sales. EDG needs to explain the reason behind a straight nominal increase of 7% in LT and 4% in HT sales in GY 2014-15;*

XI. *EDG needs to explain the rationale behind an increase of 7.5% (7.5% - FC + 7.5%- VC) for NTPC, 5% (5% - FC + 5%- VC) for NPCIL and 10% increase for transmission charges for Power Purchase cost in FY 2014-15;*

XII. *As per Tariff Regulations, 2009 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. EDG has considered 14.45% for FY 2013-14. The basis of 14.75% as rate Interest on Working Capital for FY 2014-15 needs to be explained;*

XIII. *The petitioner has also not proposed any calculation of the open access charges in its current petition. The petitioner is directed to submit the calculations for the same;*

XIV. *Slab wise Fixed Charge, Energy Charges, Connected Load needs to be provided as the same is missing in Format 28, Format 29, Format 30 and Format 31;*

XV. *Security Deposit bifurcation into Cash, FD and Bank guarantee or any other instrument needs to be provided;*

XVI. *Audit Accounts, FAR & Depreciation Register up-to FY 2012-13 needs to be provided;*

XVII. *Excel Model of the formats needs to be provided;*

”

The reply to the same have been provided by the petitioner vide submission dated 27th January, 2014.

The various submissions made by the petitioner have been discussed by the Commission at appropriate places in the tariff order along with the Commission's analysis on the same.

1.7 *Public hearing process*:— The Commission directed the Petitioner to publish the summary of the ARR and Tariff proposals in the abridged form and manner, as approved by the Commission in accordance with section 64 of the Electricity Act, 2003. Accordingly, the notices were published by the Petitioner for inviting objections/suggestions on its petition from different stakeholders. Details of public notice issued are tabulated below:

Table 1: *Details of public notice published by the Petitioner*

S. No.	Date	Language	Name of Newspaper
1.	January 23, 2014	Marathi	Gomantak
2.	January 24, 2014	English	Times of India

The Petitioner also uploaded the petition on its website (www.electricity.goa.gov.in) for inviting objections and suggestions on their petition. The Commission also uploaded the petition on its website (www.jercuts.gov.in).

Interested parties/stakeholders were requested to file their objections/suggestions on the petition on or before 10th February 2014. The copies of paper cutting of public notice are annexed as **Annexure 2** to this order.

Commission received one written objections/suggestions on the petition, by the last date for filing objections/suggestion i.e. February, 10, 2014. The officers of the utility orally on the spot also replied to stakeholders who raised their concerns on the spot.

The Commission scheduled the public hearing on February 17, 2014.

1.8 *Notice for public hearing*:— The Commission published public notices in the leading newspapers giving due intimation to the stakeholders, consumers, objectors and the public at large about the public hearing to be conducted by the Commission on February 17, 2014 at Nalanda Hall, EDC House, Atmaram Borkar Road, Panaji, Goa for all consumers on ARR petition for FY 2014-15. The details of the newspapers are as given below:

Table 2: *Details of public notice published by the Commission*

S. No.	Date	Language	Name of Newspaper
1.	January 18, 2014	Marathi	Gomantak
2.	January 18, 2014	Konkani	Sunaprant
3.	February 16, 2014	Marathi	Gomantak
4.	February 16, 2014	English	The Herald
5.	February 16, 2014	Konkani	Sunaprant

The Commission published public notice for the public hearing in the above newspapers on January 18, 2014 and again on February 16, 2014 for better participation.

Copies of public notice published by the Commission for intimation of public hearing are annexed as **Annexure 3** to this order.

The Commission received only one written comment/objection on the ARR filed by the ED-GOA. However, each stakeholder present during the public hearing was provided an opportunity to present his views on the petition filed by the Petitioner. The officers of the utility replied orally on the spot to stakeholders who raised their concerns. The list of the objectors is attached at **Annexure 4** to this order.

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

1.9 *Adherence to Model Code of Conduct*:— In view of General Elections, 2014, the Model Code of Conduct has been imposed since 05th March, 2014. In this context, the Principal Secretary, Secretariat of the Election Commission of India, vide its letter No. 437/6/1/2014/ /-CC&BE/235 dated 29th March, 2014 clarified to the CERC as follows:

Quote:

"The Commission has no objection to the continuance of the process required for the decision on the power tariff. However, tariff award shall be made only on the completion of poll in the relevant State, i.e. after the poll date/dates in that State"

Unquote

The For (Forum of Regulators) communicated the above mentioned clarifications as received from Election Commission to all SERCs vide its letter No. 15/2(39)/2013 – FOR/CERC/36750 dated April 4, 2014. The poll date in Goa, which was on 12th April, 2014, is over.

Hence, in view of the consent and instructions received from the Election Commission of India as above, the Commission has finalized the tariff order and issued the current Tariff Order.

2. Summary of the Review of FY 2013-14 and ARR Petition for FY 2014-15

2.1 *Introduction*:— The Petitioner has not filed true up petition for the FY 2012-13 owing to the non-finalization of accounts for the period. The Petition includes the Review for the FY 2013-14 and the Aggregate Revenue Requirement for FY 2014-15.

As specified in the Tariff Regulations, the Commission shall undertake the Review by considering variations between the approved and revised estimates/pre-actuals of sale of electricity, income and expenditure for the relevant year. Accordingly, ED–Goa has filed its Review for the year FY 2013-14 based on the actual performance during the 1st half of the year and the revised estimates for the second half of the year.

ED-Goa has filed the petition for the determination of Aggregate Revenue Requirement for FY 2014-15 based on the past performance and expected changes in each element of cost and revenue for the ensuing year. ED-Goa, based on the past trends and taking cognizance of other internal and external developments, has estimated the performance for FY 2014-15.

The revenue gap up to the FY 2013-14 has been proposed to be bridged by the Government support. As per the proposal for tariff increase, Rs. 85.55 Cr of the proposed revenue gap of

Rs. 279.15 Cr for FY 2014-15, would be amortised through tariff increase and the balance Rs. 193.60 Cr is submitted to be met by Government support.

2.2 Summary of the Review for FY 2013-14 & ARR for FY 2014-15

The Summary of the revised estimates for FY 2013-14 and ARR for FY 2014-15 is shown in the table below:

Table 3: *Summary of the petition for Review of FY 2013-14 & ARR for FY 2014-15*

Sr. No.	Particulars	FY 2013-14 (Rev Est)	FY 2014-15 (Projection)
1	2	6	7
1	Cost of fuel		-
2	Cost of power purchase	1,087.69	1,065.53
3	Employee costs	165.00	177.14
4	R&M expenses	23.38	24.71
5	Administration and General expenses	11.39	9.97
6	Depreciation *	16.00	24.42
7	Interest on Loan & Finance charges	10.01	8.96
8	Interest on Working Capital *	6.44	4.32
9	Interest on Security Deposit *	5.49	6.76
10	Return on NFA/Equity *	5.86	11.12
11	Provision for Bad Debt	-	-
12	CGRF Expenses	0.56	0.75
13	**Total Revenue Requirement**	**1,331.82**	**1,333.68**
14	Less: Non Tariff Income	22.55	23.22
15	Less: Revenue from Sale of Power - UI Pool	5.09	-
16	Less: Revenue from Sale of Power-Exchanges	-	-
17	**Net Revenue Requirement (13-14-15-16)**	**1,304.18**	**1,310.46**
18	Revenue from Retail Sales at Existing Tariff including FPPCA Charges	992.83	1,031.31
19	Revenue from FPA Charges	23.68	-
20	**Net Gap (17-18-19)**	**287.66**	**279.15**
21	**Energy sales (MU)**	**3,018**	**3,177**
22	**Average Cost of Supply (Rs./kWh)**	**4.32**	**4.12**

2.3 *Prayer to the Commission*:— ED–Goa as per the submission dated January 13, 2014, has requested the Commission to:

- Accept the petition for the Review for FY 2013-14 and ARR for FY 2014-15 for ED-Goa formulated in accordance with the guidelines outlined as per the regulation of Joint Electricity Regulatory Commission relating to Distribution Licensee and the principles contained in Tariff Regulations;
- Approve the total projected ARR/Review for FY 2013-14 and ARR of FY 2014-15 at Rs. **1,304.18** Crs and Rs. **1,310.46** Crs respectively;
- Examine the proposal submitted by the petitioner as detailed in the enclosed proposal for a favourable dispensation;

- The delay in filing this ARR Petition may please be condoned and the Hon'ble Commission is requested to accept this Petition and process the same;
- Pass suitable orders with respect to the Review for FY 2013-14 and ARR for FY 2014-15 for the expenses to be incurred by ED-Goa for serving its consumers;
- ED–Goa may also be permitted to propose suitable changes to the Review for FY 2013-14 and ARR for 2014-15 and the mechanism of meeting the revenue on further analysis, prior to the final approval by the Hon'ble Commission;
- Condone any inadvertent omissions/errors/shortcomings and permit ED–Goa to add/change/modify/alter this filing and make further submissions as may be required at a future date;
- Pass such further orders, as the Hon'ble Commission may deem fit and appropriate keeping in view the facts and circumstances of the case.

3. Approach of the Order for Determination of Review for FY 2013-14 & ARR for FY 2014-15

3.1 *Introduction*:— The Commission has considered the petition (petition No 122/2014) as per the JERC (Terms and Conditions of Tariff) Regulations, 2009. The Commission has considered the above regulations pertaining to business of the integrated utility and the Commission was guided by the principles contained in section 61 of the Act amongst other things to examine the sales forecast, power purchase quantum, self-generation and other income & expenditure.

The Commission has dealt with the Petition for the Review for FY 2013-14 and ARR for FY 2014-15 in accordance with JERC Tariff Regulations. As per Regulation 13 of the JERC Tariff Regulation, the data for ARR shall comprise of the audited figures for previous year, estimates for current year and forecast for the ensuing year. In this case, the petitioner was required to file the audited figures for FY 2012-13 for truing up. Further, the true up for the FY 2011-12 is also pending due to the non-submission of audited accounts and corresponding true up petition by the Petitioner. However, the Petitioner has not filed the truing up Petition for FY 2011-12 and FY 2012-13. The Commission had set out certain directions in the Tariff Order dated 27th June, 2012 for FY 2011-12 to get the accounts prepared on commercial principles and get those audited. The directions were repeated in the subsequent Tariff orders issued on March 31, 2013.

The Commission does not appreciate the approach of the petitioner towards the directives issued. The Petitioner should understand the essence and requirement of the audited accounts. The audited accounts, more than required for regulatory perspective are the true and fair reflection of any business and are considered essentials. The Commission has been repeatedly directing the petitioner to submit the true up petition and audited accounts, which have not been complied too.

The Commission in this regard directs the Petitioner to conclude the audit of the accounts and file the true up for FY 2011-12 and FY 2012-13 before June 31, 2014. Non-compliance of the directive would attract proceedings under the section 142 of the Electricity Act, 2003.

The Commission feels that the tariff determination process should not be stalled in the absence of the audited accounts for the FY 2011-12 and FY 2012-13. In the larger interest of the consumer and the licensee, the Commission has considered the review of the FY 2013-14 and ARR for FY 2014-15.

In the determination of ARR & tariff for FY 2014-15, various provisions of the JERC's Tariff Regulations, 2009 pertaining to business of the integrated utility are relevant and the Commission has been guided by the principles contained in section 61 of the Act among other things to examine the sales forecast, power purchase quantum and other income & expenditure.

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

a) The principles and methodologies specified by the Central Commission for determination of the tariff applicable to generating companies and transmission licensees;

b) The generation, transmission, distribution and supply of electricity are conducted on commercial principles;

c) The factors which would encourage competition, efficiency, economical use of the resources, good performance and optimum investments;

d) Safeguarding of consumers' interest and at the same time, recovery of the cost of electricity in a reasonable manner;

e) The principles rewarding efficiency in performance;

f) Multi-year tariff principles;

g) That the tariff progressively reflects the cost of supply of electricity and also, reduces and eliminates cross-subsidies within the period to be specified by the Appropriate Commission;

h) The promotion of co-generation and generation of electricity from renewable sources of energy;

i) The National Electricity Policy and tariff policy;

The Commission has considered the figures of income & expenditure as approved for FY 2012-13 in its order dated March 31, 2013 and revised estimates submitted by the petitioner for FY 2013-14 to form the basis of projection for income and expenditure for FY 2014-15. Actual available figures for FY 2013-14 (first half) provided by the Petitioner and validated by the Commission during the technical validation session held after the submission of the petition. The detailed analysis & treatment of each component is provided in Chapter 5 and 6 of this order.

4. Summary of Objections/suggestions received, ED-Goa's Responses and Commission's views

4.1 *Public response to the Petition*:— The Petitioner has published the summary of ARR and Tariff proposal in the newspapers, copies of the petition made available to the public and the petition posted on the website of the Petitioner duly inviting comments/objections/suggestions from the public as per provisions of the JERC (Conduct of Business) regulations, 2009. ED-Goa vide public notice dated January 18, 2014 published in various newspapers in Goa, invited comments from all consumers and stakeholders on the petition. Consumers/stakeholders also participated in the public hearing held at Goa on February 17, 2014.

Alloy & Steel Manufacturers Association (ASMA) of Goa has made a written submission of its objections before the Commission. Further, ASMA was the only stakeholder that presented its views before the Commission during the public hearing held at Goa. References to stakeholder(s) in the following paragraphs are references to this organization; being the only stakeholder to present its views before the Commission.

Alloy & Steel Manufacturers Association of Goa, Panaji hereinafter referred to as ASMA, Goa is an association of various alloy & steel manufacturers in the state of Goa. Members of the above association are consumers of Electricity Department, Goa (ED-Goa) predominantly drawing power at High Tension and categorized as HT Industrial, HT Industrial (Ferro Metallurgical/Steel Melting/Power Intensive) and HT Industrial (Steel Rolling) as per the JERC order dated March 31, 2013 for ED-Goa.

4.2 *Objections/Suggestions, Response from Electricity Department, Goa and Commission's views*

PART 1: General Issues and Comments

4.2.1 *Stakeholders Objections/Comments*

1. Power Shortage and Quality of Power and Standard of Performance Regulations

The stakeholder has submitted that power supply situation is erratic in Goa with frequent interruptions and voltage fluctuations beyond the permissible levels. The steel industry requires reliable and quality power supply to maintain productivity and quality of end products at the optimum level. ASMA has submitted that ED-Goa needs to maintain the standard of performance as per the standards specified in the JERC (Standards of Performance) Regulations 2009. Further, ED-Goa needs to set up the necessary monitoring and management infrastructure for measuring the system parameters and in case the parameters are beyond the permissible limits, billing infrastructure needs to be modified for payment of compensation to the consumers.

2. Transmission and Distribution Open Access

The stakeholder has submitted that even though the Commission has notified the JERC (Open Access in Transmission and Distribution) Regulations 2009, the progress of implementation of open access in the territory has been extremely slow. ASMA desires that the department should formulate procedures and other infrastructure to enable consumers to buy power through open access.

ED-Goa should determine voltage wise cost of supply and distribution losses. A separate transmission utility and State Load Dispatch Centre (SLDC) should be notified to monitor and manage the open access transactions. Special Energy Meters (SEM) should be installed to facilitate open access.

3. Corporatization of ED-Goa

The stakeholder has suggested the corporatization of ED-Goa to help improve the financial and operational management of the distribution licensee.

4. Automation of various processes

The stakeholder has submitted that manual collection and management of data directly impacts the determination of the various system parameters and therefore all processes should be automated to increase accuracy and reduce scope of tampering and human intervention. RAPDRP schemes should be implemented on a priority basis.

Petitioner's submission

The reply to the above objections is as below.

1. The Petitioner has submitted that it has been making all efforts to provide quality and reliable power to all consumers in the State of Goa. The suggestion with respect to monitoring and management infrastructure for measuring system parameters has been noted.

2. Regarding the implementation of open access and access of consumers to open access in its territory, the Petitioner has submitted that it has formulated the procedure for grant of open access and is available at the website of ED-Goa. The Petitioner has further submitted that in absence of voltage-wise cost of supply data, it has adopted the Commission's methodology for computation of open access charges. The suggestion of objector for appointment of agency for monitoring and maintaining energy settlement and energy accounting has been noted.

3. On the suggestion of corporatization of ED-Goa, the Petitioner has submitted that the suggestion of the stakeholder has been noted.

4. Efforts are being made to implement RAPDRP schemes in the territory of ED-Goa, to reduce manual interventions and automate various processes.

Commission's views

The Commission has made note of the objections of the stakeholders and the Petitioner's response.

The procedures for grant and application of open access has been specified in the State of Goa and the open access charges payable by the consumer have been approved in Chapter on Determination of Open Access Charges of this tariff order.

As regards the quality of supply, the Commission has noted the grievances of the 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.

Redressal of consumers' complaints and grievances is an important function and responsibility of the distribution licensee, therefore ED-Goa 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-Goa needs to give due publicity to the said Forum and its redressal mechanism so that the general public is made aware of the same. ED-Goa 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-Goa to create awareness amongst the consumers on the standards of performance notified by the Commission and arrange 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 that is understandable to the general consumer.**

The Petitioner is directed to submit a status report regarding various steps being taken up to enhance automation in the Department and reduce manual interventions wherever possible. The status report should be submitted within three months of the issuance of this order.

<u>PART 2: ARR related</u>

4.2.2 *Stakeholders Objections/Comments*

1. Energy Sales

The stakeholder has submitted that the present method of sales forecast is based on past trends and on CAGR methodology. The stakeholder has submitted that scientific load forecasting methodology should be adopted going ahead. Demand Side Management (DSM) and Energy efficiency programs with partnership between consumers and utility should be implemented.

2. Distribution Loss and Energy Requirement

The stakeholder has submitted that ED-Goa should carry out energy audit to accurately ascertain the distribution losses. ED-Goa has submitted that the distribution loss during H1 of FY 13-14 is 15.31% and on an overall basis for FY 13-14 would be 12.50%. This means during H2 of the year would be 9.69%, which seems a little improbable to achieve. ASMA has stressed that energy audit exercise should be duly carried out for accurate determination of losses. Efforts should be made by the distribution licensee to reduce the distribution losses.

3. Merit Order Dispatch of Power Purchase/Generation

The stakeholder has desired the ED to procure power on merit order dispatch principles and expects the Commission to carry out due prudence check while approving the power purchase quantum and cost. The stakeholder has submitted that the PPA with Reliance IPP should not be executed again as the cost of power purchase from this IPP is very high as compared to the other sources of power.

4. Operation and Maintenance Expenses

Employee Expenses: The employee expenses estimated for FY 13-14 are 12.38% of the ARR whereas for ED-Chandigarh it is 7.34% and ED-DD it is 1%. Further, the employee expense estimated for FY 14-15 for ED-Goa is Rs. 177.14 Crores, which is 13.51% of the total ARR whereas it is 7.61% for ED-Chandigarh and 1% for ED-DD. The stakeholder has submitted that the employee expenses for ED-Goa are very high and need appropriate assessment. The stakeholder has submitted that manpower requirement should be correctly assessed and ways and means to reduce the employee cost should be ascertained.

5. Capital Work-in-Progress, GFA and Depreciation

The stakeholder has submitted that ED-Goa has envisaged a total capital expenditure of Rs. 227.38 Crores and capitalization of Rs. 191.44 Crores for FY 2013-14. Further, total capex has been submitted as Rs 288.3 Crores and capitalization of Rs. 127.50 Crores for FY 14-15. The amount of capital expenditure and capitalization seems to be very high for a small distribution utility like ED-Goa. The stakeholder has further submitted that ED-Goa needs to submit a Detailed Project Report (DPR) for all major capex schemes with details such as need of the project, total cost, project schedule and other details. The capex scheme needs to be implemented prudently to avoid loading of any unreasonable cost on the consumers.

The stakeholder has requested the Commission to properly monitor all capital expenditure schemes so as to ensure timely completion, avoid time & cost over-runs etc. ED-Goa should upload on its website progress about capital expenditure schemes on a regular basis. Further, proper utilization should be ensured about the funds received through Electricity Duty Fund for infrastructure development. Utilization of the amount collected through levy of Electricity Duty needs to be analyzed. Further, it has been requested that the Commission should direct ED-Goa to submit a status report on the total funds collected through Electricity Duty and total utilization of the same on power infrastructure within the State.

6. Return on Capital Base/Net Fixed Assets for FY 2013-14 and FY 2014-15

Due to unavailability of audited accounts and Fixed Asset Register, valuation and calculations such as Gross Fixed Assets, Net Fixed Assets, Depreciation and Return on Capital Base are highly subjective. The stakeholder has requested the Commission to give strict directions to the Petitioner to this effect and publish the desired details on the Petitioner's website.

7. Non-Tariff Income for FY 2013-14 and FY 2014-15

The stakeholder has submitted that ED-Goa should explore the possibility of increasing the income further.

Petitioner's submission

The point-wise reply to the above objections is as below.

1. Suggestions on load forecasting and demand side management have been noted.

2. The licensee has submitted the first six monthly Energy Audit report to the Commission as compliance and is awaiting inputs to initiate the second energy audit activity. The Petitioner has clarified that the 12.25% is the T&D loss and not distribution loss. Further, the Petitioner has submitted that the T&D loss of 12.25% projected for FY 2014-15 are reasonable when compared with the T&D loss of other utilities.

3. The Petitioner has submitted that is following the merit order dispatch principles. The cost of RGPPL per unit is high as units supplied are not as per allocated quantum and fixed charges are being levied as per allocated quantum. The licensee has submitted that PPA with Reliance IPP is expiring on August 15, 2014.

4. Regarding the objection of high employee expenses, the Petitioner has submitted that the detailed manpower report justifying No. of employees and expenses has been submitted before the Commission.

5. The licensee has submitted Capital Investment Plan for FY 2014-15 before the Commission, covering schemes wise details and cost-benefit analysis. With regards to the Electricity Duty Fund amount utilization, the details have been provided to the Commission.

6. The Petitioner has submitted that it is claiming benefit on account of depreciation, normative interest on loan, Return on capital base on asset additions only from FY 2011-12. The Commission has held back benefits on the opening GFA till the time the FAR and accounts are in place. The Petitioner has submitted that it has clarified its position at para 8.1 and 8.2 of the petition and further submitted that efforts are being made to streamline the accounts and fixed assets register till FY 2012-13 by mid-2014.

7. The Petitioner has submitted that it has no comments to offer on the issue of non-tariff income.

Commission's views

The Commission has considered the determination of the various components of the ARR in line with the JERC Tariff Regulations. Detailed analysis is given in the chapters of the respective years.

Regarding the methodology for estimation of the energy sales, the Commission feels that considering the present availability of data, CAGR methodology seems appropriate. Scientific methods of load forecasting and other methodologies should be explored, wherever possible.

The Commission has already given directions to the utility to submit Energy Audit report. The Energy Audit report for the respective year should be submitted along with the true-up

petition of the year. This would help in identifying areas of high loss in the distribution area and enable the licensee to undertake suitable measures for addressing areas of high loss in the licensee area.

The Commission has been approving the power purchase cost corresponding to the merit order dispatch principles and licensee has been given strict directions to adhere to the MOD principles. Detailed analysis is in the section of power purchase cost in the respective chapters of this order.

The Commission also acknowledges the high manpower cost as compared to the other utilities. The Commission therefore as not considered the increase in manpower cost more than inflationary cost. The manpower report submitted by the petitioner is also does not support the rationale for the high cost. The Commission has provided its comments at the relevant para in this order regarding the manpower cost.

Directions regarding submission of detailed Capital Investment Plan have already been given to the licensee. The analysis pertaining to the allowed gross fixed assets, depreciation, interest on normative loan and return on capital base is in the respective sections of the chapters of this order. **The licensee has been given strict directions to submit the Fixed Asset Register and the audited accounts for the respective years along-with the true-up petition in order to allow the consideration of the opening GFA for purposes of depreciation and return on capital base. The Commission is not considering the claim of the petitioner as regards to the GFA in the absence of the FAR and consequential impact has not been allowed.**

PART 3: Tariff related

4.2.3 *Stakeholders Objections/Comments*

1. Pro-rata demand charges for temporary shutdown

ASMA has submitted that member industries are continuous process industries and hence annual maintenance is required wherein the plant is shut down for more than a week. During periods of low demand in the steel industry, plants remain non-operational for long duration. To reduce the fixed charge outgo for electricity during these periods, the stakeholders has submitted that the Commission should fix demand charges such that in case the plant is shut down for a period of 7 days or more with prior notice to ED-Goa, demand charges should be billed for days only when the plant is operational during the particular billing month.

The stakeholder has submitted that this provision was part of the tariff schedule during the earlier regime and has requested the Commission to restore the provision for calculation of pro-rata demand charges during temporary shutdown.

2. Re-introduction of Load Factor Incentive

The stakeholder has submitted load factor incentive was applicable in the past as per the Government of Goa Gazette Notification. The stakeholder has requested the Commission to re-introduce the same.

3. Tariff hike for the HT consumers

The tariff for the HT industrial (Ferro Metallurgical/Steel Melting/Power Intensive) has been proposed to be increased by – fixed charges by 16.66% and energy charges in the range of 10-12% (for the different slabs). The demand charges for the HT Industrial (Steel Rolling) are proposed to be increased by 12.5% and energy charges in the range of 3.33% to 22.22%. The stakeholder has submitted that the increases in energy charges in some slabs is very high and request the Commission to reduce the energy charges in order to promote steel and allied industry in the State. Further, it has also been submitted that the proposed demand charges in these categories are 2.625 and 2.25 times the demand charges as compared to the demand charges of the other HT consumers in the State. The stakeholder has requested the Commission to bring at par the demand charges of all the HT consumers in the State of Goa.

Petitioner's submission

The point-wise reply to the above objections is as below.

1. The Petitioner in this regard has submitted that the licensee needs recovery in the form of fixed/demand charges to meet its fixed cost obligation. The fixed/demand charges are required to be collected by the licensee so that it can keep the power available for the contracted demand. The Petitioner has further submitted that the matter falls under the jurisdiction of the Commission to determine/revise the tariff or tariff structure and has requested the Commission to ensure revenue neutrality for the licensee in case any changes are done in the tariff/tariff structure.

2. Regarding restoring the load factor incentive clause, the Petitioner has submitted that the matter falls under the jurisdiction of the Commission to determine/revise the tariff or tariff structure and has requested the Commission to ensure revenue neutrality for the licensee in case any changes are done in the tariff/tariff structure.

3. Regarding the comments on the HT Tariff Schedule and revision of demand charges for HT consumers, the Petitioner has submitted that the matter falls under the jurisdiction of the Commission to determine /revise the tariff or tariff structure and has requested the Commission to ensure revenue neutrality for the licensee in case any changes are done in the tariff/tariff structure.

Commission's views

As regard to the pro-rated demand charges the commission finds merit in the petitioner's submission that the demand charges are aimed towards meeting the fixed cost of the business. Besides paying fixed charges to the generators, the utility, in order to serve the consumers, has to create and maintain an adequate network for supply to the consumers. Therefore the demand charges cannot be avoided for short intervals where the industries are not functional.

Regarding the tariff for various consumer categories, the Commission has made a prudent assessment of the revenue gap of the different years and accordingly ascertained the tariff for different consumer categories. The detailed analysis of the tariff for FY 2014-15 is in **Chapter-Tariff philosophy and category-wise tariffs for FY 2014-15** of this order.

5. Review of ARR for FY 2013-14

5.1 *Background*

ED-Goa filed its petition for Review of FY 2013-14 and ARR for FY 2014-15 on January 13, 2014. The petition was admitted on January 16, 2014 subject to the removal of infirmities to the extent possible. Subsequent to filing, a technical validation session was held on 13th February, 2014. The Commission scheduled a hearing for Petition No.122/2014 on 17th February, 2014.

The Commission in absence of the audited accounts has considered the figures for FY 2012-13 as approved vide its order dated March 31st, 2013, actual of first half of FY 2013-14 wherever available for determination of the ARR for FY 2013-14 as they depict nearly the true performance of the utility.

The Commission has taken into consideration the following for determination of ARR for FY 2013-14:

i. Performance in FY 2012-13 as approved in the order dated March 31, 2013;

ii. Sales, power purchase and revenue figures based on actual first half of FY 2013-14 and FY 2012-13 (H1 and H2);

iii. Estimates submitted by the Petitioner for H2 of FY 2013-14 in the petition;

iv. 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.

5.2 *Analysis of Review for FY 2013-14*

The review of aggregate revenue requirement requires assessment of quantum of energy sales, energy loss as well as various cost elements like power purchase cost, O&M expenses, interest cost and depreciation etc. As regards the various components of ARR, the Commission's analysis thereon and decision in respect of items given below is discussed in the following paras:

➢ Assessment of Energy Requirement

i. Sales Projections;

ii. Loss Trajectory;

iii. Energy Balance;

iv. Power Purchase Sources;

➢ Assessment of the Aggregate Revenue Requirement

v. Power Purchase Costs & Transmission Charges;

vi. Operation and Maintenance Expenses;

- Employee Expenses
- Administration & General expenses
- Repairs & Maintenance Expenses

vii. Capital Expenditure and Asset Capitalisation;

viii. Gross Fixed Assets;

ix. Depreciation;

x. Interest on Long Term Loans;

xi. Interest on Working Capital & Security Deposits;

xii. Return on Capital Base/Net Fixed Assets;

xiii. Provision for Bad and Doubtful Debts;

xiv. Other expenses.

5.3 *Consumers, Connected Load and Energy Sales*

Petitioner's Submission

The petitioner has submitted that consumer base of Goa comprises of HT Industry, LT Industry, Commercial and Domestic consumers with the maximum consumption attributable to the domestic category. ED–Goa has been experiencing a constant & nominal growth rate over the last few years and foresees a similar kind of trend in the near future. Further, ED–Goa envisages very little increase in number of consumers which is also in line with the number of consumers approved by the Hon'ble Commission in its Tariff Order. The table below shows categorywise number of consumers for the 1st half (provisional actuals) and at the end of the year FY 2013-14 (Revised Estimates).

ED – Goa has projected the sales by considering the actual consumption for the 1st half of FY 2013-14, i.e. April, 2013 to September, 2013. The sales forecast for the remaining period is based on the trends observed in sales pattern over the previous years during the corresponding 2nd half of the respective years. ED–Goa has also considered certain key factor considered while projecting the sales for FY 2013-14:

– First, the sub-division-IV, Candolim under Division-IV, Mapusa, LT Consumers bills were not issued for the period April to September 2013. The Spot Billing work has been awarded to the agency which would cover 12-13 sub-divisions to clear the backlog of LT Billing. Hence the sales are higher in LT Domestic, LT Commercial and LT Motive Power category in later half of FY 2013-14 when compared to H1 of FY 2013-14.

Secondly, ED–Goa has shown considered higher sales for Commercial Category during the 2nd half of the year FY 2013-14. This is on account of the peak season of tourism which commences from the month September onwards and continues till the month of January/ /February. Hence, there is a substantial amount of consumption of power during this period.

The overall sales projected by ED–Goa for the year FY 2013-14 is in the range of Sales figures approved by the Hon'ble Commission.

Table 4: *Energy Sales projected by the Petitioner for FY 2013-14 (MU)*

Sr. No.	Category of Consumer	Revised Estimates FY 2013-14		
		H1	H2	FY 2013-14
A	Low Tension Supply	571	699	1270
1(a)	Tariff LTD/Domestic and Non – Commercial	358	442	800
	First 60 Units	75	93	168
	61 - 250 Units	215	265	480
	251 Units - 500 Units	54	66	120
	Above 500 Units	14	18	32
1(b)	Tariff LTD/Low Income Group	11.11	11.56	23
1(c)	Tariff LTD/Domestic Mixed	3	3	5
	First 400 Units	2	2	4
	Above 400 Units	0	0	1
2	Tariff LTC/Commercial	132	162	293
	First 100 Units	64	79	143
	100 Units - 1000 Units	59	72	131
	Above 1000 Units	9	11	19

Sr. No.	Category of Consumer	Revised Estimates FY 2013-14		
		H1	H2	FY 2013-14
3	Tariff LTP/Motive Power	39	50	89
	Connected Load Upto 50 HP	2	3	5
	Connected Load Above 50 HP	37	48	84
3(a)	Tariff-LTP/Mixed (Hotel Industries)	2	3	5
3 c	Tariff LTP/Ice Manufacturing	4	4	8
4	Tariff-LTAG/Agriculture	8	8	16
5	Tariff-LTPL/Public Lighting	12	12	24
6	Tariff-LT PWW/Public Water Works	3	3	7
B	High Tension Supply	857	891	1748
7	Tariff HT-Mixed	56	58	113
8	Tariff HTI/Industrial	314	327	641
9	H.T.Industrial (Ferro Metallurgical/Steel Melting/Power Intensive)	266	277	543
	First 300 Units/kVA	144	149	293
	Next 200 Units/kVA	101	105	206
	Above 500 Units/kVA	21	22	43
10	Tariff-HTAG/Agriculture	3	3	5
11	EHTI/Industrial	92	96	188
12	H.T. PW/Public Water Supply and Sewage	69	72	142
13	H.T. MES/Defence Establishments	12	13	25
14	H.T. Industrial (Steel Rolling)	29	31	60
	First 200 Units/kVA	21	22	43
	Next 100 Units/kVA	7	7	14
	Above 300 Units/kVA	2	2	4
15	Tariff HT-Industries (IT High Tech).	10	10	20
16	Tariff HT-Industries (ICE).	0	0	0
C	Temporary Supply			
17	Tariff-LT/Temporary	5	5	11
18	Tariff-HT/Temporary	0	0	0
19	Total Demand/ Sale Within State/UT	1,428	1,590	3,018

Commission's analysis

The Commission in its tariff order for FY 2013-14 had approved the sales of 3034 MU's for FY 2013-14 based on the past trends. In terms of the JERC Tariff Regulations, the review of the sales has been undertaken. The Commission while approving the sales has looked at the increase in the period October to March of FY 2012-13 as compared to April to September 2012. The increase is applied on the actual sales submitted by the Petitioner for the period April to September 2013 to arrive at the sales for second half of FY 2013-14. The petitioner has considered the sales for LTD- Domestic, Commercial and motive power on higher side owing to the following reason.

Quote "the sub-division-IV, Candolim under Division-IV, Mapusa, LT Consumers bills were not issued for the period April to September 2013. The Spot Billing work has been awarded to the agency which would cover 12-13 sub-divisions to clear the backlog of LT Billing" **Unquote**

Accordingly the Commission has considered the exception for the above categories and considered the sales as proposed by the Petitioner for the said categories.

As also indicated in the previous orders the Commission has considered the normative consumption of consumers under LTD –LIG category in accordance with the tariff schedule. Consumers under the LTD/LIG – Low Income Group category are allowed a connected load of two 40Watts bulbs = 2 X 40 = 80 W only as per the approved Tariff Schedule. Considering this as the basis, consumption of each consumer under the LIG category works out to be 175.2 (2x40x6x365/1000) kWh per consumer per year taking average usage of 6 hours per day. Accordingly the Commission has considered the sales for FY 2013-14 for the LTD/LIG category at 2.51 MU per year.

The Commission has considered the number of consumer and connected for second half of equivalent to the growth rates of the corresponding previous year. The Commission has observed that the Petitioner has submitted a very high increase in the connected load for the H1 of FY 2013-14 as compared to FY 2012-13 for which the petitioner during the technical validation session has cited the correction in the load after due MIS verification process. The Petitioner has however not replied to the Commission's letter in this regard failing which the Commission has provisionally considered the Petitioner's submission for H1 of 2013-14 except for LTP / Motive power where the per consumer load proposed is beyond the approved limits of load in the category. The Commission in the absence of any details has considered the per consumer load at 43 HP for LTP sub category of "Connected load upto 50 HP" and 65 HP per consumer for LTP/Motive power sub category "connected load above 50HP".

The Commission finds that the approach of the Petitioner to be very casual in submission of the data before the Commission. In the present case, the Commission is constraint to consider the submission of the Petitioner for H1 of FY 2013-14 except for LTP/Motive power as detailed above. **The Commission however directs the Petitioner to submit the figures of number of consumer, load, sales and revenue from sale of power certified by the statutory auditor for the years FY 2010-11 to FY 2013-14 during the filing of true up for the relevant year.**

Table 5: *Energy Sales approved by the Commission for FY 2013-14 (MU)*

Sr. No.	Category of Consumer	FY 13-14 (Approved vide order dated March 31, 2013)	Commission's Approval for Review		
			H1	H2	FY 2013-14
A	Low Tension Supply	1258	**561**	**686**	**1247**
1(a)	Tariff LTD/Domestic and Non–Commercial	904	**358**	**442**	**800**
1(b)	Tariff LTD/Low Income Group	2.49	**1**	**1**	**3**
1(c)	Tariff LTD/Domestic Mixed	5	**3**	**3**	**5**
2	Tariff LTC/Commercial	224	**132**	**160**	**291**
3	Tariff LTP/Motive Power	84	**39**	**50**	**89**
3(a)	Tariff-LTP/Mixed (Hotel Industries)	5	2	3	5
3 c	Tariff LTP/Ice Manufacturing	0	4	4	8
4	Tariff-LTAG/Agriculture	16	8	8	16
5	Tariff-LTPL/Public Lighting	15	12	12	24

Sr. No.	Category of Consumer	FY 13-14 (Approved vide order dated March 31, 2013)	Commission's Approval for Review		
			H1	H2	FY 2013-14
6	Tariff-LT PWW/Public Water Works	2	3	3	6
			0		
B	High Tension Supply	1776	**857**	**858**	**1715**
7	Tariff HT-Mixed	290	56	56	111
8	Tariff HTI/Industrial	616	314	314	629
9	H.T.Industrial (Ferro Metallurgical/Steel Melting/Power Intensive)	506	**266**	**266**	**532**
10	Tariff-HTAG/Agriculture	5	3	**3**	5
11	EHTI/Industrial	144	92	92	184
12	H.T. PW/Public Water Supply and Sewage	110	69	69	139
13	H.T. MES/Defence Establishments	34	12	12	25
14	H.T. Industrial (Steel Rolling)	49	**29**	**30**	**59**
15	Tariff HT-Industries (IT High Tech).	7	10	10	20
16	Tariff HT-Industries (ICE).	0	0	0	0
C	Temporary Supply				
17	Tariff-LT/Temporary	14	5	5	10
18	Tariff-HT/Temporary	1	0	0	0
19	Total Demand/ Sale Within State/UT	**3034**	**1,418**	**1,544**	**2,962**

Table 6: *Number of Consumer (in No's) approved by the Commission for Review of ARR for FY 13-14*

Sr. No.	Category of Consumer	FY 2013-2014	
		Revised Estimates	Approved (Review)
1(a)	Tariff LTD/Domestic and Non-Commercial	449602	443947
1(b)	Tariff LTD/Low Income Group	14503	14321
1(c)	Tariff LTD/Domestic Mixed	51	50
2	Tariff-LTC/Commercial	96273	95062
3 (a)	Tariff-LTP/Motive Power	9703	9581
3 (b)	Tariff-LTP/ Ice Manufacturing	45	45
3 (c)	Tariff-LTP/Mixed (Hotel Industries)	126	126
4	Tariff-LTAG/Agriculture	11235	11094
5	Tariff-LTPL/Public Lighting	9192	9076
6	Tariff-LT PWW/Public Water Works	558	550
B	High Tension Supply		
7	Tariff HT-Mixed	204	201
8 (a)	Tariff HTI/Industrial	469	464
8 (c)	Tariff HTI/Ice Manufacturing	2	2
9	H.T. Industrial (Ferro Metallurgical/Steel Melting/Power Intensive)		
	TOTAL	26	26

Sr. No.	Category of Consumer	FY 2013-2014	
		Revised Estimates	Approved (Review)
10	Tariff-HTAG/Agriculture	43	42
11	EHTI/Industrial	4	4
12	H.T. PW/Public Water Supply and Sewage	32	31
13	H.T. MES/Defense Establishments	12	12
14	H.T. Industrial (Steel Rolling)	13	13
15	Tariff HT-Industries (IT High Tech).	8	8
C	Temporary Supply		
16	Tariff-LT/Temporary	4132	4085
	TOTAL	596234	588740

Table 7: *Connected Load (in KW) approved by the Commission for review of ARR for FY 2013-14*

Sr. No.	Category of Consumer	FY 2013-2014	
		Revised Estimates	Approved (Review)
1(a)	Tariff LTD/Domestic and Non-Commercial	1126025	1127149
1(b)	Tariff LTD/Low Income Group	1200	1201
1(c)	Tariff LTD/Domestic Mixed	2187	2186
2	Tariff-LTC/Commercial	333332	333665
3 (a)	Tariff-LTP/Motive Power	1006299	457533
3 (b)	Tariff-LTP/Ice Manufacturing	1873	1873
3 (c)	Tariff-LTP/Mixed (Hotel Industries)	3298	3298
4	Tariff-LTAG/Agriculture	63906	63970
5	Tariff-LTPL/Public Lighting	9002	9011
6	Tariff-LT PWW/Public Water Works	21441	21463
B	High Tension Supply		
7	Tariff HT-Mixed	67649	67716
8 (a)	Tariff HTI/Industrial	356954	357311
8 (c)	Tariff HTI/Ice Manufacturing	364.09	364.09
9	H.T. Industrial (Ferro Metallurgical/Steel Melting/Power Intensive)	93223	93316
10	Tariff-HTAG/Agriculture	8202	8211
11	EHTI/Industrial	76519	76596
12	H.T. PW/Public Water Supply and Sewage	26852	26879
13	H.T. MES/Defense Establishments	6812	6818
14	H.T. Industrial (Steel Rolling)	16204	16219
15	Tariff HT-Industries (IT High Tech).	5159	5164
C	Temporary Supply		
16	Tariff-LT/Temporary	16301	16316
17	Tariff-HT/Temporary		
	TOTAL	3,242,803	2,696,260

* Connected Load for LT category is in kW and for HT in kVA

5.4 *Intra-State Transmission & Distribution Loss*

Petitioner's submission

The Distribution Loss for the year FY 2013-14 on overall basis is estimated to be around 12.5% which is in line with previous year loss levels. ED–Goa has been trying to minimize the Distribution Loss and shall continue with the efforts in reducing the Distribution Loss further. It may be noted that the distribution losses for the State of Goa are comparatively lower than many other state utilities and also competitive.

Commission's analysis

The Commission in its Tariff Order for March 31, 2013 had approved a loss level of 12% for FY 2013-14. However, the Petitioner in its present petition has shown an achievement of T&D losses for FY 2012-13 to be around 12.48% and has requested the Commission to revise the loss levels for FY 2013-14 at the same levels as FY 2012-13. The Petitioner has not provided substantial reason for the proposed non-achievement of the targeted levels. The Petitioner has envisaged high levels of capital investment, which includes system improvement schemes. The proposed capital expenditure would be unjustified if there is no corroborated improvement in the T&D losses.

The Commission therefore does not find any merit in the submission of the petitioner for revision of the T&D loss for FY 2013-14 and retains the losses approved in the Tariff Order dated March 31, 2013. Accordingly, the T&D loss level for the review of FY 2013-14 remains 12%.

5.5 *Inter-State Transmission Loss*

Petitioner's submission

ED–Goa so far had adopted Average Loss Method, which has provided near approximate losses; hence in this petition, ED–Goa proposes an alternate methodology giving a better accuracy in arriving at a realistic Distribution Loss. In this methodology, the Energy Input at Goa Periphery is considered at both the regions – WR & SR. Likewise, the total Power Purchased from both the regions has been considered and accordingly, the inter-state transmission loss is worked out.

Accordingly, the petitioner has worked out losses for western region and southern region at 2.45% and 11.63% respectively for H1 of FY 2013-14.

In case of H2 of FY 2013-14 the total PGCIL Losses are considered for both the regions, i.e. WR & SR. The PGCIL loss for the SR for FY 2013-14 are considered at **9.50%**. (Andhra Intra State Transmission Loss + SR Interstate Loss + Karnataka wheeling loss). On the other hand PGCIL losses for the WR are considered as the average of 52 week losses at 3.66% (source: WRPC Website).

Commission's analysis

The inter-state transmission losses are considered uncontrollable at the hands of the petitioner. The petitioner in its previous submissions had considered the average loss calculations based on the pooled losses. The Petitioner in its submission has considered the actual recorded Input at Goa Periphery to arrive at the inter-state losses. The Commission appreciates the efforts of the Petitioner to consider the correct method of calculation of actual losses, which brings transparency in the system.

The Commission in order to determine the inter-state transmission losses has relied upon the Energy accounting data available at SRPC and NRPC for the first half of FY 2013-14. The inter--state transmission charges calculated for H1 of FY 2013-14 are 2.82% and 12.24% for power procured through generating stations in western region (other than stations within Goa) and southern region respectively.

The Commission has considered the losses for H2 equivalent to the actual percentage in H1 of FY 2013-14 shown above.

5.6 *Energy Balance*

Petitioner's Submission

ED-Goa while computing Energy balance for entire FY 2013-14 has considered actual of UI overdrawal/underdrawal, purchase of traders, sale to exchange etc. Thus, on the basis of the actual of H1 and projections of H2 of FY 2013-14, the Energy Balance for the year FY 2013-14 is computed by ED-Goa shown in the table below:

Sr. No.	Item	Apr-Mar (Rev.Est) - WR	Apr-Mar (Rev.Est) - SR	Apr-Mar (Rev.Est) WR + SR
		FY 2013-14	FY 2013-14	FY 2013-14
1	2	3	4	5
1	Retail Sales to Consumers			3,018
	Add: Distribution Losses - %			12.50%
	Distribution Losses – Mus			431
2	Net Energy Requirement at Goa Periphery			3,449
3	Total Power Scheduled at Goa Periphery			
	Scheduled Power from NTPC, RGPPL, NPCIL & RSTPS	2,605	745	3,351
	Add: Actuals of Over/Underdrawal, Traders and Sale to exchange - H1			46
	Add: Power from Open Market during peak/(Surplus Power diversion to exchange during off-peak)			78
	Total	2,605	745	3,475
4	Less: PGCIL Losses - %	3.66%	9.50%	4.79%
	PGCIL Losses – Mus	95	71	166
5	Total Power Purchased within Goa State			
	Add: Co-generation	29	-	29
	Add: Independent Power Producers (IPP)	112	-	112
	Total	141	-	141
6	Energy Input at Periphery after PGCIL Losses & State Power Purchase	2,651	675	3,449

Commission's analysis

The Commission in the foregoing paragraphs has approved the actual sales, internal and external losses based on which the energy balance is considered. The Commission in its previous order had approved the requirement 3447.44 MU to meet the energy requirement within the state to the retail consumers, assuming T&D losses of 12% on the approved sales of 3033.75 MU. The Commission has considered the approval of revised sales estimates in this order and the inter-state losses, accordingly the requirement has been adjusted for the approval under the review of FY 2013-14. The Commission has considered the merit order dispatch principles to meet the requirement within the State. Accordingly, only the power purchase units as required to meet the requirement within the territory have been considered.

The Petitioner in its petition has mentioned that ED–Goa has purchased power under banking arrangement through Mittal Processors Private Limited whereby it had purchased power of 76.80 MU in July and August and has to return 83.45 MU in October, 2013. The Commission during its prudence check had found that though the Petitioner has considered the cost of such transaction such as open access charges transmission charges etc. but the units had not been considered in the power purchase cost or energy balance submitted by the Petitioner. It is also been observed that the units transacted under the banking arrangement as mentioned by the Petitioner were incorrect. The Commission had verified the units from the REA and the bills submitted by the Petitioner. The energy transacted during June and August reflected in the REA issued by WRPC is 7.75 MU, which is considered by the Commission in the power purchase quantum. It is further observed from the REA of October, 2013, that the Petitioner has returned power of 8.21 MU in October, 2013 for the banking arrangement, which has been considered in H2 of FY 2013-14 by the Commission.

Accordingly, the approved energy balance for the FY 2013-14 is shown in the table below;

Table 8: *Energy Balance proposed and approved by the Commission for FY 2013-14*

Sr. No.	Particulars	FY 13-14	Revised Estimates FY 2013-14			Commission's Approval		
		Approved	H1	H2	FY 2013-14	H1	H2	FY 2013-14
A)	ENERGY REQUIREMENT							
1	Sales within the State/UT	3,033.75	1,428.05	1,590.17	3,018.22	1,418.19	1,543.61	2,961.80
2	Distribution losses							
i)	%	12.00%	15.31%	9.82%	12.50%	16.05%	7.92%	12.00%
ii)	MU	413.69	258.09	173.08	431.17	271.10	132.78	403.88
3	Energy required at State Periphery for Sale to Retail Consumers	3,447.44	1,686.14	1,763.26	3,449.39	1,689.29	1,676.39	3,365.68
i)	Sales outside state/UT : UI/Under-drawal		33.04		33.04	33.58		33.58
ii)	Sales							
	a) Through PX							
	b) Traders							
iii	Sales to other distribution licensees							
	a) Bilateral Trade							
	b) Banking Arrangement (NVVN)						8.21	
5	Total Energy Requirement for State	3,447.44	1,719.18	1,763.26	3,482.44	1,722.87	1,676.39	3,399.26
6	Transmission losses							
i)	%	4.18%	4.02%	5.08%	4.56%	4.15%	4.79%	4.47%
	MU	150.52	71.92	94.36	166.27	74.56	84.37	158.93

Sr. No.	Particulars	FY 13-14	Revised Estimates FY 2013-14			Commission's Approval		
		Approved	H1	H2	FY 2013-14	H1	H2	FY 2013-14
8	Total Energy at Generator end	3,597.96	1,791.10	1,857.61	3,648.71	1,797.43	1,760.75	3,558.19
B)	ENERGY AVAILABILITY/ /PURCHASED							
1	Net thermal generation (Own+ IPP + Share from Central Stations)	3,454.47	1,711.93	1,779.54	3,491.47	1,711.93	1,760.75	3,472.69
a	Share from Central Sector (NTPC + NPCIL)	3,306.01	1,638.50	1,712.11	3,350.61	1,638.50	1,746.16	3,384.66
b	IPPs		58.83	52.83	111.67	58.83	-	58.83
c	Co-generation within State (GEPL, GSPL & Sesa)	148.46	14.60	14.60	29.19	14.60	14.60	29.19
2	Net hydel generation (own+shared)							
3	Power Purchased from	143.49	79.17	78.07	157.24	85.50	-	85.50
	a) Common Pool/UI/ OD		79.17		79.17	77.75		77.75
	b) Traders/ /Exchanges		-	78.07	78.07			-
	c) Renewable Energy Sources	143.49						
	d) Banking Arrangement (NVVN)					7.75		7.75
4	Net power purchase	3,597.96	1,791.10	1,857.61	3,648.71	1,797.43	1,760.75	3,558.19
5	Net Availability	3,447.44	1,719.18	1,763.26	3,482.44	1,722.87	1,676.39	3,399.26

5.7 *Power Purchase Quantum and Cost*

Petitioner's submission

Power Purchase Cost for H1 FY 2013-14

ED-Goa meets its total energy requirement from its allocation from the Central Generating Stations (CGS), Private Generators like Reliance Infrastructure Ltd. State based Co-generation facilities, Power Exchanges etc. ED-Goa receives power from CGS like NTPC and NPCIL as per allocation from time to time. The power purchases from other sources such viz Co–generation, IPP have been considered as per PPAs.

ED–Goa on a real time basis has also overdrawn/underdrawn power from both WR & SR grid.

However the underdrawal and the revenue from it are shown separately in ARR format (not netted off from power purchase cost).

Transmission Charges H1: The transmission charges for the 1st half of FY 2013-14 comprises of transmission charges to Western Region, Southern Region, KPTCL and other Transmission Licensees. The Transmission charge comes to around Rs. 61.73 Crores

Power Purchase Cost for Overall FY 2013-14

Power Purchase quantum for FY 14 (H1 + H2): For the year FY 2013-14, ED–Goa has projected the Power Purchase by considering the actual power purchase for the 1st half of the year FY 2013-14 (i.e. April, 13 – September, 14). The key assumptions for power purchase costs are as under:

- Ramagundam – Overall power purchase as approved in T.O. FY 2013-14
- Mouda STPS – Slightly higher in H2 as power station is now in full operation
- The quantum for Open market for has been considered as balancing figure
- Reliance IPP, due to outage in October–November period, 6 MUs of quantum is reduced/projected on lower side. The power purchase from IPP is being considered in ARR as per JERC letter No. 17/4/2011-JERC/1283 dated 1-10-2013.

Power Purchase Fixed Cost for overall FY 2013-14: The Fixed charges for NTPC & IPP for entire FY 2013-14 are taken same as approved by Commission in T.O. FY 2013-14.

Power Purchase Variable Cost for overall FY 2013-14: The variable cost for FY 2013-14 has been computed considering actual average variable cost of each source for first six months period of April-September, 2013. It is submitted that no escalation of cost has been considered.

Power Purchase Other & Supplementary Charges for FY 2013-14: The other costs which includes ED, Cess, Incentive, MOPA etc. and supplementary charges are considered on actual basis paid in first six months period of April-September, 2013 and are assumed to be same for H2 also as ED-Goa is receiving bills with such charges.

Power Purchase cost of Traders and Overdrawal for FY 2013-14: The power purchase cost for power purchased from traders (NVVN) and power overdrawal from grid are considered on actual basis paid in first six months period of April-September, 2012 only. The quantum for traders for H2 is considered as balancing figure of energy balance and cost is considered @300 paise/kWh.

Power Purchase from Renewable Energy Sources:

Non-Solar RPO: ED-Goa would like to mention that it is pursuing the matter of RPO in case No. 61/2012. However ED-Goa would like to mention that Non-Solar RPO is being met through purchase of Co-generation power and the same has been acknowledged by Hon'ble Commission vide its order dated 27th December, 2013 in case No. 61/2012.

The table below provides status of Non-Solar RPO:

Particulars	FY 10-11	FY 11-12	FY 12-13	FY 13-14	FY 14-15	Total
Consumption (Sales)	2,727	2,746	2,962	3,018	3,177	14,631
Non-Solar RPO %	0.75%	1.70%	2.60%	2.60%	2.60%	
Non-Solar (MUs)	20	47	77	78	83	**305**
Purchase of Power from Co-generation	**132**	**119**	**72**	**29**	**84**	**436**
Goa Energy Private Limited	108	106	61	24	24	323

Particulars	FY 10-11	FY 11-12	FY 12-13	FY 13-14	FY 14-15	Total
Goa Sponge & Power Limited	24	13	10	6	6	58
Sesa Goa Ltd.	-	-	-	-	55	55
Surplus for Non-Solar	**(111)**	**(72)**	**5**	**49**	**(2)**	**(131)**

Solar RPO: ED-Goa would like to provide its requirement for meeting Solar RPO for the period FY 2010-11 to FY 2014-15 in the below table:

Particulars	FY 2010-11	FY 2011-12	FY 2012-13	FY 2013-14	FY 2014-15	Total
Consumption (Sales)	2,727	2,746	2,962	3,018	3,177	14,631
Solar RPO %	0.25%	0.30%	0.40%	0.40%	0.40%	
Reqt of Solar (MUs)	7	8	12	12	13	52

Ministry of New & Renewable Energy, New Delhi, has entrusted M/s Solar Energy Corporation of India, New Delhi to invite tender for 750 W grid connected solar photovoltaic project under Jawaharlal Nehru National Solar Mission (JNNSM) Phase –II, Batch – I. The firm has already processed pre-bid meeting on 19-11-2013 and last date for submitting and opening the bids was on 28-12-2013 for selection of the successful bidders for supply of solar power for next 25 years.

It is informed by the Ministry of New & Renewable Energy vide letter No. 29/5(5)/2010--11/JNNSM/ST-Part dated 31-10-2013 that once selection process is over, Solar Energy Corporation of India (SECI) shall sign Power Purchase Agreement (PPAs) with the selected Solar Power Developers for the purchase of solar power from them and also sign Power Sale Agreements (PSAs) with the state utilities/Discoms who are willing to buy solar power under this scheme.

M/s solar Energy Corporation of India (SECI) will also work out on the quantum of power that can be offered to every state and communicate shortly. Meanwhile, they have requested to appraise the State/Joint Electricity Regulatory Commissions about intention to purchase this power to fulfill the RPO fixed by the Commissions.

In view of the above commitment from MNRE, it is requested to allow this department to procure solar RPO from the allocation by the SECI and not to insist upon to procure RECs for the backlogs as presently Government is facing critical financial crunch.

Recently, Tata Power Company Ltd. has got a favorable order from MERC vide order dated 20th December, 2013 (Case No. 159 of 2013) to postpone fulfillment of annual solar-power procurement targets by as many as five years to 2016. Tata Power Company Ltd. has been unable since 2010 to source enough solar power to meet government renewable mandates because of a shortage of sun-based generation in the country. MERC also waived off the fines and ordered the company to fulfill five years of targets by 31st March, 2016.

ED-Goa submits that it had earlier tried to procure solar power through tender process but the participation was not encouraging. It was noticed in few cases of utilities that are unable to meet Solar RPO despite best efforts; SERCs have allowed offsetting Solar RPO against Non--Solar RPO. Accordingly, we request Hon'ble Commission that Solar RPO be set-off against excess power purchase of Non-Solar power until next financial year or until the time solar power under JNNSM Phase-II is received.

The table below provides the total computation of RPO for the period from FY 2010-11 to FY 2014-15 including final output after Solar RPO set-off.

As can be seen from the above table, total RPO requirement up to FY 2014-15 is 357 MUs and total projected power to be purchased from Non-Solar (Co-generation) is 436 MUs. ED-Goa submits that even after meeting Solar RPO from Non-Solar quantum, there is net surplus of 79 MUs.

The Hon'ble Commission is requested to consider of setting off Solar RPO against Non-Solar RPO as per above proposal and it is also prayed that Hon'ble Commission may not insist ED-Goa to purchase of RECs for Solar Power.

Transmission Charges FY 13 – H2: The Transmission Charges for FY 2013-14 are considered as per POC computation, i.e. Part A - Transmission charge for withdrawal of power and Part B - Transmission charges of generators. Further, the transmission charge has also been considered factoring the wheeling charges pertaining to KPTCL.

The transmission charges for 2nd half of FY 13-14 are computed based on the RTA Statement for November, 2013.

Power Purchase Cost summary FY 13-14: In line with the foregoing paragraphs, the total Power Purchase for FY 2013-14 is summarized in the table below:

Sr. No	Particulars	FY 2013-14 (Projected)		FY 2013-14 (Approved)		FY 2013-14 (Rev.Est)	
		Purchase (Mus)	Total Cost (Rs.Crs)	Purchase (Mus)	Total Cost (Rs.Crs)	Purchase (Mus)	Total Cost (Rs.Crs)
1	NTPC	2,943	571.67	3,305	618.67	3,134	717.44
2	RGPPL	51	25.74	-	19.20	28	24.40
3	NPCIL	185	48.00	200	51.38	189	48.78
4	Traders	41	20.50	-	-	78	23.42
5	Overdrawal			-	-	79	16.72
6	Co - Generation	148	35.63	148	35.63	29	6.66
7	IPP	-	19.83	-	19.83	112	130.45
8	Renewable Energy Source	143	43.21	143	67.65	-	-
9	Transmission Charges		103.36		97.50	-	119.81
	Grand Total	**3,512**	**867.95**	**3,797**	**909.86**	**3,649**	**1,087.69**

It is requested Hon'ble Commission to approve the power purchase cost including transmission charges at Rs. **1,087.69** Crores for FY 2013-14 as per revised workings and at an average cost of Rs. **2.98**/kWh. Further the Regional Energy Accounts (REA) and Regional Transmission Accounts (RTA) for the period from April, 2013 to September, 2013 are provided in soft format along with the petition for verification and scrutiny of the Commission.

Commission's Analysis

While estimating the energy availability and cost for FY 2013-14, the Commission has considered the actual Power purchase and cost submitted by the petitioner for first half of FY 2013-14 of, NTPC, IPP, Co-gen, & other sources. The Commission during the technical validation sessions, verified the power purchase bills on random basis and exercised due diligence in the validation of the power purchase costs incurred by the licensee for the period

April to September, 2013. The Commission has randomly verified the station wise Power purchase bills submitted by the Petitioner for the said period. The Commission has also verified the energy units procured from the Regional Energy Account as recorded by the Western Region Power Committee and Southern Region Power Committee.

The Commission at Para 6.6 of its Tariff order for FY 2012-13 dated June 27, 2012 and Para 5.6 of the Tariff order for FY 2013-14 dated March 31, 2013, and had shown its concerns over the high cost purchases done by the Petitioner. The Commission has given its detailed observations on such an issue. It is observed that the petitioner has purchased power from IPP at the rate of Rs. 11.75 per unit during first half of FY 2013-14. Further, it is pertinent to mention here that taking cognizance of the fact that the purchase of such high power cost is commercially unviable source the Petitioner in its petition for FY 2013-14 (Petition No. 99/2013) had also submitted as follows:

Quote

"Power Purchase from Reliance IPP: *It is submitted that ED-Goa has not projected any power from Reliance IPP in FY 2013-14. However, petitioner submits that considering that PPA is valid till August, 2014, it is committed to pay fixed charges which are factored in the ARR petition. ED-Goa would like to further mention that in case of urgency and requirement of power during peak periods and if grid/exchange/open market power is unavailable, power would be procured from Reliance IPP under intimation to Hon'ble Commission. The cost of such power purchase shall be claimed through FPPCA."* **Unquote**

The Commission had also acknowledged the submission of the Petitioner at Page 90 of its order dated March 31, 2013; where the Commission had also not considered the purchases from Reliance IPP due high and uneconomical cost. However, the fixed cost of the station was considered.

However, the petitioner has not intimated the Commission for any such purchases from the IPP as was committed in its previous Petition No. 99/2013. Further, the Commission had given an opportunity to the Petitioner to establish that the power drawn from the IPP was unavoidable. The Petitioner, during the technical validation session was directed to provide evidence that the IPP purchases during the first half of FY 2013-14 was the least cost option. However, the Petitioner in its reply was unable to substantiate that the purchases from the IPP were as per merit order and no other cheaper source of power was available during the period of purchases from the IPP. The Petitioner in its response has referred the letter dated 1-10-2013 of the Commission withdrawing proceedings against the said IPP as the reason to purchase power from the IPP. The petitioner has submitted as follows:

"*Since all the proceedings against RIL were closed by Hon'ble JERC vide its letter dated 1-10-2013 which was informed by RIL to this Department. Therefore, it was presumed that EDG can draw IPP power as per PPA with them which is valid till 13-08-2014. In case Hon'ble Commission is still not allowing to purchase power from IPP, then the matter will be referred to State Government as done in the past."*

The Commission in this regard would like to mention that the proceedings and withdrawal of the proceedings against the IPP has no bearing on the prudent power purchase for the ED-Goa. The Commission in its previous orders has dealt at length the need of prudent purchase in accordance with the merit order. As regard to the terms of the PPA with the IPP the Commission has given its view in its Tariff Order for FY 2012-13 at Para 6.6 which is reiterated.

Further, the Commission notes that the Petitioner has not scheduled energy from cheaper sources available during the first half of FY 2013-14 and instead considered high cost purchase from the IPP. The Commission had relied on the data available from the REA for September, 2013 issued by the WRPC. The summary prepared from the REA and the purchases from CGS is shown in the table below:

Table 9: *Energy availability vis-à-vis energy scheduled for the period April, 13 to September, 13*

	Cumulative Availability	Scheduled	Energy not scheduled
KSTPS	792.79	792.78	0.01
VSTPS 1	130.56	112.14	18.42
VSTPS 2	50.97	50.72	0.25
VSTPS 3	44.44	44.44	0.00
KGPP	46.79	14.40	32.39
GGPP	45.07	13.81	31.26
SSTPS-II	41.74	41.05	0.69
KSTPS III	18.92	18.92	-
Sipat 1	78.61	73.64	4.96
RGPPL	39.70	13.94	25.76
VSTPS IV	21.98	21.98	0.00
Mauda	3.88	0.99	2.89
Total	**1,315.44**	**1,198.80**	**116.64**

In the instant case, it is seen that the energy available from stations other than energy purchased from IPP could have sufficed the requirement for sale within the State. Under section 86 of the Electricity Act, 2003, the Commission is mandated to regulate electricity purchase and procurement process of the distribution licensee. Further, in view of JERC Tariff Regulations, the power purchase cost can be allowed **on the merit order principles only**.

The above table and the foregoing discussion shows that the purchases made from the IPP were not prudent and were not in line with the merit order dispatch principles as specified by the Commission. The licensee has also not established that there was no alternative cheaper source of power other than IPP at that time. The Petitioner has also not established any fact that the energy purchased from such high cost was required to fulfill the energy requirement.

The Commission taking a prudent view of the situation has allowed the fixed charges for the IPP on provisional basis subject to getting approval of tariff from the commission and considered the per unit variable cost equivalent to the highest average variable cost of the central generating station during April to September, 2013, to allow the variable cost corresponding to the energy procured from the IPP.

The Commission directs the petitioner to submit the details of the power purchases from the IPP along with details of time slots, frequency and requirement in which purchases were done, corroborated with the evidence that the energy was not sold by way of under-drawl or sale to exchange at the same time slot. The rates of sale through UI or exchange at the same time slot and frequency shall also be correlated with the purchases of the IPP.

The Commission may consider the cost of power purchase during true up process, if it could be established by the Petitioner that the power from IPP was sourced due to shortage in the availability from other stations or requirement which could not have been met by way of existing allocation and facts which support that there were no alternative cheaper sources of power available at the time of purchases from the IPP.

Accordingly, the Commission while approving the cost of the IPP has considered the actual fixed cost paid for the first half of the FY 2013-14 only and variable cost at Rs. 2.80 per unit which is equivalent to the cost of Mauda STPS.

Commission for review of ARR for FY 2013-14 provisionally **considered the fixed cost for first six months (April to September, 2012) at Rs. 9.17 Crores as submitted by the petitioner for the Power procured from IPP during first half of FY 2013-14.** This approval is subject to determination of the tariff for the IPP by the Commission under section 62 of the Electricity Act, 2003.

The Petitioner in its petition has mentioned that ED–Goa has purchased power under banking arrangement through Mittal Processors Private Limited whereby it had purchased power of 76.80 MU in July and August and has to return 83.45 MU in October, 2013. The Commission during its prudence check had found that though the Petitioner has considered the cost of such transaction such as open access charges transmission charges etc. but the units have not been considered in the power purchase cost or energy balance submitted by the Petitioner. It has also been observed that the units transacted under the banking arrangement as mentioned by the Petitioner were incorrect. The Commission had verified the units from the REA and the bills submitted by the Petitioner. The energy transacted during June and August reflected in the REA issued by WRPC is 7.75 MU which is considered by the Commission in the power purchase quantum. It is further observed from the REA of October, 2013, that the Petitioner has returned power of 8.21 MU in October, 2013 for the banking arrangement which has been considered in H2 of FY 2013-14 by the Commission.

The approved power purchase cost by the Commission as part of the review exercise does not include the additional/penal charges paid towards overdrawls/below allowable frequency under the UI mechanism. As per the CERC (Unscheduled Interchange charges and related matters) Principle Regulations and its amendments thereof and Press Notification issued by Ministry of Power on 23rd July, 2009 and after verification of the data submitted by the Petitioner, the Commission is mandated to disallow the additional UI charges of **Rs. 0.59 Crores** against the UI overdrawl/underdrawl beyond the allowed frequency for H1 of FY 2013-14 imposed on the utility under the UI regulations of CERC (as amended from time to time) and it will not be a pass through in the aggregate revenue requirement of the Petitioner for FY 2013-14.

The Commission has also verified the UI overdrawl figure from the reports of SRPC and WRPC and accordingly considered the UI overdrawl units and amount in the power purchase cost of April to September, 2013.

Accordingly, the power purchase cost approved for the FY 2013-14 (April to September) is shown in the table below:

Table 10: *Approved Power Purchase for FY 2013-14 (April to September)*

Sr. No.	Source	Purchase (MU)	FC (Rs. Crore)	VC (Rs. Crore)	Others (Rs. Crore)	Supplementary (Rs. Crore)	Total (Rs. Crore)
1	2	10	14	15	16	17	18
A	**Central Sector Power Stations**						
I	**NTPC**	**1,538.01**	**114.83**	**205.00**	**5.30**	**23.13**	**348.26**
	KSTPS	*792.78*	*44.06*	*77.59*	*3.27*	*7.82*	*132.75*
	VSTPS - I	*112.14*	*8.52*	*14.41*	*0.73*	*2.64*	*26.31*
	VSTPS - II	*50.72*	*3.32*	*6.14*	*0.32*	*1.41*	*11.19*
	VSTPS -III	*44.44*	*4.81*	*5.39*	*0.29*	*0.74*	*11.23*

Sr. No.	Source	Purchase (MU)	FC (Rs. Crore)	VC (Rs. Crore)	Others (Rs. Crore)	Supplementary (Rs. Crore)	Total (Rs. Crore)
	VSTPS-IV	*21.98*	*3.40*	*2.70*	*0.12*	*0.04*	*6.26*
	KGPP	*14.40*	*4.09*	*3.61*	*-*	*(2.20)*	*5.50*
	GGPP	*13.81*	*4.96*	*3.33*	*-*	*(2.34)*	*5.96*
	SIPAT- I	*73.64*	*10.43*	*12.03*	*0.32*	*4.37*	*27.15*
	FSTPS					*0.01*	*0.01*
	KSTPS-III	*18.92*	*3.07*	*1.90*	*0.08*	*0.47*	*5.51*
	TSTPS						*-*
	KHSTPS-I						
	RSTPS	*345.40*	*20.57*	*70.68*	*-*	*4.68*	*95.92*
	SIPAT- II	*41.05*	*5.10*	*6.94*	*0.17*	*0.57*	*12.78*
							-
							-
							-
							-
	Mouda	*0.99*	*2.50*	*0.28*		*0.00*	*2.78*
	Other Adjust-ments/Banking	*7.75*				*4.91*	*4.91*
							-
II	**RGPPL**	**13.94**		**12.20**			**12.20**
III	**NPCIL**	**94.30**		**24.39**	**-**	**-**	**24.39**
	KAPS	58.38		*14.00*			14.00
	TAPS	35.91		10.38			10.38
III	**OVERDRAWAL**	**77.75**					**16.10**
B	**Within State Generations**						
I	**CO-GENERA-TION**	**14.60**	**-**	**3.33**	**-**	**-**	**3.33**
	Goa Energy Private Limited	*11.79*		*2.66*			*2.66*
	Goa Sponge & Power Limited	*2.81*		*0.67*			*0.67*
							-
C	**IPP:**						
	Reliance Infra	***58.83***	***10.78***	***16.49***		***(1.61)***	***25.66***
			-	-	-	-	-
D	**OTHER CHARGES**	**-**	**-**	**-**	**-**	**61.73**	**61.73**
	PGCIL Transmission Charges, Wheeling, Open Access & Trading Margin & Other Charges					*61.73*	61.73
E	**Less: Additional UI Charges**						0.59
F	**Total**	**1,797.43**	**125.61**	**261.40**	**5.30**	**83.24**	**491.07**

Power Purchase quantum and cost for FY 2013-14 (October to March)

The Commission for power procurement from NTPC stations, NPCIL stations and power from co-generation plants for the period October, 2012 to March, 2013 has adopted the following approach.

➢ **Central Generating Stations – NTPC and NPCIL**

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

- Korba Super Thermal Power Station Stage 1, 2 and 3
- Vindhyachal Super Thermal Power Station Stage I, II, III and IV
- Kawas Gas Power Station
- Gandhar Gas Power Station
- Sipat Super Thermal Power Station Stage I & 2
- Ratnagiri Gas and Power Pvt. Ltd.
- Ramagundam Super Thermal Power Station Stage 1 and 2
- Mauda Super Thermal Power Station

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

- **Allocation of Share**: The Commission has considered the firm allocation and allocation from the unallocated quota from the above stations except Ramagundam STPS as per the notification of the Western Region Power Committee vide WRPC/Comml-I/6/Alloc/2013/2061 dated November 29, 2013. The allocation for Ramagundam STPS is considered as per the notification of the Southern Region power Committee vide SRPC/SE-I/54/UA/2013/9182-231 dated August 22, 2013.

- **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 three years (FY 2010-11 and FY 2011-12 and FY 2012-13). The Net energy sent out has been considered after reducing the applicable auxiliary consumption as per the CERC Tariff Regulation, 2009. The Commission has observed that RGPPL has not been scheduling power to its beneficiaries in the absence of fuel, during the period September to November. However, it is evident from the REA for December, 2013 that the energy units have been supplied in month. Accordingly, the availability of RGPPL has been considered for 4 months only

- **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 CERC Tariff Regulations, 2009. The Annual Fixed Charges for each stations 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 April 2013 to September 2013 submitted by the petitioner for consideration of the per unit variable charges for the FY 2013-14. The energy charges for RGPPL have been considered as per the invoice of October 2013.

- **Merit Order Dispatch**: Further, the NTPC stations have been subjected to merit order dispatch and accordingly the power purchase quantum and variable cost are approved. However, the fixed charges are approved for all stations.

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

Table 11: *Approved Power purchase quantum from NTPC stations under merit order dispatch for H2 of FY 2013-14*

Source	Capacity (MW)	Average PLF	Weighted Average Allocation		Gross Generation (MUs)	Auxilliary Consumption (%)	Net Generation (MUs)	Purchase (MUs)	PGCIL Losses (MUs)	Energy Available at Periphery
			%	MW						
KSTPS	2100	91.44	10.10%	212.07	8410	8.50%	7695	777.1	21.9	755.2
KORBA - III	500	86.13	1.09%	5.45	1886	6.50%	1764	19.2	0.5	18.7
VSTPS - II	1000	91.58	1.34%	13.37	4011	6.50%	3750	50.1	1.4	48.7
VSTPS -III	1000	91.58	1.14%	11.38	4011	6.50%	3750	42.7	1.2	41.5
VSTPS IV	500	85.00	1.31%	6.55	1862	6.50%	1741	22.8	0.6	22.2
VSTPS - I	1260	91.58	2.92%	36.80	5054	9.00%	4599	134.3	3.8	130.5
SIPAT - Stage I	1980	85.00	1.20%	23.79	7372	6.50%	6892	82.8	2.3	80.5
SIPAT Stage 2	1000	88.37	1.13%	11.32	3870	6.50%	3619	41.0	1.2	39.8
RSTPS	2100	91.68	4.76%	99.96	8433	7.20%	7826	372.5	45.6	326.9
RGPPL	1967	92.14	1.00%	19.67	7938	3.00%	7700	51.3	1.4	49.9
GGPP	657.39	70.51	1.92%	12.63	2030	3.00%	1969	37.8	1.1	36.8
KGPP	656.2	69.63	1.89%	12.37	2001	3.00%	1941	17.3	0.5	16.8
MSTPS I	500	85.00	1.31%	6.55	1862	6.50%	1741	-	-	-
Total	**15221**			**472**				**1649**	**82**	**1567**

Note: Part availability considered from KGPP and no availability considered for MSTPS under merit order

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

Table 12: *Approved Power purchase Cost for H2 FY 2013-14 from NTPC stations*

Source	Energy Available at Periphery	Fixed Charges (Rs Crores)	Variable Cost per Unit (H1 FY	Variable Charges (RS Crores)	Total Charges (Rs Crores)
KSTPS	755.16	41.68	97.87	76.05	117.74
KORBA - III	18.69	2.98	100.22	1.93	4.91
VSTPS - II	48.71	3.36	121.02	6.07	9.42
VSTPS -III	41.49	4.88	121.27	5.18	10.06
VSTPS IV	22.17	3.46	122.76	2.80	6.26
VSTPS - I	130.54	9.03	128.53	17.27	26.30
SIPAT - Stage I	80.47	9.36	163.35	13.53	22.89
SIPAT Stage 2	39.81	5.31	169.10	6.93	12.23
RSTPS	326.92	22.93	204.62	76.22	99.15
RGPPL	49.88	9.60	235.00	12.06	21.66
GGPP	36.77	5.01	241.55	9.14	14.15
KGPP	16.80	3.88	250.79	4.34	8.22
MSTPS I	-	4.26	280.23	0.00	4.26
Total	**1,567.40**	**125.74**		**231.51**	**357.25**

Note: Part availability considered from KGPP and no availability considered for MSTPS under merit order.

- **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
- Tarapur Atomic Power Station

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 Western Region Power Committee vide WRPC/Comml-I/6/Alloc/2013/2061 dated November 29, 2013
- *Gross Energy Availability:* The Commission has estimated the gross energy availability from the existing NPCL stations based on the installed capacity and the average Plant Load Factor for the past two years (FY 2011-12 and FY 2012-13) as recorded by CEA in its monthly generation reports. The Net energy sent out is considered after reducing the auxiliary consumption.
- *Energy Available to the Petitioner:* The effective share from the stations is applied on the energy sent out to arrive at the energy available for the petitioner from respective stations.

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

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

Accordingly, the Commission approves the following availability from NPCIL stations :

Table 13: *Approved Power purchase quantum from NPCIL stations under merit order dispatch*

Source	Capacity (MW)	Average PLF	Weighted Average Allocation		Gross Generation (MUs)	Auxilliary Consumption (%)	Net Generation (MUs)	Purchase (MUs)	PGCIL Losses (MUs)	Energy Available at Periphery
			%	MW						
KAPS	440	87.85	3.52%	15.47	1791	10.00%	1612	56.7	1.6	55.1
TAPS	1080	81.17	1.18%	12.73	3812	10.00%	3431	40.5	1.1	39.3
Total	**1520**			**28.21**				**97.1**	**2.7**	**94.4**

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

Table 14: *Approved Power purchase Cost for NPCIL Stations*

Source	Energy Available at Periphery	Fixed Charges (Rs Crores)	Variable Cost per Unit (H1 FY	Variable Charges (RS Crores)	Total Charges (Rs Crores)
KAPS	55.08	-	239.87	13.60	13.60
TAPS	39.31	-	289.10	11.69	11.69
Total	**94.39**	**-**		**25.29**	**25.29**

➢ **Co-Generation**

The petitioner has contracted Power from the following Co-Generation plants

- Goa Energy Private Limited
- Goa Sponge and power Limited

The Commission has considered the following assumptions for estimation of energy availability and Power Purchase cost from the above stations and has excluded Sesa Goa as per the submission of the Petitioner:

- **Energy Availability**: The energy availability has been considered as per the petitioner's submission.
- **Variable Charges**: The omission has considered the rates as per the actual rates during April, 2013 to September, 2013.
- **Merit Order Dispatch:** The Commission in order to promote the purchase from alternative sources of energy has considered these plants as must run stations and are not subjected to merit order dispatch.

Accordingly, the Commission has approved the following availability and cost for Co-Generation.

Table 15: *Approved Power purchase quantum and Cost for Co-Gen for H2 of FY 2013-14*

Source	Purchase (MUs)	Energy Available at Periphery	Fixed Charges (Rs Crores)	Variable Charges (RS	Total Charges (Rs Crores)
Goa Energy Private Limited	11.79	11.79	0	2.66	2.66
Goa Sponge & Power Limited	2.81	2.81	0	0.67	0.67
Total	**14.60**	**14.60**	-	**3.33**	**3.33**

➢ **IPP**

The petitioner has contracted Power from M/s Reliance Infrastructure Limited 48 MW Gas Based Combined Cycle Power Plant.

The Commission has observed that the Power purchased from the IPP in the past is in excess of Rs. 11.75 per unit. The Commission has deliberated on the concerns of high cost power from the IPP in its previous orders. The Petitioner still has not been able to justify such high cost purchases.

The Commission has considered the following assumptions for estimation of energy availability and Power Purchase cost from the above station:

- *Energy Availability:* The energy availability has been considered as per the petitioner's submission.
- *Fixed and Variable Charges:* The Commission has observed that the energy procured from the above station is at a very high rate as compared to energy available in competitive market in present scenario. The energy from the IPP is falling outside merit order dispatch. The Commission however has considered the fixed charges equivalent to actual fixed charges paid during April to September, 2013. The Petitioner would require to pay fixed charges even if the power is not scheduled. The approval of fixed charges is provisional and would be subject to determination of the tariff for the IPP by the Commission under section 62 of the Electricity Act, 2003.

- **The IPP falls out of the merit order, therefore only fixed cost has been allowed for FY 2012-13.**

Table 16: *Approved Power purchase quantum and Cost from IPP for H2 of FY 2013-14*

Source	Purchase (MUs)	Energy Available at Periphery	Fixed Charges (Rs Crores)	Variable Charges (RS	Total Charges (Rs Crores)
IPP- Reliance Infra	-	-	9.17	-	9.17
Total	**-**	**-**	**9.17**	**-**	**9.17**

➢ **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 for approving the Transmission charges for the period October to March, 2013. Accordingly, the Transmission charges for usage of the PGCIL network is approved at **Rs. 46.37 Cr.**

The petitioner also utilizes the network of KPTCL for wheeling the power scheduled from Ramagundam STPS. The wheeling charges payable as submitted by the petitioner are 2.5 paisa per unit that is pursuant to a contract between the petitioner and KPTCL. The Commission therefore approves **Rs. 0.93 Cr** as transmission charges payable to KPTCL for the power wheeled from the KPTCL network.

➢ **Power Purchase Cost Approved**

For determining the power purchase cost, merit order dispatch principle is applied as elaborated in the foregoing. 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 these plants to ascertain the merit order.

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

Table 17: *Power Purchase cost approved for October 13 to March 2014*

Source	Purchase (MUs)	PGCIL Losses	Energy Available at	Fixed Charges (Rs Crores)	Variable Charges (RS	Total Charges (Rs Crores)
NTPC	1,649.0	81.6	1,567.4	125.74	231.51	357.25
NPCIL	97.1	2.7	94.4	-	25.29	25.29
Co-Gen	14.60	-	14.60	-	3.33	3.33
IPP	-	-	-	9.17	-	9.17
Transmission Charges						47.30
Total	1,760.8	84.4	1,676.4	134.9	260.1	442.3

The power purchase cost thus allowed for the entire FY 2013-14 are summarized in the table below:

Table 18: *Power Purchase cost approved for FY 2013-14*[1]

Source	Approved in order dated March 31'2013		Revised Estimates FY 2013-14		Approved H1 FY 2013-14		Approved H2 FY 2013-14		Approved FY 2013-14	
	Purchase (MU)'s	Total Cost Rs Crores	Purchase (MU)'s	Total Cost Rs Crores	Purchase (MU)'s	Total Cost Rs Crores	Purchase (MU)'s	Total Cost Rs Crores	Purchase (MU)'s	Total Cost Rs Crores
NTPC (incl RGPPL)	3305	637.87	3162.0	741.8	1,552.0	360.46	1,649.03	357.25	3,200.98	717.70
NPCIL	199.9	51.38	188.6	48.8	94.3	24.39	97.13	25.29	191.43	49.68
Co-Gen	148.46	35.63	29.2	6.7	14.60	3.33	14.60	3.33	29.19	6.66
Renewable Energy	143.89	67.65	0.0	0.0	-	-	-	-	-	-
IPP		19.83	111.7	130.5	58.83	25.66	-	9.17	58.83	34.83
Traders			78.1	23.4		-			-	-
Overdrawl			79.2	16.7	77.75	15.50			77.75	15.50
Transmission Charges		97.5		119.8		61.73		47.30	-	109.03
Total	3796.8	909.86	3648.7	1087.7	1797.4	491.1	1760.8	442.3	3558.2	933.4

It may be noted that the variation in the approval of the Commission in the last order are broadly attributable to the following reasons

1. Variation of the sales admitted in this review;
2. Purchases from IPP during the first half of the FY 2013-14;
3. Non availability of power from Renewable sources as envisaged by the Commission;
4. Supplementary bills amounts to Rs. 23.31 Crores raised by NTPC on account of variation in CERC regulation/orders and supplementary charges like ED cess, green cess and FERV (foreign exchange rate variation) during first half of FY 2013-14;
5. UI under/over drawl which was not considered by the Commission in the Approved cost of Power purchase/sale of energy in tariff order dated March 13, 2013.

5.8 *Renewable Purchase 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 Commission as per its order dated January 2, 2014 has specified the RPO obligations of the utilities, and accordingly the RPO has been considered as 3% for FY 2013-14; 0.4% from solar and 2.60% from non-solar sources.

The Commission has considered the purchases from Co-generation plants vide its order on Petition No. 61/2012. The Petitioner has been procuring power these plants to fulfill its non-solar Renewable Power Obligation. However, the Petitioner has not met its solar purchase obligation since FY 2010-11.

The Commission vide its order dated October 25, 2013 in petition No. 61/2012, the Commission had given directions to the utility to meet its RPO for the respective years and comply with the same by March 31, 2014 failing which the Commission would be constrained to proceed under Regulation 4 of JERC (Procurement of Renewable Energy) Regulations, 2010 against the licensees/obligated entities. Therefore, ED-Goa has to strictly comply with the orders of the Commission and fulfill its RPO commitments for the respective years.

[1] The Commission has not approved purchase from IPP in view of MOD. However since this energy is already received in the system so cost of this energy following MOD principle has been allowed.

In the interest of the stakeholders, the Commission has provisioned the pending RPO obligations of the utility of the respective years in FY 2013-14, as the utility is required to meet its obligations by 31.03.2014. The RPO provisioning has been done assuming the fulfillment of RPO obligation through REC certificates. The Commission has considered the cost of such backlog for the years where the Commission has determined the ARR for ED-Goa, which is FY 2011-12 onward.

The pending RPO obligation for the complete FY 2013-14 has been provisioned assuming the fulfillment of RPO obligation through the purchase of REC certificates. This is in consideration of the fact that the utility has so far not been able to meet its RPO obligation through renewable energy purchase in energy terms.

The Commission in order to determine the RPO in terms of units has considered the approved sales for the years since FY 2011-12. The computation of cost of balance RPO since FY 2011-12 is shown in the table below

S. No.	Description	FY 2011-12	FY 2012-13	FY 2013-14
1	**Sales Within State**	2746.00	2886.00	2961.80
2	**RPO Obligation (in %)**			
	- Solar	0.30%	0.40%	0.40%
	-Non Solar	1.70%	2.60%	2.60%
3	**RPO Obligation (in MU)**			
	- Solar	8.24	11.54	11.85
	-Non Solar	46.68	75.04	77.01
4	**RPO Compliance (Actual Purchase)**			
	- Solar	0.00	0.00	0.00
	-Non Solar	119.12	71.65	29.19
5	**RPO Compliance (REC Certificate Purchase)**			
	- Solar	0.00	0.00	0.00
	-Non Solar	0.00	0.00	0.00
6	**Total RPO Compliance**			
	- Solar	0.00	0.00	0.00
	-Non Solar	119.12	71.65	29.19
7	**Shortfall in RPO Compliance**			
	- Solar	8.24	11.54	11.85
	-Non Solar	-72.44	3.39	47.81
8	**Cumulative Shortfall in RPO Compliance (MU)**			
	- Solar	8.24	19.78	31.63
	-Non Solar	-72.44	-69.05	-21.24
9	**Floor Price of REC Certificates /MWH**			
	- Solar			**9300.00**
	-Non Solar			**1500.00**
10	**Provision for RPO Compliance**			
	- Solar			**29.42**
	-Non Solar			**0.00**
	-Total			**29.42**

Therefore, the Commission has considered the above cost of Rs. 29.42 Crores towards fulfillment of the RPO over and above the power purchase cost approved at section 5.7 of this order. The Commission directs the utility to comply with the directions of the Commission and fulfill its RPO obligations, including the backlog of the previous years.

5.9 **Operation and Maintenance Expenses**

Operation & Maintenance expenses comprise of the following heads of expenditure viz.

- Employee Expenses
- Administration & General Expenses
- Repairs & Maintenance Expenses

Operation & Maintenance Expenses consists of three elements viz Employee Expenses, A&G Expense and R&M Expense:

- Employee expenses comprise of salaries, dearness allowance, bonus, terminal benefits in the form of pension & gratuity, leave encashment and staff welfare expenses.
- Administrative expenses mainly comprise of rents, telephone and other communication expenses, professional charges, conveyance and travelling allowances and other debits.
- Repairs and Maintenance Expenses go towards the day to day upkeep of the distribution network of the Company and form an integral part of the Company's efforts towards reliable and quality power supply as also in the reduction of losses in the system.

Employee Cost

Petitioner's submission

The Petitioner has computed the O&M **(Employee Expense)** expense for FY 2013-14 based on the actual employee expenses till October/November, 2013. Further ED-Goa has considered 20% increase in DA and 3% increment for revised estimation of employee expenses. The correspondence letter submitted to The Commissioner, Labour & Employment dated 15th November, 2013 for Fixation of Minimum Rates of wages in Government Department is provided at **Annexure VI: Minimum Rates Wage Letter**. The total employee cost is re-estimated at Rs. **165.00** Crores for FY 2013-14 as against approved figure of Rs. **148.64** Crores.

Commission's analysis

As per JERC Tariff Regulations -

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;

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;

The Commission had approved the Employee Cost in its dated June 27, 2012 by escalating the expenses of FY 2011-12 being the base year with the available WPI. Similarly as per the regulations stated above the employee expenses were escalated by the available WPI up to FY 2013-14 in the Commission's previous approvals. The Commission while approving the Employee expenses for FY 2012-13 has shown its concern for the high employee expenses. The Commission in its Tariff Order for FY 2012-13 had suggested that the petitioner should bring down its labor cost to bring it closer to the all India average. The Commission has also directed the Petitioner to conduct Employee Cost/Manpower study. The report on the

Manpower study has been submitted by the Petitioner, which is being scrutinized separately.

However, from submitted report, the Commission observes that the existing employees per thousand consumers in Goa is around 10 which is even higher as compared to 8.5 and 5 in Puducherry and Chandigarh respectively. The Commission also observes that ED-Goa is still having the employees such as draughtsman, mechanics, mason mistry, plumber, carpenter, turner/fitter, welder, daftry, lift operator, blue printer etc, which has no contribution to the mainstream business. The Commission is of the view that with development of technology, the requirement of employee per thousand consumers has decreased across utilities in India. In view of this, the existing sanctioned post needs review.

As regard to the Manpower study report the Commission therefore directs the petitioner to review sanctioned post benchmarking with the utilities in India, abolishing such unproductive posts (as indicated above).

The Petitioner has not submitted the true up for FY 2011-12 and FY 2012-13, therefore the Commission is not in a position to do a prudent check for the base year expenses. The Commission has therefore considered the approved figures of FY 2012-13 as the base for considering the expenses for FY 2013-14 which is in line with its approval in the order for FY 2013-14 dated March 31, 2013. The Commission, for the purpose of review, has revised its approval limited to the revision of WPI available on the website of the Economic Advisor, Ministry of Commerce and Industry for estimation of the increase in the average of WPI index. The WPI index so calculated for FY 2013-14 is 5.69%.

The Commission has therefore considered an escalation of 5.69% over the approved Employee expenses for FY 2012-13 of Rs. 136.44 Cr to approve the expenses for FY 2013-14. Accordingly, the Commission has approved the Employee Expenses for the review of FY 2013-14 at Rs. 144.21 Crores.

Accordingly the Commission has approved the Employee Expenses of Rs. 144.21 Crores as against the approved figures of Rs. 148.64 Crores approved in the Tariff order dated March 31, 2013.

A&G Expenses

Petitioner's submission

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

The Commission in the tariff order for FY 2013-14 had approved A&G expenses based on inflation over FY 2012-13. However ED-Goa would like to mention that the A&G expenses for the electricity department for the purpose of ARR is at much lower side. The actual expense for first six months period from April-September 2013 is Rs. **2.40** Crores.

Further ED-Goa has considered the revised budget estimates submitted to Government of Goa for the purpose of revised projections of FY 2013-14 in this petition. The A&G expenses based on provisional actuals and revised estimates for the year FY 2013-14 computes to Rs. **11.39** Crores. The Hon'ble Commission is requested to approve A&G expenses as per revised projections for FY 2013-14.

Commission's analysis

The Commission in its order dated March 31, 2013 had approved the A&G expenses of Rs. 9.36 Crores by escalating the A&G expenses approved for FY 2012-13 with the available

WPI. The petitioner has also submitted that the actual A&G expense for the first half of FY 2013-14 has been only Rs. 2.40 Crore which considering the approval of Rs. 9.36 Cr.

The Petitioner has not submitted the true up for FY 2011-12 and FY 2012-13, therefore the Commission is not in a position to do a prudent check for the base year expenses. The Commission has therefore considered the approved figures of FY 2012-13 as the base for considering the expenses for FY 2013-14 which is in line with its approval in the order for FY 2013-14 dated March 31, 2013. The Commission, for the purpose of review, has revised its approval limited to the revision of WPI available on the website of the Economic Advisor, Ministry of Commerce and Industry for estimation of the increase in the average of WPI index. The WPI index so calculated for FY 2013-14 is 5.69%.

The Commission has therefore considered an escalation of 5.69% over the approved A&G expenses for FY 2012-13 of Rs. 9.36 Cr to approve the expenses for FY 2013-14. Accordingly, the Commission has approved the A&G expenses for the review of FY 2013-14 at Rs. 9.08 Crores.

R&M Expenses

Petitioner's submission

ED–Goa has been carrying out various R&M activities as a step towards improvement of systems, reduction in breakdowns, reduction in response time and increasing preventive maintenance. The R&M activities carried out pertain to Plant & Machinery, Hydraulic works, civil works etc.

ED-Goa has actually incurred amount of Rs. **7.32** Crores in the first six months period from April-September 2013. Further ED-Goa has considered the revised budget estimates submitted to Government of Goa for the purpose of revised projections of FY 2013-14 in this petition. The R&M expenses based on provisional actuals and revised estimates for the year FY 2013-14 computes to Rs. **23.38** Crores. The Hon'ble Commission is requested to approve the R&M expenses based on the actual basis or may approve linked to gross fixed assets as is being done in other states.

Commission's analysis

The Commission had approved the R&M expenses in its dated June 27, 2012 by escalating the expenses of FY 2011-12 with the available WPI at Rs. 18.52 Crores.

The petitioner has submitted the R&M expenses for the first half of FY 2012-13 at Rs. 7.32 Crores and estimated the expenses of the second half at the Rs. 16.38 Crores. The Commission had sought clarification of the sudden increase estimated in the second half. The petitioner has replied to the above stated variation as follows

Quote

"It is submitted that majority of the payments and expenses are expected to be incurred in later half of the year and hence the expenses for H2 are on higher side.

Similarly the expenses for FY 2014-15 are projected based on the budget estimates for FY 2014-15. The projected expenses for FY 2014-15 are less if compared with WPI index over FY 2013-14 figures." ***Unquote***

The Commission does not find merit in the argument of the Petitioner as the R&M expenses in the second half are considered more than double as compared to the first half. R&M activities are continuous in nature and spread over the year whereby such huge variations are difficult to understand.

The Petitioner has also submitted the provisional actual figures of FY 2012-13 at Table 3-3 of its petition, which indicated that the actual R&M expenditure has been Rs. 18.94 Crores as against the Commission's approval for the same year at Rs. 18.55 Crores.

Further, The Petitioner has not submitted the true up for FY 2011-12 and FY 2012-13, therefore the Commission is not in a position to do a prudent check for the base year expenses.

In view of the foregoing, the Commission has therefore considered the approved figures of FY 2012-13 as the base for considering the expenses for FY 2013-14 that is in line with its approval in the order for FY 2013-14 dated March 31, 2013. The Commission, for the purpose of review, has revised its approval limited to the revision of WPI available on the website of the Economic Advisor, Ministry of Commerce and Industry for estimation of the increase in the average of WPI index. The WPI index so calculated for FY 2013-14 is 5.69%.

The Commission has therefore considered an escalation of 5.69% over the approved R&M expenses for FY 2012-13 of Rs. 18.55 Cr to approve the expenses for FY 2013-14. Accordingly, the Commission has approved the R&M expenses for the review of FY 2013-14 at Rs. 19.61 Crores.

Summary of O&M Expenses approved for FY 2013-14

The O&M expenses as submitted and approved for FY 2013-14 are as below:

Table 19: *O&M expenses approved by the Commission for FY 2013-14 (Rs. Cr)*

		FY 2013-14		
Sr. No.	Particulars	Approved vide order dated March 31, 2013	Revised Estimates	Approved
1	Employee Expenses	148.64	165.00	144.21
2	A&G Expenses	9.36	11.39	9.08
3	R&M Expenses	20.21	23.38	19.61
4	**Total O&M Expenses**	**175.74**	**199.77**	**172.90**

5.10 *Capital Expenditure and Capitalization*

Petitioner's submission

The Capital Work In Progress (CWIP), Gross Fixed Asset (GFA) and Depreciation are shown in the section below.

ED–Goa would like to submit that it in line with the Commission's directive it has submitted a detailed Capital Investment Plan to the Hon'ble Commission on 29th November, 2013 for the Hon'ble Commission's approval. However, for the ease of reference, ED–Goa hereby submits a gist on the Capital Expenditure & Capitalisation for the year FY 2013-14.

Sr. No.	Name of Scheme	Capex FY 14 (Rs. Crs)	Capitalization FY 14 (Rs. Crs)
1	Schedule Tribe Development Scheme & Scheduled castes development scheme (P)	20.00	20.00
2	Normal Development Schemes (Plan)	12.00	12.00
3	Erection of 220/33 KV 1X50 MVA Sub-Station at Cuncolim	3.00	58.34
4	Erection of 220 KV line from Xeldem to Cuncolim	2.00	7.40
5	Strengthening of 220 KV Transmission Network	8.00	4.50
6	Augmentation of Kadamba S/S from 2x40 MVA to 4x40 MVA (Plan) including new 110 KV line	0	0
7	Erection of 220/110/33/11 KV Sub-Station at Verna (New)	0	0

Sr. No.	Name of Scheme	Capex FY 14 (Rs. Crs)	Capitalization FY 14 (Rs. Crs)
8	Erection of 220 KV line from Ponda-Verna-Xeldem	0	0
9	APDRP (State Schemes)	25.00	25.00
10	Restructured Accelerated Power Development and Reforms Programme	5.00	0
11	Infrastructure Schemes through Electricity Duty Funds	120.96	55.70
12	Other Minor Schemes	11.42	8.50
13	Underground cabling scheme	20.00	0
	Total	**227.38**	**191.44**

As seen from the above table, the majority of the Capex incurred is for Infrastructure Schemes through Electricity Duty Funds, APDRP and R-APDRP. The total Capital Expenditure for FY 2013-14 as per revised estimates is Rs. **227.38** Crores. The detail of capital expenditure schemes for FY 2013-14 is provided in the **Format 5 of Tariff Filing Formats.**

Commission's analysis

The Commission observes that the capital expenditure and the capitalization submitted by the Petitioner for FY 2013-14 is required to meet the increasing demand in the licensee area.

The Petitioner has considered a capitalization of Rs. 191.44 Crores as against the approval of Rs. 192.77 Crores approved by the Commission for FY 2013-14 vide its order dated March 31, 2013.

The Petitioner has submitted the Capital investment plan which is under scrutiny with the Commission. Further, the Commission for the purpose of ARR computation, provisionally considers the capitalization of Rs. 192.77 Cr proposed by the Petitioner for FY 2013-14 subject to the scheme wise approval by the Commission.

5.11 **GFA and Depreciation**

Petitioner's submission

The Regulation 26 of JERC for the State of Goa and Union Territories (Terms and Conditions for Determination of Tariff) Regulations, 2009 provides for depreciation to be calculated. Further, as per the regulation, depreciation shall be calculated annually at the rate of depreciation specified by the JERC/CERC from time to time. Therefore, in line with the Regulation, ED–Goa has calculated the depreciation at Rs**. 16.00** Crores. The table below shows the working of Depreciation:

Sr. No	Particulars	FY 2013-14 (Rs.Crs)	FY 2013-14 (Rs.Crs)	FY 2013-14 (Rs.Crs)
		Projection	**Approved**	**Rev. Est**
1	Opening Value of Assets at the beginning of the year	207.30	207.30	207.30
2	Additions during the year	192.77	192.77	191.44
3	Value of assets sold/disposed off	-	-	-
4	Gross Fixed Assets at the end of year	**400.07**	**400.07**	**398.74**
5	**Rate of Depreciation**	**5.28%**	**5.28%**	**5.28%**
6	**Depreciation**	**16.03**	**16.03**	**16.00**

Commission's analysis

The Petitioner admittedly, at present does not have a reliable fixed asset register to support the claim for the opening Gross Fixed Assets and has not claimed the same for the purpose of computation of the depreciation. As such in the absence of updated fixed asset registers, the opening value of fixed assets is on assumption basis.

The Petitioner has submitted a sample fixed asset Register for FY 2007-08 for the consideration of the Commission. The Commission in this regard had found the following discrepancy in the fixed asset register:

1. The extent of physical verification of assets were not provided in the report.
2. The value of assets not in use and WDV of the assets were not mentioned in the report.

The Petitioner in this regard has submitted as follows:

Quote

"The petitioner submits that physical verification is not carried out for past assets as the Proforma Accounts for FY 2006-07 are finalized and audited and accepted by CAG. The petitioner hereby submits that the sample physical verification has been done for Assets Addition in FY 2007-08 only and was done keeping in mind the assets that were accessible. For example, the underground cable (which constituted a major chunk of the assets) could not be physically verified and also the energy meters and service cables installed in 2007-08 being verified in 2013-14 is also not feasible. Total Assets added during the year FY 2007-08 is of amount Rs. 929235848 and the value of assets verified is Rs. 139292017. This comes out to be 15% of the total assets installed in FY 2007-08. But if we consider the assets that cannot be physically verified as mentioned above, the total value of the verifiable assets comes out to be Rs. 552045104. Hence, the ratio of sample physically verified assets to the verifiable assets comes out to 25% for FY 2007-08. The table below shows the same:

Total Assets Acquired in FY 2007-08 and Assets verified

Sr. No.	Details of Asset	Assets Acquired during the year FY 2007-08	% of total Assets	Can be physically verified or Not
a	b	c	d	e
1	Land	24407009	3%	yes
2	Building	31033710	3%	yes
3	R.C.C Tanks	0	0%	yes
4	Plant & Machinery	106656109	11%	yes
5	Transformer above 100KVA	161547990	17%	yes
6	Transfomer below 100KVA	17146929	2%	yes
7	Static machine Tools	0	0%	yes
8	Self Propelled Vehicles	4455307	0%	yes
9	Switch Gear & S/s Equipments	27900007	3%	yes
10	Meters	36510917	4%	difficult to verify as may have been replaced
11	Office Furniture	473675	0%	yes
12	Office Equipments	804302	0%	yes
13	LT & HT Overhead Lines	90104539	10%	difficult to verify as may have been replaced
14	Lightning Arrestors	222405	0%	yes

Sr. No.	Details of Asset	Assets Acquired during the year FY 2007-08	% of total Assets	Can be physically verified or Not
15	Batteries	883561	0%	yes
16	Streetlight Fixtures	46694188	5%	difficult to verify as may have been replaced
17	Service Lines	3204456	0%	difficult to verify as may have been replaced
18	Under Groud Lines	377190744	41%	cannot be viewed as under ground
19	Others		0%	
	Total Assets verified:	**929235848**	100%	
	Total Verifiable assets:	**552045104**		
	Total Assets verified:	**139292017**		
	% Assets verified	**25%**		

The petitioner submits that it is practically difficult to identify the assets not in use at this moment in 2013/2014 that were commissioned in FY 2007-08 especially the lines, cables and meters which would have been damaged during this period of time. However, while physically verifying the assets, it was found that 1 power transformer of 40MVA presently not in use and kept in switchyard of Verna S/S. Its value while it became an asset was Rs. 19067276 and it was damaged in FY 2008-09.

Also, the stores has provided with the auctioned value of assets Rs. 419897 which were scraped in FY 2007-08, but details of assets i.e. date of commissioning, value of asset at the time of commissioning and the division it was installed was not provided. Hence this was assumed that these were included in the value of assets written off in FY 2007-8 because their useful life was over.

The fixed Assets Costing below Rs. 5,000/- each have been classified under 'Other assets', which should have been written off during the respective year of purchase, but such practice have not been carried by the department and such accumulated balance of other assets amounts to Rs. 7.23 crores as at 1st April, 2007, which is charged to Income & Expenditure Account for the year 2007-08 & due to this Profit for the FY 2007-08 has been reduced to that extent. The details of the asset written off are provided in the table below:

The Assets written off during FY 2007-08

Sr. No.	Details of Asset	Values of Asset whose life is over
a	**b**	**c**
1	Land	0
2	Building	0
3	R.C.C Tanks	0
4	Plant & Machinery	0
5	Transformer above 100KVA	335137
6	Transfomer below 100KVA	1398480
7	Static machine Tools	0
8	Self Propelled Vehicles	13321101
9	Switch Gear & S/s Equipments	490962
10	Meters	5139287
11	Office Furniture	183546
12	Office Equipments	130562
13	LT & HT Overhead Lines	0

Sr. No.	Details of Asset	Values of Asset whose life is over
14	Lightning Arrestors	96559
15	Batteries	73288
16	Streetlight Fixtures	8948394
17	Service Lines	0
18	Under Groud Lines	0
19	Others	72296237
Total		**102413553**

It is submitted that finalization of FAR & FS would be as per commercial principles duly audited by CAG/Statutory Auditor. Further ED-Goa would also refer FS/FAR of ED-DNH for its ongoing works pertaining to FY 2008-09 to FY 2012-13" **Unquote**

The Commission acknowledges the efforts of the Petitioner to compile the Fixed Asset Register for the previous years. The Commission directs the Petitioner to prepare the FAR in lines with the submitted report. The Commission is of the view that depreciation is a charge for use of assets deployed in rendering the service for which Tariff is being determined. Say total assets are Rs. 100 Cr, obsolete unusable assets are of Rs. 20 Cr plus assets written off plus assets not written off or not declared obsolete but not usable lying in store etc. cannot be considered for determination of tariff.

The asset that will qualify for depreciation is only the net value, which are deployed to provide service to the consumer. This value will be adjusted further for depreciation already claimed.

Therefore, the Commission suggests the following to be included in the report on best effort basis:

1. Assets under different functions bifurcated into assets deployed and rendering service and assets not in use/obsolete/scrapped.

2. Report on physical verification of assets where verification should be done for all major assets and atleast 30% of the remaining assets.

3. Historical value of assets and the depreciation claimed till date to ascertain the net value of assets should be included.

As per Regulation 26 of JERC Tariff Regulations, "depreciation shall be computed on historical cost of the assets including additions during the year".

Further, Regulation 22 mandates that "Investments made prior to and up to 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 present Petition the assets are cannot be verified in absence of the FAR and the audited accounts for the previous years. Therefore, the Commission in line with its approach and the petitioner's submission has not considered opening assets as on April 1, 2011. However, assets added during FY 2011-12 onwards, which were approved in the Commission's previous orders, had been considered provisionally for the computation of the ARR.

The addition of assets proposed under this review by the Petitioner almost same as that approved in the Commission's order for FY 2013-14 dated March 31, 2014. Therefore, the Commission has provisionally considered the asset addition for FY 2013-14 at Rs. 191.44 Crores as proposed by the Petitioner.

Regulation 26 of JERC (Terms and Conditions for Determination of Tariff) Regulations, 2009 specifies that depreciation for the assets 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 2013-14 has been considered as shown in the table below:

Table 20: *Depreciation approved by the Commission for FY 2013-14 (Rs. Cr)*

Sr. No.	Particulars	FY 2013-14	FY 2013-14	
		Approved in order dated March 31, 2013	Revised Estimates	Approved by the Commission
1	**Opening Value of Assets at the beginning of the year**	207.03	207.30	207.30
2	Additions during the year	192.77	191.44	191.44
3	GFA at the end of year	400.07	**398.74**	**398.74**
4	Rate of depreciation	5.28%	5.28%	5.28%
5	**Depreciation**	**16.03**	**16.00**	**16.00**

The Commission therefore approves depreciation as Rs. 16.00 Cr for the review of FY 2013-14.

5.12 *Interest and Finance Charges*

Petitioner's submission

The Regulation 29 provides for Interest and Finance Charges on Loan. ED-Goa has submitted that the majority of capital assets are created out of the equity contribution from Government of Goa and the actual borrowing of loan is only to the extent of the APDRP schemes. ED–Goa has also considered the Letter of Credit charges for claiming rebates on power purchase. The total Interest and Finance Charges for the year FY 2013-14 are Rs. 10.01 Crores. The table below shows the Interest and Finance Charges vis-a-vis approved by the Hon'ble Commission.

Sr. No	Particulars	FY 2013-14 (Rs.Crs)	FY 2013-14 (Rs.Crs)	FY 2013-14 (Rs.Crs)
		Projection	Approved	Rev. Est
1	Opening Normative Loan	87.72	136.29	89.41
2	Normative Additions during the year	-	134.94	-
3	Less: Loan Repayment	10.23	14.51	12.12
4	**Closing Normative Loan**	**77.49**	**256.72**	**77.29**
5	**Average Normative Loan**	**82.61**	**196.50**	**83.35**
6	Interest Rates - actual	7.99%	7.99%	10.45%
7	Interest on Loan	6.60	15.70	8.71
8	Finance Charges	1.00	1.00	1.30
9	**Interest on Loan & Finance**	**7.60**	**16.70**	**10.01**

Commission's analysis

As per the JERC tariff regulations 2009 -

"25. Interest and Finance Charges on Loan

(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.

(3) The interest rate on the amount of equity above 30% treated as loan shall be the weighted average rate of interest on loan capital of the generating company/licensee:

Provided that interest and finance charges of renegotiated loan agreements shall not be considered, if they result in higher charges:

Provided further that interest and finance charges on works in progress shall be excluded and shall be considered as part of the capital cost.

(4) Interest charges on security deposits, if any, made by the consumers with a generating company/licensee, shall be equivalent to the bank rate or at the rate, if any, specified by the Commission whichever is higher.

(5) In case any moratorium period is availed of, depreciation provided for in the tariff during the years of moratorium shall be treated as repayment during those years and interest on loan capital shall be calculated accordingly.

(6) The Commission shall allow obligatory taxes on interest, commitment charges, finance charges and any exchange rate difference arising from foreign currency borrowings, as finance cost.

(7) Any saving in costs on account of subsequent restructuring of debt shall be passed on to the consumers."

In the instant case, the licensee has not provided the actual value of fixed assets, Hence the servicing of assets in the form of interest on loan and return on assets is indeterminate at this stage on the opening GFA, hence interest and finance charges has not been considered on the assumed value of assets. The same shall be considered at true-up stage if full details are made available.

The Commission has considered a normative loan of Rs. 134.01 Cr for FY 2013-14 (being 70% of Rs. 191.44 Cr provisionally considered to be capitalized during FY 2013-14) to calculate the interest on normative loan amount. Commission has considered the weighted average interest rate of interest of 7.99% for the existing loans as approved in the Tariff order for FY 2013-14 dated March 31, 2013; which is subject to actual true up. The table below shows the computation of the normative interest for FY 2013-14 approved by the Commission:

Table 21: *Interest on normative loan approved by the Commission for FY 2013-14 (Rs. Cr)*

Sr. No.	Particulars (in Rs. Cr)	FY 2013-14	FY 2013-14	
		Approved by vide order dated March 31, 2013	Revised Estimates	Approved
1	2	3	4	5
1	Opening Normative Loan	136.29	89.41	136.29
2	Add: Normative Loan during the year	134.94	0	134.01
3	Less: Normative Repayment	14.51	12.12	13.63
4	Closing Normative Loan	256.72	77.29	256.67
5	Average Normative Loan	**196.50**	**83.35**	**196.48**
6	Rate of Interest	7.99%	10.45%	7.99%
7	**Interest on Normative Loan**	**15.70**	**8.71**	**15.70**

The petitioner has claimed interest on loans taken from PFC, however as the petitioner has not been able to substantiate the opening balance of fixed assets the Commission does not allow the interest expenses pertaining to formation of the Opening GFA of FY 2011-12 including interest on PFC loans. The Commission would consider the expenses at the time of truing up in accordance with the prevailing regulations supported with the legitimate fixed asset register and audited accounts.

The petitioner has proposed Rs. 1.3 Crores as LC charges as against the approval of Rs. 1.00 Crores approved for FY 2013-14. However, the Petitioner has not submitted any rationale for such variation. Therefore the Commission has restricted the LC charges to the approval vide its order dated March 31, 2013.

The Commission therefore approves the total interest and finance charges as Rs. (15.70+1.00) 16.70 Cr for the review of FY 2013-14.

5.13 *Interest on Working Capital*

Petitioner's submission

As per Regulation 29 of JERC for the State of Goa and Union Territories (Terms and Conditions for Determination of Tariff) Regulations, 2009, Interest on Working Capital for a licensee shall be the sum of the following for one month:

i) Power Purchase Cost.

ii) Employees Cost.

iii) Administration & General Expenses &

iv) Repair & Maintenance Expenses.

The Interest Rate is considered equivalent to the SBI PLR for the year FY 2013-14 which is at **14.45%.** In line with the aforesaid regulation, the Interest on Working Capital works out to Rs. **6.44** Crores for FY 2013-14.

Commission's analysis

As per Regulation 29 of JERC Tariff Regulations -

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."

The Commission has considered the calculation of the different components of the working capital, based on the above-stipulated norms and as per the values approved in the respective sections of this Order. In accordance with section 47(4) of the Electricity Act, 2003, the distribution licensee is required to pay interest on security deposit collected from the consumers. If this security deposit is invested in the form of interest earning fixed deposits or other similar instruments, the interest earned from such investment could be utilized to pay the interest to the consumers under section 47(4) of the Electricity Act, 2003. However, it is noted that the petitioner has not invested any of the security deposit held and the said amount is available to the petitioner. Accordingly, the Commission has allowed the interest payable to the consumer as expense in this order. Commission has considered the security deposit available with the Petitioner as a source to meet working capital requirements and has deducted this amount from the working capital requirement considered for interest for review of FY 2013-14.

The Commission had asked the Petitioner for the split of the consumer security deposit into bank guarantee, fixed deposit and cash forms, to which the Petitioner responded stating that the same is being compiled. However, the Petitioner has submitted vide letter dated February 3, 2014.

In absence of the audited accounts for FY 2012-13, the Commission has considered the security deposit amount as submitted by the Petitioner for the closing of FY 2012-13 for the purposes of this tariff order. The same would be revisited at the time of true-up based on actual data.

The Commission has considered the SBI advance rate of 14.45% as on April 4, 2013 for ARR of FY 2013-14. The details of submission of the Petitioner vis-a-vis approval of the Commission are given in the table below:

Table 22: *Interest on working capital approved by the Commission for FY 2013-14 (Rs. Cr)*

	FY 2013-14	FY 2013-14	
Particulars (In Rs. Cr)	Approved by the Commission	Revised Estimates	Approved
Power Purchase Cost for one month	75.82	90.64	77.09
Employee Cost for one month	12.39	13.75	12.02
A&G Expenses for one month	0.78	1.00	0.76
R&M Expenses for one month	1.68	1.95	1.63
Total Working Capital for one month	**90.67**	**107.33**	**91.49**
Closing Security Deposit (amount already with ED Goa)	79.03	62.77	64.95
Total Working Capital considered for one month	**11.65**	**44.57**	**26.54**
SBI PLR Rate	14.45%	14.45%	14.45%
Interest on Working Capital	**1.68**	**6.44**	**3.84**

The Commission therefore approves the interest on working capital as Rs. 3.84 Cr for the review of FY 2013-14.

5.14 *Interest on Security Deposit*

Petitioner's submission

The Regulation 25 of JERC for the State of Goa and Union Territories (Terms and Conditions for Determination of Tariff) Regulations, 2009 provides for Interest on Security Deposit, if any, made by the consumer with the licensee. The provision of interest on security deposits is to be made at the bank rate. The prevailing Bank rate is considered at **8.75%** as notified by Reserve Bank of India vide circular dated 29th October, 2013. The notification of RBI is provided at **Annexure VII: RBI Bank Rate Notification.**

In lieu of the above, Interest on Security Deposit is calculated at Rs. **5.49** Crores.

Commission's analysis

As per Section 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*.

The Commission for the review of the FY 2013-14 has considered the interest payable on the average security deposit available in the previous year i.e. FY 2012-13. The Commission has considered the submission dated February 3, 2014 for the security deposit held for FY 2012-13 in the absence of the audited accounts. The Commission has considered the security deposit available in cash only. The Commission has therefore considered the following computation for interest on consumer security deposit for FY 2013-14.

Table 23: *Interest on Security Deposit approved by the Commission for FY 2013-14 (Rs. Cr)*

	FY 2013-14	FY 2013-14	
Particulars (In Rs. Cr)	Approved by the Commission	Revised Estimates	Approved
Opening Security Deposit	70.24	62.77	64.95
Add: Deposits during the Year	9.62	16.54	9.62
Less: Deposits refunded	0.84	2.06	0.84
Closing Security Deposit	**79.03**	**77.25**	**73.73**
Bank Rate	8.75%	8.75%	8.50%[2]
Interest on Security Deposit	**6.15**	**5.49**	**5.42**

5.15 *Return on capital base/Net fixed assets*

Petitioner's submission

The proviso of Regulation 23 (2) and Regulation 24 of Tariff Regulations, 2009 provides for entitlement for Returns on Capital Base/Net Fixed Assets by utility/licensee. Thus, in line with the regulation and the methodology adopted by the Hon'ble Commission in its previous order, ED–Goa has calculated the return on capital base at 3%.

Commission's analysis

ED–Goa is an integrated utility in its present form as defined in Regulation 2(9) of the JERC Tariff Regulations and ED–Goa is not restructured and corporatized till date. As of now, it is an integrated utility and 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

[2] Bank Rate prevailing as on April 1, 2013 i.e. 8.50%.

consideration of either return on capital base or return on equity is the audited Annual Accounts and assets & depreciation registers. ED-Goa has not been maintaining adequate information. The same has also been discussed in treatment of this component in the previous chapter.

As discussed in the section on 'GFA and Depreciation', the Commission has allowed additional capitalization FY 2013-14. Further the Commission has also allowed the GFA for the year in FY 2011-12 and FY 2012-13 in its previous order which cumulatively forms the opening GFA for the FY 2013-14. The Commission has accordingly considered Rs. 207.30 Cr as the gross block at the beginning of FY 2013-14 and accumulated depreciation of Rs. 12.13 Cr, resulting in the net fixed assets of Rs. 195.17 Cr at the beginning of FY 2012-13. The Commission, therefore, approves the return on capital base of Rs. 5.86 Cr @ 3% on the net fixed assets at the beginning of FY 2013-14. The table below shows the computation of the return on capital base as approved by the Commission.

Table 24: *Return on Capital base approved by the Commission for FY 2013-14 (Rs. Cr)*

Sr. No.	Particulars (In Rs. Cr)	FY 2013-14	FY 2013-14	
		Approved vide order dated March 31, 2013	Revised Estimates	Approved
1	Gross block at beginning of the year	207.30	207.30	207.30
2	Less accumulated depreciation	12.13	12.13	12.13
3	**Net fixed assets at beginning of the year**	**195.17**	**195.17**	**195.17**
4	**Reasonable return @ 3% of NFA**	**5.86**	**5.86**	**5.86**

5.16 *Provision for Bad & Doubtful debts*

Petitioner's submission

The Petitioner has not claimed any provision towards bad and doubtful debts.

Commission's analysis

As specified in Regulation 28 of JERC Tariff Regulations (to be read with the format):

*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 Cr)
1.	2.	3.
1.	*Amount of receivable bad and doubtful debts (audited)*	
2.	*Provision made for debts in ARR*	

The Commission is of the view that bad and doubtful debts actually written off, limited to 1% as per the regulations, would be considered only after the availability of audited accounts and would be taken up at the time of the true-up of the ARR.

Table 25: *Provision for bad debts approved by the Commission for FY 2013-14*

Particulars	FY 2013-14 Petitioner's Submission	FY 2013-14 Approved
Provision for bad and doubtful debts	Not Claimed	NIL

The Commission has not considered the provision for bad & doubtful debts for ARR of FY 2013-14 and would consider it in true up as per the provisions of the regulations.

5.17 *Other expenses*

Petitioner's submission

The petitioner has estimated expenses of Rs. **0.56** Crores for FY 2013-14. This expense pertains to the salaries of the members, domestic travel expenses, office expense, advertisement etc. The Hon'ble Commission is requested to approve the CGRF expenses for FY 2013-14.

Commission's analysis

The Commission observes that the expenses of Rs. 0.56 Crores projected are towards the salaries of the members of the CGRF and the associated expenses. **The Commission considers the expenses as reasonable and approves Rs. 0.56 Crores for the review of FY 2013-14.**

5.18 *Non-Tariff Income*

Petitioner's submission

Non-Tariff Income comprises of proceeds from sale of dead stock, waste paper, Receipt from State Electrical Inspectorate & other miscellaneous receipts. The Non-Tariff Income for the year FY 2013-14 comes to Rs. **22.55** Crores which is in line with the Non-Tariff Income approved by the Hon'ble Commission of Rs. 22.53 Crs.

Commission's analysis

The Commission had approved the Non-Tariff income for the FY 2013-14 at Rs. 22.53 Crores in its order for FY 2013-14. The Petitioner has submitted the revised estimates at Rs. 22.55 Crores, which is in line with the Commission's approval. **Therefore, the Commission approves the Non-Tariff Income of Rs. 22.55 Crores for the Review of FY 2013-14.**

5.19 *Revenue from Sale of Surplus Power*

Petitioner's submission

The petitioner on actual basis in the first half of FY 2013-14 has earned revenue from sale of surplus power (through UI) of Rs**. 5.09** Crores.

Commission's analysis

The Commission has verified the amount earned through UI for April to September 2013, from the data available at SRPC and WRPC website. The Commission has found that the UI revenue for both regions for underdrawl of energy to be Rs. 8.38 Crores. Further, the Commission has not considered any UI transactions for the second half of FY 2013-14. Accordingly, the Commission has considered **Rs. 8.38 Crores** for UI underdrawl.

5.20 *Aggregate Revenue Requirement (ARR) for FY 2013-14*

Commission's analysis

The Commission has considered and approved ARR for the review of FY 2013-14 based on the items of expenditure and revenue discussed in the preceding sections and the same has been summarized in the table below.

Table 26: *Aggregate Revenue Requirement (ARR) approved by the Commission for the Review of FY 2013-14 (Rs. Cr)*

Sr. No.	Particulars (In Rs. Cr)	FY 2013-14	FY 2013-14	
		Approved by the Commission	Revised Estimates	Approved
1	Cost of power purchase	909.86	1,087.69	933.41
2	Employee costs	148.64	165.00	144.21
3	R&M expenses	20.21	23.38	19.61
4	Administration and general expenses	9.36	11.39	9.08
5	Depreciation	16.03	16.00	16.00
6	Int and Finance Charges	16.70	10.01	16.70
7	Interest on Working Capital	1.68	6.44	3.84
8	Interest on Security Deposit	6.15	5.49	5.42
9	Return on NFA	5.86	5.86	5.86
10	Provision for Bad Debts		-	
11	Other Expenses	1.02	0.56	0.56
12	**Total Revenue Requirement**	**1,135.52**	**1,331.82**	**1,154.68**
13	Less: Non-Tariff Income	22.53	22.55	22.55
14	Less: Revenue from Sale of Power - UI Pool		5.09	8.38
15	Provision for RPO Obligation for previous years		-	29.42
16	Less: Revenue from Sale/Banking of Power		-	
17	**Aggregate Revenue Requirement**	**1,112.99**	**1,304.18**	**1,153.17**

The Commission therefore approves the Aggregate Revenue Requirement at Rs. 1,153.17 Cr for the Review of FY 2012-13.

5.21 *Revenue at existing tariff for FY 2012-13*

Petitioner's submission

The provisional actual revenue from sale of power including FPPCA charges for H1 of FY 2013-14 is Rs**. 502.20** Crores.

The estimated revenue from sale of power for H2 of FY 2013-14 is Rs. **514.31** Crores. The FPPPA Charges for 2nd Qtr (July to Sep 2013) to be levied in Nov 2013, Dec 2013 & Jan 2014 is negative & negligible & hence not considered for H2 estimation purposes.

Commission's analysis

The Commission has considered the actual for the period April, 2013 to September, 2013 submitted by the Petitioner. The Commission has approved the category wise sales for the second half of FY 2013-14 as elaborated in the Para 5.3 of this order. Accordingly, the Commission has considered the revenue from existing tariff for FY 2013-14 that is shown in the table below:

Table 27: *Revenue at existing tariff approved by the Commission for FY 2013-14 (Rs. Cr)*

Category/Consumption Slab	FY 13-14 (H1)		FY 13-14 (H2)		FY 2013-14	
	Sales (MU)	Revenue (Rs. Crores)	Sales (MU)	Revenue (Rs. Crores)	Sales (MU)	Revenue (Rs. Crores)
Low Tension Supply	**561**	**136**	**686**	**167**	**1247**	**174**
Tariff LTD/Domestic and Non - Commercial	**358**	**73**	**442**	**79**	**800**	**79**
First 60 Units	75		93	11.43	168	11
61 - 250 Units	215		265	44.05	480	44
251 Units - 500 Units	54		66	18.01	120	18
Above 500 Units	14		18	5.62	32	6
Tariff LTD/Low Income Group	**1**	**0.52**	**1**	**0.21**	**3**	**1**
Tariff LTD/Domestic Mixed	**3**	**1**	**3**	**1**	**5**	**1**
First 400 Units	2		2	0.56	4	1
Above 400 Units	0		0	0.17	1	0
Tariff LTC/Commercial	**132**	**44**	**160**	**56**	**291**	**56**
First 100 Units	64		79	24.16	143	24
100 Units - 1000 Units	59		72	28.29	131	28
Above 1000 Units	9		9	3.77	17	4
Tariff LTP/Motive Power	**39**	**11**	**50**	**22**	**89**	**22**
Connected Load Upto 50 HP	2		3	0.94	5	1
Connected Load Above 50 HP	37		48	21.39	84	21
Tariff-LTP/Mixed (Hotel Industries)	**2**	**0.93**	**3**	**1.06**	**5**	**2**
Tariff LTP/Ice Manufacturing	**4**	**1.32**	**4**	**1.18**	**8**	**3**
Tariff-LTAG/Agriculture	8	1.48	8	1.23	16	3
Tariff-LTPL/Public Lighting	12	2.92	12	3.69	24	7
Tariff-LT PWW/Public Water Works	3	0.31	3	1.16	6	1
High Tension Supply	**857**	**343**	**858**	**345**	**1715**	**576**
Tariff HT-Mixed	56	22.52	56	24.62	111	47
Tariff HTI/Industrial	314	121.07	314	141.29	629	262
H.T.Industrial (Ferro Metallurgical/ /Steel Melting/Power Intensive)	**266**	**93**	**266**	**95**	**532**	**95**
First 300 Units/kVA	144		144	49.57	288	50
Next 200 Units/kVA	101		101	37.41	202	37
Above 500 Units/kVA	21		21	8.41	43	8
Tariff-HTAG/Agriculture	3	0.44	3	0.45	5	1
EHTI/Industrial	92	32.03	92	38.45	184	70
H.T. PW/Public Water Supply and Sewage	69	24.81	69	23.66	139	48
H.T. MES/Defense Establishments	12	4.66	12	4.20	25	9
H.T. Industrial (Steel Rolling)	**29**	**19**	**30**	**10**	**59**	**10**
First 200 Units/kVA	21		21	6.54	42	7
Next 100 Units/kVA	7		7	2.42	14	2

Category/Consumption Slab	FY 13-14 (H1)		FY 13-14 (H2)		FY 2013-14	
	Sales (MU)	Revenue (Rs. Crores)	Sales (MU)	Revenue (Rs. Crores)	Sales (MU)	Revenue (Rs. Crores)
Above 300 Units/kVA	2		2	0.76	4	1
Tariff HT-Industries (IT High Tech)	10	20.10	10	3.15	20	23
Tariff HT-Industries (ICE)	0	0.10	0	0.11	0	0
Temporary Supply						
Tariff-LT/Temporary	5	5.24	5	3.87	10	9
Tariff-HT/Temporary	0	0.08	0	0.00	0	0
Hoardings/Sign Boards	0					
Total Demand/Sale Within State/UT	**1,418**	**479**	**1,544**	**511.85**	**2,962**	**990.36**

The Commission accordingly approves the revenue from existing tariff at Rs. 990 Crores for the Review of FY 2013-14. Further, the petitioner has also considered the revenue from FPPCA levied on the consumer. The total FPPCA charge estimated to be levied during FY 2013-14 is Rs. 23.68 Crores. The Commission has therefore considered the amount of Rs. 23.68 Crores in addition to the revenue estimated from sale of power.

Therefore, the Commission approves the Revenue from sale of power including FPPCA charge at Rs. 1014 Crores (990 + 23.68FPPCA).

5.22 *Revenue Gap at existing tariff for FY 2013-14*

Commission's analysis

The revenue gap worked out for the Review of FY 2013-14 is Rs. 139.12 Crores based on the aggregate revenue requirement of Rs 1153.17 Cr and the revenue from existing tariff of Rs. 1014 Cr.

The petitioner has submitted that the entire gap for FY 2013-14 is committed to be funded by the Hon'ble Government of Goa by way of budgetary support. The petitioner in this regard has also submitted the letter from Government of Goa wherein the Government of Goa has assured to provide requisite budgetary support to meet the deficit at the existing tariff for FY 2013-14. In view of the budgetary support for FY 2013-14 from the Government of Goa, there is no net revenue gap for FY 2013-14 to be carried forward for FY 2014-15.

Table 28*: Revenue Gap at existing tariff approved by the Commission for FY 2013-14 (Rs. Cr)*

Particulars	Approved by the Commission vide order dated March 31, 2013	Review for FY 2013-14	
		Revised Estimates	Approved
Aggregate Revenue Requirement	1,112.99	1,304.18	1,153.17
Revenue from Existing Tariff including FPPCA	981.11	1016.51	1014.05
Gap/(Surplus)	131.88	287.66	139.12
Budgetary Support from Govt. of Goa	131.88	287.66	139.12
Net Revenue Gap/(Surplus)	-	-	-

6. Aggregate Revenue Requirement (ARR) for FY 2014-15

6.1 *Background*

The ARR Petition for FY 2014-15 was filed by ED-Goa before the Commission on 13th January, 2014 as per the relevant provisions mentioned in the JERC Tariff Regulations.

The Commission has taken into consideration the following for ARR and tariff determination for FY 2014-15:

i. Approved ARR for the FY 2012-13 by the Commission vide its order dated March 31, 2013

ii. Estimates submitted by the Petitioner for FY 2014-15

iii. Review for FY 2013-14 approved by the Commission

6.2 *Analysis of Aggregate Revenue Requirement of FY 2014-15*

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, depreciation etc. Revised estimates/pre-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 is discussed in the following paras:

- Assessment of Energy Requirement
  - i. Sales Projections
  - ii. Loss Trajectory
  - iii. Energy Balance
  - iv. Power Purchase Sources
- Assessment of the Aggregate Revenue Requirement
  - i. Power Purchase Costs & Transmission Charges;
  - 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

As per the regulation No. 13 of JERC Tariff Regulations,

"

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."

6.3 Consumers, Connected Load and Energy Sales

Petitioner's Submission

The consumer base of Goa comprises of HT Industry, LT Industry, Commercial and Domestic consumers with the maximum consumption attributable to Domestic Consumers. ED–Goa foresees a minimal growth in LT category in the near future. Therefore ED–Goa has considered a minimal increase of 0.5% increase in number of consumers and in the load for LT Categories over the previous year. Further ED-Goa has considered 7% growth in energy sales in LT category and around 4% in HT category from its existing and new consumer base. The table below shows category wise number of consumers, corresponding connected load and energy sales for the FY 2014-15.

Commission's analysis

Consumers

The past trends of the number of consumers from FY 2010-11 to FY 2013-14 as per the available data have been analysed. The Commission has considered the 3 years CAGR growth rate on the approved values of FY 2013-14 to project the number of consumers for FY 2014-15. The Commission has considered a zero growth rate, wherever the 3 year CAGR was negative.

The approved number of consumers for FY 2014-15 vis-à-vis the petitioner's submission has been tabulated below:

Table 29: *Number of consumers approved by the Commission for FY 2014-15*

Sr. No.	Category of Consumer	FY 2014-2015	
		Petitioner's Submission	Approved
1(a)	Tariff LTD/Domestic and Non-Commercial	451850	446515
1(b)	Tariff LTD/Low Income Group	14576	14321
1(c)	Tariff LTD/Domestic Mixed	51	51
2	Tariff-LTC/Commercial	96754	96414
3 (a)	Tariff-LTP/Motive Power	9751	9622
3 (b)	Tariff-LTP/ Ice Manufacturing	45	45
3 c)	Tariff-LTP/Mixed (Hotel Industries)	126	126
4	Tariff-LTAG/Agriculture	11291	11105
5	Tariff-LTPL/Public Lighting	9238	9466
6	Tariff-LT PWW/Public Water Works	560	553
B	High Tension Supply		
7	Tariff HT-Mixed	204	206
8 (a)	Tariff HTI/Industrial	469	493
8 c)	Tariff HTI/Ice Manufacturing	2	2
9	H.T.Industrial (Ferro Metallurgical/Steel Melting/Power Intensive)		
	TOTAL	26	26
10	Tariff-HTAG/Agriculture	43	42
11	EHTI/Industrial	4	4
12	H.T. PW/Public Water Supply and Sewage	32	31
13	H.T. MES/Defense Establishments	12	13
14	H.T. Industrial (Steel Rolling)		0
	TOTAL	13	14
15	Tariff HT-Industries (IT High Tech).	8	8
C	Temporary Supply		
16	Tariff-LT/Temporary	4173	4173
17	Tariff-HT/Temporary		
	TOTAL	599232	593230

Connected Load

The Commission in its approval for the review of FY 2013-14 has noted the variation in the connected load in the tariff categories to be highly varied from the FY 2012-13 figures. The Petitioner in the technical validation session had indicated the variation to be on account of updation of the record. The Commission in this regard has given appropriate directions at Para

5.3 of this order. In view of the above the historical trends cannot be used to ascertain the growth rates due to sudden variation. Therefore the Commission has considered the Petitioner's estimates of connected load.

Energy Sales

The Commission has analysed the past trends of the sales from FY 2009-10 to FY 2013-14. The 4 years CAGR (from 2009-10 to 2013-14) has been applied on the approved sales for the FY 2013-14 to arrive at the approved sales for FY 2014-15. The modified 4 years CAGR has been considered normally whereas in case the CAGR is negative, then zero growth is assumed for the consumer class. The Commission has considered the sales for the FY 2013-14 as approved in this order under the Review.

Consumers under the LTD/LIG – Low Income Group category are allowed a connected load of two 40Watts bulbs = 2 X 40 = 80 W only as per the approved Tariff Schedule. Considering this as the basis, consumption of each consumer under the LIG category works out to be 175.2 (2x40x6x365/1000) kWh per consumer per year taking average usage of 6 hrs. Per day which is considered adequate.

The Petitioner has claimed consumption of 24MUs for 14321 consumers in this category, thereby giving an average consumption of 1693 units/consumer/year. The Petitioner has not furnished any basis for arriving at the consumption assessed for such unmetered consumption.

The Commission, therefore, adopts the assessed consumption of 175.2 unit/year/consumer arrived by the Commission as explained above. On the basis of this, the Commission approves the sales for the LTD/LIG consumers at 2.51 MU.

The Commission has further considered the sales within slabs in the proportion as proposed by the Petitioner. The approved Sales for the FY 2014-15 are shown in the table below:

Table 30: *Energy Sales approved by the Commission for FY 2014-15*

Sr. No.	Category of Consumer	FY 14-15 (Proposed)	FY 14-15 (Approved)
A	**Low Tension Supply**	**1359**	**1293**
1(a)	Tariff LTD/Domestic and Non - Commercial	**856**	**841**
	First 60 Units	180	177
	61 - 250 Units	514	504
	251 Units - 500 Units	128	126
	Above 500 Units	34	34
1(b)	Tariff LTD/Low Income Group	24	**3**
1(c)	Tariff LTD/Domestic Mixed	**6**	**5**
	First 400 Units	5	4.36
	Above 400 Units	1	0.97
2	Tariff LTC/Commercial	**314**	**291**
	First 100 Units	153	142
	100 Units - 1000 Units	140	130
	Above 1000 Units	21	19
3	Tariff LTP/Motive Power	**95**	**94**
	Connected Load Upto 50 HP	5	5
	Connected Load Above 50 HP	90	89
3(a)	Tariff-LTP/Mixed (Hotel Industries)	5	**5**
3 c	Tariff LTP/Ice Manufacturing	8	**8**
4	Tariff-LTAG/Agriculture	18	**16**
5	Tariff-LTPL/Public Lighting	26	**24**
6	Tariff-LT PWW/Public Water Works	7	**7**

Sr. No.	Category of Consumer	FY 14-15 (Proposed)	FY 14-15 (Approved)
B	**High Tension Supply**	**1,818**	**1785**
7	Tariff HT-Mixed	118	**112**
8	Tariff HTI/Industrial	666	**655**
9	H.T.Industrial (Ferro Metallurgical/ Steel Melting/ Power Intensive)	**565**	**555**
	First 300 Units/kVA	305	300
	Next 200 Units/kVA	215	211
	Above 500 Units/kVA	45	44
10	Tariff-HTAG/Agriculture	**6**	**5**
11	EHTI/Industrial	195	**192**
12	H.T. PW/Public Water Supply and Sewage	147	147
13	H.T. MES/Defense Establishments	26	**25**
14	H.T. Industrial (Steel Rolling)	**63**	**61**
	First 200 Units/kVA	44	44
	Next 100 Units/kVA	14	14
	Above 300 Units/kVA	4	4
15	Tariff HT-Industries (IT High Tech).	21	**21**
16	Tariff HT-Industries (ICE).	1	**1**
C	**Temporary Supply**		
17	Tariff-LT/Temporary	11	11
18	Tariff-HT/Temporary	0	0
19	**Total Demand/ Sale Within State/UT**	**3,177**	**3,078**

6.4 *Intra-Transmission & Distribution Loss*

Petitioner's submission

As mentioned earlier, ED–Goa has been taking up efforts to reduce the Distribution Loss to an optimum level. Various works under APDRP has drastically reduced the outages and the AT&C losses. The bifurcation of the feeders, new Sub-Stations has also helped in improving the voltage profile and reliability of power supply. Augmentation of the capacities of the Sub--Stations has helped in releasing additional loads to the consumers and consequent increase in revenue.

The distribution losses considered for FY 2014-15 are **12.25%**. It may be noted that the distribution losses for the State of Goa are comparatively lower than many other state utilities and also competitive. ED-Goa expects that post the completion of various works carried out under Capital Expenditure; it would be in a better position to reduce the losses further.

Commission's analysis

Commission observes the submissions made by the Petitioner for FY 2014-15 is at higher level than that of FY 2013-14 approved in tariff order dated March 31' 2013. The Petitioner has not provided adequate basis for consideration of such increased loss levels.

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 based on any other information available and its own judgment.

The Petitioner has not submitted the energy audit report for the entire licensed area. However, the Petitioner has submitted an energy audit report for sample feeders. In the absence of energy audit, the Commission is not accepting the claim of the licensee. Therefore, the Commission has considered a normative reduction of 0.50% for the FY 2014-15.

Table 31: *Intra-transmission losses & distribution losses approved by the Commission for FY 2014-15*

Particulars	FY 2013-14 Approved	FY 2014-15 Petitioner's Submission	FY 2014-15 Approved
Intra-transmission and distribution losses	12.00%	12.25%	11.50%

6.5 *Inter-State Transmission Loss*

Petitioner's submission

As explained in the previous chapter, PGCIL losses are because of two regions – Western Region (WR) and Easter Region (ER). Hence, while computing the Energy Requirement, losses from both the regions has been considered. The transmission loss for WR & SR for FY 2014-15 have been considered at 3.66% and 9.50% respectively.

Commission's Analysis

The Commission has considered the actual percentage of inter-state transmission losses for Western Region and Southern region recorded in the first half of FY 2013-14 as detailed in the Para 5.5 of this order. **The Commission would like to mention here that the actual interstate losses as recorded by the WRLDC and SRLDC would be considered at the time of true up. Accordingly, the Commission has considered losses for purchases from western region and southern region at 2.84% and 12.24% respectively.**

Since the Commission has considered the merit-order dispatch principles (discussed in detail in the section of Power Purchase Cost) the inter-state transmission losses in terms of the quantum of units have only been allowed to the extent required to meet the energy requirement in the State. The inter-state transmission losses approved are 170.77 MU. The transmission charges have been allowed, as they are fixed in nature and the utility would have to pay for them irrespective of the units procured from the generator. The same is discussed in the following section of power purchase for FY 2014-15.

6.6 *Power Purchase Quantum and Cost for FY 2014-15.*

Petitioner's submission

The merit order dispatch principles are typically adopted while determining the power purchases from various generating stations. However, in case of ED-Goa since most of the power is tied-up through long term PPAs it has to purchase all the power that is available at its disposal. ED–Goa proposes to meet the energy requirement from Central Sector Stations, Co-generation, and IPPs etc. Due to the dynamic load profile & urgency in the system, ED-Goa may be required to purchase power from open market whenever there is shortage. During off-peak hours there is surplus available with ED-Goa and also due to unpredictable changes in demand the available power is disposed to exchanges. However ED-Goa tries to schedule less power during off-peak hours from the allocated quota to avoid commercial loss to the extent possible.

Power purchase from Central Sector Stations: The majority of power procurement of ED–Goa comes from Central Sector Stations which is around 80-85%. In absence of LGBR for FY 2014-15, ED-Goa has projected same quantum of FY 2013-14 for FY 2014-15. It is submitted that due to recent coal crisis, even some of the central sector stations are also facing problems of running plant to optimum capacity. Share from Mouda Power station has been taken as approved by Commission in FY 2013-14 T.O. considering full power availability.

Further due to long term PPAs with CGS on RTC basis, there is surplus power available to ED-Goa during off-peak period. ED-Goa has been taking every possible step to avoid commercial loss and accordingly schedules less power from CGS quota.

Power Purchase from Renewable Energy: As discussed in earlier chapter para **0** and **Table 4-15**, about meeting total RPO from non-solar by way of co-generation power purchases.

Power Purchase from Co-generation: It is submitted that considering the share of ED-Goa from the existing co-generation plants viz. Goa Energy Private Ltd., and Goa Sponge Private Ltd., the power purchase for FY 2014-15 is projected at same level as of FY 2013-14. Further there has been delay in arranging power from another co-generation plant M/s. Sesa Goa Limited due to Government approval process for signing final PPA. It is expected that the power would be available in FY 2014-15 and accordingly **55.00** MUs have been considered from M/s. Sesa Goa Ltd.

Power Purchase from Reliance IPP: It is submitted that subsequent to JERC Letter on Reliance IPP matter dated 1-10-2013, ED-Goa will purchase power from Reliance, till 15^{th} August, 2014 the last date of validity of PPA.

Power Purchase from Open Market/Traders: It is submitted since ED-Goa would not be availing power from Reliance IPP post expiry of PPA in mid-August 2014, there would be shortage during peak period (morning and evening). ED-Goa shall be procuring such power from open market/traders/exchange. It is estimated that ED-Goa would procure **297.35** MUs for FY 2014-15 as balancing figure to energy balance.

The table below shows the Power purchase for FY 2014-15 submitted by the Petitioner.

Table 32: *Summary of Power purchase cost submitted by the petitioner (FY 2014-15)*

Sr. No.	Source	Purchase (MU)	External losses (%)	Energy recd. by Licensee (MU)	FC (Rs. Crore)	VC (Rs. Crore)	Total (Rs. Crore)
A	Central Sector Power Stations						
I	NTPC	3,158.75		3,494.50	251.65	465.89	717.54
	KSTPS	*1,585.55*		3,494.50	*89.84*	*166.82*	*256.65*
	VSTPS - I	*224.27*			*19.49*	*30.99*	*50.48*
	VSTPS - II	*101.43*			*7.32*	*13.20*	*20.52*
	VSTPS -III	*88.89*			*10.67*	*11.59*	*22.26*
	VSTPS - IV	*43.96*			*5.60*	*5.80*	*11.40*
	KGPP	*28.81*			*10.18*	*7.77*	*17.95*
	GGPP	*27.61*			*12.16*	*7.17*	*19.33*
	SIPAT- I	*147.28*			*20.11*	*25.86*	*45.98*
	KSTPS-III	*37.84*			*6.26*	*4.08*	*10.33*
	RSTPS	*745.40*			*49.29*	*163.97*	*213.25*
	SIPAT- II	*82.11*			*11.67*	*14.93*	*26.60*
	Mouda	*45.60*			*9.05*	*13.74*	*22.79*
II	RGPPL	*27.88*			-	*8.36*	8.36
		-					
III	NPCIL	*188.60*			-	*51.21*	51.21
	KAPS	*116.77*				*29.41*	29.41
	TAPS	*71.83*				*21.80*	21.80
		-					
IV	Traders	297.35			-	89.20	89.20
	Open Market/Other Traders	*297.35*				*89.20*	89.20
					-		
B	Within State Generations						
I	CO- GENERATION	84.19		84.19	-	19.86	19.86
	Goa Energy Private Limited	*23.57*		23.57		*5.32*	*5.32*
	Goa Sponge & Power Limited	*5.62*		5.62		*1.35*	*1.35*
	Sesa Goa Limited	*55.00*		55.00		*13.20*	*13.20*
C	IPP:	-			-		
	Reliance Infra	*41.88*		41.88	*7.44*	*42.69*	*50.13*
D	OTHER CHARGES	-					129.22
	PGCIL Transmission Charges, Wheeling & Other Charges	-					129.22
E	Total	3,798.64		3,620.57	259.08	677.23	1,065.53

Commission's View

The following approach has been adopted by the Commission for approving the power procurement from NTPC stations, NPCIL stations and power from co-generation plants.

➢ **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 Stage 1, 2 and 3
- Vindhyachal Super Thermal Power Station Stage I, II, III and IV
- Kawas Gas Power Station
- Gandhar Gas Power Station
- Sipat Super Thermal Power Station Stage I & 2
- Ratnagiri Gas and Power Pvt. Ltd.
- Ramagundam Super Thermal Power Station Stage 1 and 2
- Mauda Super Thermal Power Station

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

- **Allocation of Share**: The Commission has considered the firm allocation and allocation from the unallocated quota from the above stations except Ramagundam STPS as per the notification of the Western Region Power Committee vide WRPC/Comml--I/6/Alloc/2013/2061 dated November 29, 2013. The allocation for Ramagundam STPS is considered as per the notification of the Southern Region power Committee vide SRPC/SE--I/54/UA/2013/9182-231 dated August 22, 2013.

- **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 available past three years (FY 2010-11 and FY 2011-12 and FY 2012-13). The Net energy sent out has been considered after reducing the applicable auxiliary consumption as per the CERC Tariff Regulation, 2009. The Commission has observed that RGPPL has not been scheduling power to its beneficiaries in the absence of fuel, during the period September to November. However, it is evident from the REA for December, 2013 that the energy units have been supplied in month. Accordingly, the availability of RGPPL has been considered for the year.

- **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 2014-15 from the NTPC stations:

- **Fixed Charges:** The fixed charges of the central generating stations are governed by the tariff order issued by CERC under the tariff regulation issued by CERC. The CERC has issued the Tariff Regulations for the period 2014-19 under which the tariff orders for each station are yet to be issued by CERC. Therefore, the annual fixed charges are considered based on the formula specified for the stations in the CERC Tariff Regulations, 2009. The Annual Fixed Charges for each stations have been taken as per the Tariff orders for FY 2013-14 for the respective stations.

- **Variable Charges:** The Commission has considered the average variable cost for the period April, 2013 to September 2013 submitted by the petitioner for consideration of the per unit variable charges for the FY 2014-15. The energy charges for RGPPL has been considered as per the invoice of October, 2013.

- **Merit Order Dispatch**: NTPC stations have been subjected to merit order dispatch and accordingly the power purchase quantum and variable cost are approved. However, the fixed charges are approved for all stations.

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

Table 33: *Approved Power purchase quantum from NTPC stations under merit order dispatch*

Source	Capacity (MW)	Average PLF	Weighted Average Allocation		Gross Generation (MUs)	Auxilliary Consumption (%)	Net Generation (MUs)	Purchase (MUs)	PGCIL Losses (MUs)	Energy Available at Periphery
			%	MW						
KSTPS	2100	91.44	10.11%	212.36	16820	8.50%	15391	1,554.2	43.9	1,510.3
KORBA - III	500	86.13	1.12%	5.59	3772	6.50%	3527	38.5	1.1	37.4
VSTPS - II	1000	91.58	1.36%	13.56	8022	6.50%	7501	100.2	2.8	97.4
VSTPS -III	1000	91.58	1.16%	11.58	8022	6.50%	7501	85.4	2.4	83.0
VSTPS IV	500	85.00	1.34%	6.69	3723	6.50%	3481	45.6	1.3	44.3
VSTPS - I	1260	91.58	2.94%	37.06	10108	9.00%	9198	268.7	7.6	261.1
SIPAT - Stage I	1980	85.00	1.23%	24.33	14743	6.50%	13785	165.6	4.7	160.9
SIPAT Stage 2	1000	88.37	1.15%	11.51	7741	6.50%	7238	81.9	2.3	79.6
RSTPS	2100	91.68	0.00%	0.00	16865	7.20%	15651	745.0	91.2	653.8
RGPPL	1967	92.14	1.00%	12.63	15876	3.00%	15400	154.0	4.3	149.6
GGPP	657.39	70.51	1.92%	12.63	4060	3.00%	3939	75.7	2.1	73.5
KGPP	656.2	69.63	1.89%	12.37	4003	3.00%	3882	55.6	1.6	54.0
MSTPS I	500	85.00	1.34%	6.69	3723	6.50%	3481	-	-	-
Total	**15221**			**367**				**3370**	**165**	**3205**

Note: Part dispatch considered from KGPP and no dispatch considered from Mouda STPS under the merit order principles.

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

Table 34: *Approved Power purchase Cost from NTPC stations*

Source	Energy Available at Periphery	Fixed Charges (Rs Crores)	Variable Cost per Unit (H1 FY	Variable Charges (RS Crores)	Total Charges (Rs Crores)
KSTPS	1,510.32	83.36	97.87	152.11	235.47
KORBA - III	37.38	5.97	100.22	3.86	9.82
VSTPS - II	97.42	6.72	121.02	12.13	18.85
VSTPS -III	82.97	9.76	121.27	10.35	20.12
VSTPS IV	44.34	6.92	122.76	5.60	12.52
VSTPS - I	261.08	18.06	128.53	34.53	52.60
SIPAT - Stage I	160.94	18.72	163.35	27.05	45.77
SIPAT Stage 2	79.63	10.61	169.10	13.86	24.47
RSTPS	653.83	45.85	204.62	152.44	198.30
RGPPL	149.65	19.20	235.00	36.19	55.39
GGPP	73.53	10.02	241.55	18.28	28.30
KGPP	54.00	7.77	250.79	13.94	21.70
MSTPS I	-	8.53	280.23	-	8.53
Total	**3,205.10**	**251.48**		**480.34**	**731.82**

➢ **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
- Tarapur Atomic Power Station

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

- **Allocation of Share**: The Commission has considered the firm allocation and allocation from the unallocated quota from the above stations as per the notification of the Western Region Power Committee vide WRPC/Comml--I/6/Alloc/2013/2061 dated November 29, 2013.
- **Gross Energy Availability:** The Commission has estimated the gross energy availability from the existing NPCL stations based on the installed capacity and the average Plant Load Factor for the past two years (FY 2011-12 and FY 2012-13) 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 2014-15:

- **Variable Charges:** The Commission has considered the average variable cost for the period April, 2013 to September, 2013 submitted by the petitioner for consideration of the per unit variable charges for the FY 2014-15.
- **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 :

Table 35: *Approved Power purchase quantum from NPCIL stations under merit order dispatch*

Source	Capacity (MW)	Average PLF	Weighted Average Allocation		Gross Generation (MUs)	Auxilliary Consumption (%)	Net Generation (MUs)	Purchase (MUs)	PGCIL Losses (MUs)	Energy Available at Periphery
			%	MW						
KAPS	440	92.92	3.52%	15.47	3582	10.00%	3223	113.4	3.2	110.2
TAPS	1080	80.59	1.18%	12.73	7624	10.00%	6862	80.9	2.3	78.6
Total	**1520**			**28.21**				**194.3**	**5.5**	**188.8**

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

Table 36: *Approved Power Purchase Cost for NPCIL Stations*

Source	Energy Available at Periphery	Fixed Charges (Rs Crores)	Variable Cost per Unit (H1 FY	Variable Charges (RS Crores)	Total Charges (Rs Crores)
KAPS	110.15	-	239.87	27.19	27.19
TAPS	78.62	-	289.10	23.39	23.39
Total	**188.77**	**-**		**50.58**	**50.58**

➢ **Co-Generation**

The petitioner has contracted Power from the following Co-generation plants

- Goa Energy Private Limited
- Goa Sponge and Power Limited
- Sesa Goa
- **Energy Availability**: The energy availability has been considered as per the petitioner's submission.
- **Variable Charges**: The variable charges have been considered as per the actual of April to Sepetember, 2013.
- **Merit Order Dispatch:** The Commission has considered these plants as must run stations and are not subjected to merit order dispatch.

Accordingly, the Commission has approved the following availability and cost for Co-generation.

Table 37: *Approved Power purchase quantum and Cost for Co-generation*

Source	Purchase (MUs)	Energy Available at Periphery	Fixed Charges (Rs Crores)	Variable Charges (RS	Total Charges (Rs Crores)
Goa Energy Private Limited	23.57	23.57	0	5.32	5.32
Goa Sponge & Power Limited	5.62	5.62	0	1.35	1.35
Sesa Goa	55.00	55.00	0	13.20	13.20
Total	**84.19**	**84.19**	**-**	**19.86**	**19.86**

➢ **IPP**

The Commission has shown its concern over the high cost in each of the previous years assessed before. However, for the purpose of this order the Commission has considered the availability and cost as considered by the Petitioner. The purchases from the IPP falls out of the merit order. However, as the petitioner is under obligation for the PPA the fixed charges would be payable to the IPP even if the power is not drawn. Therefore, the Commission has considered the fixed cost provisionally of Rs. 7.44 Crores (As the PPA with the IPP is only till August, 2014). The fixed charges approved are Provisional and subject to approval of the Tariff of the IPP by the Commission under the section 62 of the Electricity Act, 2003 and actual payment to the IPP by the petitioner.

➢ **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 3.90% of total energy purchase for sale to the consumers in its area as power purchase from renewable sources for FY 2014-15 including 0.60% for Solar and 3.30% for Non-Solar.

The Commission has floated the draft amendments to the JERC (Procurement of Renewable Energy) Regulations, 2010 for comments. The Commission has finalized the amendment and sent the same for publication to Controller of Publications, Ministry of Urban Development on

February 20, 2013. In the finalized petition, the Commission has amended the definition of Renewable Energy Sources under Regulation 2 (p) as follows:

Quote

"Renewable Energy Sources" means Electricity generating sources recognized or approved by the Ministry of New and Renewable Energy and includes bundled power purchase (to the extent of Renewable Energy content in the bundled Power), power generated from co-generation based power plant wherein the fuel used is non-fossil fuel duly recognized as renewable sources by MNRE and certified by the State accredited agency."

Unquote

The Commission has considered the above finalized regulations pending notification of the amendments. The power availed by ED-Goa through the co-generation plants are fossil fuel based which cannot be considered under RE sources.

Therefore, the Commission has considered the RPO obligation through REC certificates at Rs. 4.00 and Rs. 9.00 per unit for non-solar and solar respectively. However, the Petitioner can explore alternatives for fulfillment of RPO that would be considered at the time of true-up.

Table 38: *Approved Power purchase quantum and Cost from Renewable Energy Sources*

Source	Purchase (MUs)	PGCIL Losses	Energy Available at Periphery	Fixed Charges (Rs Crores)	Variable Charges (RS	Total Charges (Rs Crores)
Non Solar	-	-	-	-	12.47	12.47
Solar	-	-	-	-	17.18	17.18
Total	-	-	-	-	29.64	29.64

- **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 L-1/44/2013-CERC dated 31-12-2013 applicable from January, 2014 to March, 2014 for approving the Transmission charges. Accordingly, the Transmission charges for usage of the PGCIL network are approved at **Rs. 92.75 Cr.**

The petitioner also utilizes the network of KPTCL for wheeling the power scheduled from Ramagundam STPS. The wheeling charges payable as submitted by the petitioner are 2.5 paisa/unit which is pursuant to a contract between the petitioner and KPTCL. The Commission therefore approves **Rs. 1.86 Cr** as transmission charges payable to KPTCL for the power wheeled from the KPTCL network.

Accordingly, the total Transmission charges approved for the FY 2014-15 are Rs. 94.61 Crores:

- **Power Purchase Cost Approved**

For determining the power purchase cost, merit order dispatch principles are applied as elaborated in the foregoing. 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 these plants at the top of the merit order.

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

Table 39: *Power Purchase cost approved for FY 2014-15*

Source	Purchase (MUs)	PGCIL Losses	Energy Available at	Fixed Charges (Rs Crores)	Variable Charges (RS	Total Charges (Rs Crores)
NTPC	3,370.4	165.3	3,205.1	251.48	480.34	731.82
NPCIL	194.3	5.5	188.8	-	50.58	50.58
Co-Gen	84.19	-	84.19	-	19.86	19.86
Renewable Energy Obligation					29.64	29.64
IPP	-	-	-	7.44	-	7.44
Transmission Charges						94.61
Total	3,648.8	170.8	3,478.1	258.9	580.4	934.0

6.7 *Energy Balance*

Petitioner's Submission

Accordingly the Energy Balance for the year FY 2014-15 is computed and presented in the table below:

Sr. No.	Item	Apr-Mar (Proj) - WR	Apr-Mar (Proj) - SR	Apr-Mar (Proj) WR + SR
		FY 2014-15	FY 2014-15	FY 2014-15
1	2	3	4	5
1	Retail Sales to Consumers			3,177
	Add: Distribution Losses - %			12.25%
	Distribution Losses - MUs			444
2	**Net Energy Requirement at Goa Periphery**			**3,621**
3	**Total Power Scheduled at Goa Periphery**			
	Scheduled Power from NTPC, RGPPL, NPCIL & RSTPS	2,630	745	3,375
	Add: Power from Open Market during peak	297	-	297
	Less: (Surplus Power diversion to exchange during off-peak)	-	-	-
	Total	**2,927**	**745**	**3,673**
4	**Less: PGCIL Losses - %**	3.66%	9.50%	4.85%
	PGCIL Losses - MUs	107	71	178
5	**Total Power Purchased within Goa State**			
	Add: Co-generation	84	-	84
	Add: Renewable Energy Sources	-	-	-
	Add: Independent Power Producers (IPP)	42	-	42
	Total	**126**	**-**	**126**
6	**Energy Input at Periphery after PGCIL Losses & State Power Purchase**	**2,946**	**675**	**3,621**

Commission's analysis

The Commission has approved the 3478.06 MU that would be required to meet the energy requirement within the state to the retail consumers, assuming distribution losses of 11.50% on the approved sales of 3078.09 MU. The Commission has considered the merit order dispatch principles to meet the energy requirement within the State. Accordingly, only the power purchase units as required to meet the requirement within the territory have been considered i.e. 3478.06 million units and after considering the inter-state transmission losses of 170.77 million units, the net power purchase effectively arrived at 3648.84 million units. In accordance with the consideration of merit order dispatch principles for estimation of purchase of power; energy sale outside the State through the common pool/UI has not been allowed by the Commission for FY 2014-15. The approved energy balance for the FY 2014-15 is shown in the table below:

Table 40: *Energy balance approved by the Commission for FY 2014-15*

Sr. No.	Particulars	FY 14-15 (Proposed)	FY 14-15 (Approved)
A)	**ENERGY REQUIREMENT**		
1	**Sales within the State/UT**	3,177.05	3,078.09
2	**Distribution losses**		
i)	%	**12.25%**	**11.50%**
ii)	MU	443.52	399.98
3	**Energy required at State Periphery for Sale to Retail Consumers**	**3,620.57**	**3,478.06**
4	**Add: Sales to common pool consumers/ UI**		
5	**Total Energy Requirement for State**	**3,620.57**	**3,478.06**
6	**Transmission losses**		
i)	%	**4.69%**	**4.68%**
	MU	178.07	170.77
8	**Total Energy at Generator end**	**3,798.64**	**3,648.84**
B)	**ENERGY AVAILABILITY / PURCHASED**		
1	Net thermal generation **(Own+ IPP + Share from Central Stations)**	**3,501.29**	**3,648.84**
a	Share from Central Sector (NTPC + NPCIL)	3,375.22	3,564.64
b	IPPs	41.88	-
c	Co-generation within State (GEPL, GSPL & Sesa)	84.19	84.19
2	Net hydel generation (own+shared)		
3	**Power Purchased from**	**297.35**	**-**
	a) Common Pool/UI/ OD		
	b) Traders/Exchanges	297.35	
	c) Renewable Energy Sources		
	d) Banking Arrangement (NVVN)		
4	**Net power purchase**	**3,798.64**	**3,648.84**
5	**Net Availability**	**3,620.57**	**3,478.06**

6.8 *Operation and Maintenance Expenses*

Operation & Maintenance expenses comprise of the following heads of expenditure viz.

- Employee Expenses
- Administration & General Expenses
- Repairs & Maintenance Expenses

The Petitioner maintains its accounts on cash basis. Further, the Petitioner has submitted that it does not maintain its accounts purely in the above categorisation of O&M heads. It has various heads such as salaries, medical treatment, domestic travelling, office expense, other charges towards supply materials; minor repair works etc. which are categorised into O&M heads for the purpose of Aggregate Revenue Requirement.

Employee Cost

Petitioner's submission

The expense head of employee cost consists of salary and allowance, bonus, Leave Travel Concession (LTC) & Honorarium etc. For the year FY 2014-15, ED-Goa has projected the employee cost by escalating the Employees Expense for previous on the basis of Wholesale Price Index.

Commission's analysis

As per JERC Tariff Regulations—

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;

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;

The Commission has approved employee cost as Rs. 144.21 Cr for review of FY 2013-14 for reasons explained therein. The latest WPI index till January, 2014 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 and considering the increase in WPI of FY 2013-14 over FY 2012-13) employee Cost for FY 2014-15 works out to Rs. 152.42 Crores. **The Commission considers the employee cost of Rs. 152.42 Crores for FY 2014-15.**

Table 41: *Employee expenses approved by the Commission for FY 2014-15 (Rs. Cr).*

Particulars	FY 2013-14 Approved	Fy 2014-15 Petitioner's Submission	FY 2014-15 Approved
Employee Expenses	144.21	177.14	152.42

A&G Expenses

A&G expenses comprise of the following broad sub-heads of expenditure, viz.

- Domestic Travelling Expenses, Office Expenses
- Legal, Regulatory & Consultancy Fees
- Insurance etc.

Petitioner's submission

A&G expenses comprise of the following broad sub-heads of expenditure, viz.

- Domestic Travelling Expenses, Office Expenses.

- Legal, Regulatory & Consultancy Fees.
- Insurance etc.

The details of A&G expenses estimated for FY 2014–15 as per Budget Estimates are provided in the table below:

Sr. No.	Particulars	FY 2014-15 (Rs.Crs)
		Projection
1	Rent, rates & taxes	0.41
2	Domestic Travel Allowances	0.69
3	Office Expenses	5.00
4	Regulatory Expenses (License + Petition Fees)	1.58
5	Advertisement & Publicity	0.81
6	Legal, Professional & Special Service Charges	0.60
7	Other A&G Charges	0.88
8	Other material related expenses	-
9	**Total**	**9.97**

Commission's analysis

The Commission has considered A&G expenses as Rs. 9.08 Crores for Review of ARR for FY 2013-14 for reasons explained therein. In line with the JERC Tariff Regulations 2009, taking Rs. 9.08 Crore for FY 2013-14 and applying escalation of 5.69% (for reasons explained above in section of employee expenses), the A&G expense works out at Rs. 9.60 Crores for FY 2014-15.

The Commission considers the A&G expenses of Rs. 9.60 Crores as reasonable and approves the same for FY 2014-15.

Repair & Maintenance Expenses

Petitioner's submission

In line with methodology adopted in FY 2013-14, ED-Goa has projected R&M expenses as submitted to Government of Goa in Budget Estimates. ED-Goa has been undertaking various Repairs and Maintenance activities as a step towards improvement of systems, reduction in breakdowns, reduction in response time and increasing preventive maintenance.

Commission's analysis

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 R&M expenses as Rs. 19.61 Crores for Review of ARR for FY 2013-14 for reasons explained therein. In line with the JERC Tariff Regulations 2009, taking Rs. 19.61 Crores for FY 2013-14 and applying escalation of 5.69% (for reasons explained above in section of employee expenses), the R&M expense works out at Rs. 20.73 Crores for FY 2014-15.

The Commission considers the R&M expenses of Rs. 20.73 Crores as reasonable and approves the same for FY 2014-15.

Summary of O&M Expenses approved for FY 2014-15.

The O&M expenditure estimated by the Petitioner vis-à-vis approved by the Commission for FY 2014-15 is given below:

Table 42: *O&M expenses approved by the Commission for FY 2014-15*

Sr. No.	Particulars	FY 2014-15	
		Estimates	Approved
1	Employee Expenses	177.14	152.42
2	A&G Expenses	9.97	9.60
3	R&M Expenses	24.71	20.73
4	**Total O&M Expenses**	**211.82**	**182.75**

6.9 *Capital Expenditure and Capitalisation*

Petitioner's submission

ED–Goa would like to submit that in line with the Commission's directive it has submitted a detailed Capital Investment Plan to the Hon'ble Commission for its approval.

ED–Goa proposes to incur an amount of Rs. 288.3 Crores towards Capital Expenditure, out of which the works proposed to be incurred from the Electricity Duty Reserve/Fund Accounts are estimated to be Rs. 100 Crores. The total capitalization of the assets from the above capital expenditure is projected at Rs. 127.50 Crores for FY 2014-15.

Commission's analysis

The Commission observes that the capital expenditure and the capitalization submitted by the Petitioner for FY 2014-15 is required to meet the increasing demand and augmentation of the existing network.

The treatment of the capital expenditure and capitalisation is the same as discussed in the chapter on Review for FY 2013-14. As per the Regulations 21 of JERC for the State 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 ongoing projects separately that will spill into the ensuing year and new projects (along with their justification) that will commence in the ensuing year. The Petitioner has submitted the capital investment plan as per the regulations, which is being considered separately for the approval.

However, for the purpose of the ARR for FY 2014-15 the Commission has considered the capitalisation of Rs. 127.50 Crores as submitted by the Petitioner.

6.10 *GFA and Depreciation*

Petitioner's submission

The Opening Balance of GFA for FY 2014-15 comes to around Rs. **398.74** Crores. The additions to GFA are estimated to be around Rs. **127.50** Crores

Commission's analysis

GFA and Capitalisation

The petitioner admittedly, at present does not have a reliable fixed asset register to support the claim for the opening Gross Fixed Assets for FY 2011-12 and has not claimed the same for the purpose of computation of the ARR. The Commission is of the view that fixed assets register records the asset wise details and various types of information can be extracted from the same including the aging schedule of the asset, present value and capital works in progress etc. As such in the absence of updated fixed asset registers, the opening value of fixed assets is on assumption basis.

As per Regulation 26 of JERC Tariff Regulations, "*depreciation shall be computed on historical cost of the* assets *including additions during the year"*.

Further, Regulation 22 mandates that *"Investments made prior to and up to 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 addition, in the absence of audited accounts from FY 2007-08, the opening value of the assets is on an assumption basis and is not allowed.

The Petitioner has projected the addition of assets of Rs. 127.50 Cr for FY 2014-15. The Commission, considering the reasonableness of the expenditure approves the capitalization of Rs. 127.50 Cr for FY 2014-15. This amount is the net addition to the assets on the approved closing balance of FY 2013-14 of Rs. 398.74 Cr, resulting in the closing GFA approved for FY 2014-15 of Rs. 526.24 Cr.

Table 43: *Gross Fixed Assets approved by the Commission for FY 2014-15*

Sr. No.	Particulars	*FY 2013-14*	*FY 2014-15*	
		Approved by the Commission	Estimates	Approved by the Commission
1	**Opening Value of Assets at the beginning of the year**	207.30	398.74	398.74
2	Additions during the year	191.44	127.50	127.50
3	Value of assets sold/disposed off			
4	**Gross Fixed Assets at the end of year**	**398.74**	**526.24**	**526.24**

<u>Depreciation</u>

In the absence of the Fixed Asset Register and the audited accounts for the previous years, the Petitioner has not considered any depreciation on the opening value of gross fixed assets of FY 2011-12. The Commission has accordingly considered the depreciation on the addition to the fixed assets for the FY 2014-15 on the closing GFA approved for FY 2013-14, taken as the opening GFA for FY 2014-15.

Further, 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 effective rate of depreciation for distribution assets is 5.28% vide Appendix-III (Depreciation schedule of CERC (Terms and Conditions of Tariff) Regulations, 2009. As a standard practice, and as per the Regulation 26 of the JERC Tariff Regulations, depreciation is computed on the average value of assets at the end of the year, which is reasonable and appropriate method. Based on this assumption, the depreciation for the FY 2014-15 works out at Rs. 24.42 Cr.

The table below captures the depreciation as submitted by the Petitioner and as approved by the Commission for FY 2014-15.

Table 44: *Depreciation approved by the Commission for FY 2014-15*

Sr. No.	Particulars	FY 2013-14	FY 2014-15	
		Approved by the Commission	Estimates	Approved by the Commission
1	**Opening Value of Assets at the beginning of the year**	207.30	398.74	398.74
2	Additions during the year	191.44	127.50	127.50
3	Value of assets sold/disposed off			
4	**Gross Fixed Assets at the end of year**	**398.74**	**526.24**	**526.24**
5	**Rate of depreciation**	5.28%	5.28%	5.28%
6	**Depreciation**	**16.00**	**24.42**	**24.42**

6.11 *Interest and Finance Charges*

Petitioner's submission

The Regulation 29 provides for Interest and Finance Charges on Loan. ED–Goa has submitted that the majority of capital assets are created out of the equity contribution from Government of Goa and the actual borrowing of loan is only to the extent of the APDRP schemes. ED–Goa has also considered the Letter of Credit charges for claiming rebates on power purchase. The total Interest and Finance Charges for the year FY 2014-15 are Rs. 8.96 Crores.

Commission's analysis

The Commission in line with Regulation 25 of the JERC Tariff Regulations allows the normative interest charges of Rs. 23.05 Cr on the average normative loan of Rs. 288.46 Cr. The addition in the normative loan amount has been taken to be 70% of the capitalized amount approved for the year i.e 0.70 X 127.5= Rs. 89.25 Cr. Commission has considered the weighted average rate of existing loans of 7.99% as approved for FY 2013-14. The Commission approves the normative interest charges for the year at Rs. 23.05 Cr. The table below shows the computation of the normative interest for FY 2014-15 approved by the Commission:

Table 45: *Interest on normative loan approved by the Commission for FY 2014-15*

Sr. No.	Particulars (in Rs. Cr)	FY 2013-14	FY 2014-15	
		Approved	Estimates	Approved
1	Opening Normative Loan	136.29	77.29	256.67
2	Add: Normative Loan during the year	134.01	0	89.25
3	Less: Normative Repayment	13.63	11.62	25.67
4	Closing Normative Loan	256.67	65.67	320.25
5	Average Normative Loan	196.48	71.48	288.46
6	Rate of Interest (@SBI PLR rate)	7.99%	10.72%	7.99%
7	Interest on Normative Loan	15.70	7.66	23.05

The Petitioner has claimed the interest on loans taken from PFC, however as the petitioner has not been able to substantiate the opening balance of fixed assets the Commission does not allow the interest expenses pertaining to formation of the Opening GFA for FY 2011-12 including interest on PFC loans. The Commission would consider the expenses at the time of truing up in accordance with the prevailing regulations supported with the legitimate fixed asset register and audited accounts.

The Commission has also allowed the LC charges of Rs. 1.3 Cr as claimed by the Petitioner resulting in total interest and finance charges approved of Rs. 24.35 Cr for FY 2014-15.

6.12 *Interest on Working Capital*

Petitioner's submission

As per Regulation 29 of JERC for the State of Goa and Union Territories (Terms and Conditions for Determination of Tariff) Regulations, 2009, Interest on Working Capital for a licensee shall be the sum of the following for one month:

- Power Purchase Cost.
- Employees Cost.
- Administration & General Expenses &
- Repair & Maintenance Expenses.

The Interest Rate is considered equivalent to the SBI PLR for the year FY 2014-15 which is at 14.75%.

In line with the aforesaid regulation, the Interest on Working Capital is calculated for the year FY 2014-15

Commission's analysis

The Commission has considered the calculation of the working capital as per Regulation 29 of the JERC Tariff Regulations. The different components of the working capital have been considered as per the values approved in the respective sections of this Order. The Commission has considered the amount collected from the consumers as security deposit as available with the Petitioner. The security deposit available with the Petitioner in cash has been treated as available to meet the working capital required for FY 2014-15.

The Commission has considered the SBI advance rate of 14.75%[3] for ARR of FY 2014-15. The detailed calculation of the interest on working capital is as mentioned below.

Table 46: *Interest on working capital approved by the Commission for FY 2014-15*

Sr. No.	Particulars (In Rs. Cr)	FY 2014-15	
		Estimates	Approved by the Commission
1	Power Purchase Cost for one month	88.79	77.83
2	Employee Cost for one month	14.76	12.70
3	A&G Expenses for one month	0.89	0.80
4	R&M Expenses for one month	2.06	1.73
5	**Total Working Capital for one month**	**106.51**	**93.06**
6	Closing Security Deposit (amount already with ED Goa)	77.25	73.73
7	Total Working Capital considered for one month	**29.26**	**19.32**
8	**SBI PLR Rate**	14.45%	14.75%
9	**Interest on Working Capital**	**4.23**	**2.85**

[3] SBI advance rate as on 07.11.2013 has been considered for the computation of the interest on the working capital; latest available SBI advance rate has been considered.

6.13 *Interest on Security Deposit*

Petitioner's submission

The Regulation 25 of JERC (for the State of Goa and Union Territories (Terms and Conditions for Determination of Tariff) Regulations, 2009 provides for Interest on Security Deposit, if any, made by the consumer with the licensee. The provision of interest on security deposits is to be made at the bank rate. The prevailing Bank rate is considered at **8.75%** as notified by Reserve Bank of India vide circular dated 29th October, 2013 provided at **Annexure VII: RBI Bank Rate Notification.**

In lieu of the above, Interest on Security Deposit is calculated at Rs. **6.76** Crores.

Commission's analysis

As per Section 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 regulations, the Commission directs the Petitioner to pay the interest on security deposit collected from the consumers.

The Commission directs that the Petitioner must pay interest on consumer security deposit for FY 2014-15 (at the Bank Rate i.e. 8.75%[4] per annum applicable as on 29th October, 2013) with effect from 1st April, 2014 to the consumers on their security deposit irrespective of petitioner's constraints and this needs to be explicitly indicated on the consumers bill, a sum of Rs. *(calculated amount)* as 'Interest on security deposit' at the rate of 8.75% per annum for the FY 2014-15. **The Commission in this regard shall view any non-compliance seriously.**

Table 47: *Interest on security deposit approved by the Commission for FY 2014-15*

Sr. No.	Particulars (In Rs. Cr)	FY 2014-15	
		Estimates	Approved by the Commission
1	Opening Security Deposit	77.25	73.73
2	Add: Deposits during the Year	15.96	15.96
3	Less: Deposits refunded	2.86	2.86
4	**Closing Security Deposit**	**90.36**	**86.84**
5	**Bank Rate**	8.75%	8.50%
6	**Interest on Security Deposit**	**6.76**	**5.89**

6.14 *Return on Capital base/Net Fixed Assets*

Petitioner's submission

The proviso of Regulation 23 (2) and Regulation 24 of Tariff Regulations, 2009 provides for entitlement for Returns on Capital Base/Net Fixed Assets by utility/licensee. Thus, in line with the regulation and the methodology adopted by the Hon'ble Commission in its previous order, ED–Goa has calculated the return on capital base at 3%.

Commission's analysis

ED Goa is an integrated utility in its present form as defined in Regulation 2(9) of the JERC Tariff Regulations and ED–Goa is not restructured and corporatized till date. As of now, it is an integrated utility and is entitled to return on capital base under the provisions of Schedule VI of

[4] Bank Rate of 8.75% as per RBI circular dated October 29, 2013.

the repealed Electricity (Supply) Act, 1948 vide provision under Regulation 23 of JERC (Terms and Conditions for Determination of Tariff) Regulations, 2009. The basic requirement for consideration of either return on capital base or return on equity is the audited Annual Accounts and assets & depreciation registers. ED–Goa has not been maintaining adequate information. The same has also been discussed in treatment of this component in the previous chapter.

As discussed in the section on 'GFA and Depreciation', the Commission has allowed additional capitalization for FY 2013-14 and FY 2014-15. The Commission has considered Rs. 398.74 Cr as the gross block at the beginning of FY 2014-15 and accumulated depreciation of Rs. 28.12 Cr, resulting in the net fixed assets of Rs. 370.61 Cr at the beginning of FY 2014-15. The Commission, therefore, approves the return on capital base of Rs. 11.12 Cr @3% on the net fixed assets at the beginning of FY 2014-15. The table below shows the computation of the return on capital base as approved by the Commission.

Table 48: *Return on capital base approved by the Commission for FY 2014-15*

S. No.	Particulars (In Rs. Cr)	FY 2013-14	FY 2014-15	
		Approved by the Commission	Estimates	Approved by the Commission
1	Gross block at beginning of the year	207.30	398.74	398.74
2	Less accumulated depreciation	12.13	28.13	28.12
3	**Net fixed assets at beginning of the year**	**195.17**	**370.61**	**370.61**
4	**Reasonable return @3% of NFA**	**5.86**	**11.12**	**11.12**

6.15 *Provision of Bad & Doubtful debts*

Petitioner's submission

The Petitioner has not claimed any Provisions for bad and doubtful debts.

Commission's analysis

In accordance with Regulation 28 of the JERC Tariff Regulations, the Commission is of the view that bad and doubtful debts actually written off, limited to 1% as per the regulations, would be considered only after the availability of audited accounts and would be taken up at the time of the true-up of the ARR.

Table 49: *Provision for bad debts approved by the Commission for FY 2014-15 (Rs. Cr)*

Particulars	Petitioner's Submission FY 2014-15	Approved
Provision for bad and doubtful debts	Not Claimed	NIL

The Commission has not considered the provision for bad & doubtful debts for ARR of FY 2014-15 and would consider it up in true up as per the provisions of the regulations.

6.16 *Other expenses*

Petitioner's submission

The Hon'ble Commission has issued JERC (Establishment of Forum for Redressal of Grievances of the Consumers) Regulation, 2009 and according to the Regulations, every distribution licensee needs to establish a forum for Redressal of Grievances of consumers.

The petitioner has estimated expenses of Rs. **0.75** Crores for FY 2014-15. This expense pertains to the salaries of the members, domestic travel expenses, office expense, advertisement etc. The Hon'ble Commission is requested to approve the CGRF expenses for FY 2014-15.

Commission's analysis

The Commission observes that the expenses of Rs. 0.75 Crores projected are towards the salaries of the members of the CGRF and the associated expenses. The Commission therefore considers the expenses legitimate and approves **Rs. 0.75 Crores** for the ARR of FY 2014-15.

6.17 *Non-Tariff Income*

Petitioner's submission

The Non-Tariff Income estimated for FY 2014-15 is Rs. **23.22** Crores which comprises of proceeds from sale of dead stock, waste paper & other miscellaneous receipts.

Commission's analysis

The Commission considers the non-tariff income of Rs. 23.22 Cr as submitted by the Petitioner as reasonable and approves the same.

6.18 *Aggregate Revenue Requirement (ARR) for FY 2014-15*

Petitioner's Submission

The petitioner has submitted the Aggregate Revenue Requirement at Rs. 1310.46 Crores.

Commission's analysis

The Commission has approved ARR for FY 2014-15 based on the items of expenditure and revenue discussed in the preceding sections and the same has been summarized in the table below. The Commission approves the ARR at Rs. 1163.10 Cr for FY 2014-15. The same is tabulated below and the comparison with the submission is as shown below-

Table 50: *Aggregate Revenue Requirement approved by the Commission for FY 2014-15 (Rs. Cr)*

Sr. No.	Particulars (In Rs. Cr)	FY 2014-15	
		Estimates	Approved
1	Cost of power purchase	1,065.53	933.95
2	Employee costs	177.14	152.42
3	R&M expenses	24.71	20.73
4	Administration and general expenses	9.97	9.60
5	Depreciation	24.42	24.42
6	Int and Finance Charges	8.96	24.35
7	Interest on Working Capital	4.32	2.85
8	Interest on Security Deposit	6.76	5.89
9	Return on NFA	11.12	11.12
10	Provision for Bad Debts	-	
11	Other Expenses	0.75	0.75
12	**Total Revenue Requirement**	**1,333.68**	**1,186.32**
13	Less: Non-Tariff Income	23.22	23.22
14	**Aggregate Revenue Requirement**	**1,310.46**	**1,162.86**

6.19 *Revenue at existing tariff for FY 2014-15*

Petitioner's Submission

The revenue from sale of power from existing retail tariffs for FY 2014-15 comes to Rs.1031.31 Crores and category wise revenue is tabulated below:

Revenue at existing tariff submitted by the petitioner for FY 2014-15 (Rs. Crores)

Sr. No.	Category of Consumer	Energy Sales (MUs)	Total Revenue (Rs Crore)	Avg Tariff (Rs/kWh)
1	2	3	4	5
A	**Low Tension Supply**	**1,359**	**308.98**	**2.27**
1(a)	Tariff LTD/Domestic and Non-Commercial	856	153.44	1.79
1(b)	Tariff LTD/Low Income Group	24	0.44	0.18
1(c)	Tariff LTD/Domestic Mixed	6	1.60	2.88
2	Tariff-LTC/Commercial	314	110.79	3.53
3 (a)	Tariff-LTP/Motive Power	95	28.60	3.00
3 (b)	Tariff-LTP/ Ice Manufacturing	8	0.00	0.00
3(a)	Tariff-LTP/Mixed (Hotel Industries)	5	2.12	4.01
4	Tariff-LTAG/Agriculture	18	2.18	1.24
5	Tariff-LTPL/Public Lighting	26	8.03	3.11
6	Tariff-LT PWW/Public Water Works	7	1.78	2.52
B	**High Tension Supply**	**1,807**	**714.04**	**3.95**
7	Tariff HT-Mixed	118	51.31	4.36
8(a)	Tariff HTI/Industrial	538	226.87	4.21
8(b)	Tariff HTI/Hotel Industries	128	67.99	5.32
8(c)	Tariff HTI/Ice Manufacturing	1	0.23	4.51
9	H.T.Industrial (Ferro Mettallurgical/ Steel Melting/ Power Intensive)	565	200.03	3.54
10	Tariff-HTAG/Agriculture	6	0.94	1.69
11	EHTI/Industrial	195	80.50	4.12
12	H.T. PW/Public Water Supply and Sewage	147	49.79	3.38
13	H.T. MES/Defence Establishments	26	9.63	3.69
14	H.T. Industrial (Steel Rolling)	63	20.14	3.22
15	Tariff HT-Industries (IT High Tech).	21	6.62	3.11
		-	-	-
C	**Temporary Supply**	**11**	**8.29**	**7.50**
16	Tariff-LT/Temporary	11	8.19	7.50
17	Tariff-HT/Temporary	0	0.10	7.50
		-	-	-
	Total	**3,177**	**1,031.31**	**3.25**

Commission's analysis

Based on the estimates of sales, consumers and connected load approved by the Commission for FY 2014-15, the Commission has arrived at the revenue from existing tariff of Rs. 1026 Cr. The slab wise consumers, sales and the connected load have been pro-rated as per the submission of FY 2014-15 by the petitioner.

Table 51: *Revenue at existing tariff approved by the Commission for FY 2014-15 (Rs. Cr)*

Category/Consumption Slab	FY 2014-15			
	Sales	Fixed Charges	Energy Charges	Total Charges
Low Tension Supply	**1293**	**26**	**289**	**315**
Tariff LTD/Domestic and Non - Commercial	**841**	**6**	**145**	**151**
First 60 Units	177	0.57	21.18	21.76
61 - 250 Units	504	3.23	80.70	83.93
251 Units - 500 Units	126	1.55	32.79	34.34
Above 500 Units	34	0.62	10.09	10.71
Tariff LTD/Low Income Group	**3**	**0.43**	**0.00**	**0.43**
Tariff LTD/Domestic Mixed	**5**	**0**	**2**	**2**
First 400 Units	4	0.00	1.18	1.18
Above 400 Units	1	0.00	0.36	0.36
Tariff LTC/Commercial	**291**	**3**	**100**	**103**
First 100 Units	142	1.13	42.51	43.63
100 Units - 1000 Units	130	1.55	49.56	51.11
Above 1000 Units	19	0.38	7.85	8.23
Tariff LTP/Motive Power	**94**	**15**	**28**	**43**
Connected Load Upto 50 HP	5	0.56	1.23	1.79
Connected Load Above 50 HP	89	14.14	26.64	40.78
Tariff-LTP/Mixed (Hotel Industries)	**5**	**0.10**	**2.08**	**2.18**
Tariff LTP/Ice Manufacturing	**8**	**0.06**	**2.37**	**2.43**
Tariff-LTAG/Agriculture	16	0.52	1.94	2.46
Tariff-LTPL/Public Lighting	24	0.27	7.11	7.38
Tariff-LT PWW/Public Water Works	7	0.52	1.72	2.23
High Tension Supply	**1785**	**172**	**539**	**711**
Tariff HT-Mixed	112	14.22	35.31	49.53
Tariff HTI/Industrial	655	75.04	216.12	291.15
H.T.Industrial (Ferro Metallurgical/ Steel Melting/ Power Intensive)	**555**	**50.39**	**146**	**197**
First 300 Units/kVA	300	27.21	74.90	102.11
Next 200 Units/kVA	211	19.15	57.98	77.13
Above 500 Units/kVA	44	4.03	13.32	17.35
Tariff-HTAG/Agriculture	5	0.25	0.66	0.91
EHTI/Industrial	192	16.09	63.32	79.40
H.T. PW/Public Water Supply and Sewage	147	5.64	44.06	49.71
H.T. MES/Defense Establishments	25	1.02	7.44	8.47

Category/Consumption Slab	FY 2014-15			
	Sales	Fixed Charges	Energy Charges	Total Charges
H.T. Industrial (Steel Rolling)	**61**	**8**	**12**	**20**
First 200 Units/kVA	44	5.53	7.86	13.38
Next 100 Units/kVA	14	1.79	3.18	4.97
Above 300 Units/kVA	4	0.47	1.11	1.57
Tariff HT-Industries (IT High Tech).	21	1.08	5.44	6.52
Tariff HT-Industries (ICE).	1	0.08	0.15	0.23
Temporary Supply				
Tariff-LT/Temporary	11		8.19	8.19
Tariff-HT/Temporary	0		0.10	0.10
Total Demand/ Sale Within State/UT	**3,078**	**197**	**828**	**1,025.66**

6.20 *Revenue Gap at existing tariff for FY 2014-15*

Petitioner's submission

The revenue gap for FY 2014-15 computes to Rs. **279.15** Crores

Commission's analysis

The revenue gap worked out for FY 2014-15 is Rs. 137.20 Cr based on the aggregate revenue requirement of Rs. 1162.86 Cr and the revenue from existing tariff of Rs. 1043.58 Cr. The table below shows the approved revenue gap for FY 2014-15 at the existing tariff:

Table 52*: Revenue Gap at existing tariff approved by the Commission for FY 2014-15 (Rs. Cr)*

Particulars	FY 2014-15 Petitioner's Submission	FY 2014-15 Approved
Aggregate Revenue Requirement	1,310.31	1,162.86
Revenue from existing tariff	1031.31	1025.66
Revenue Gap at existing tariff	279.15	137.20

6.21 *Average Cost of Supply for FY 2014-15*

The average cost of supply for FY 2014-15 based on the approved ARR and total sale is as shown below.

Table 53: *Average cost of supply approved by the Commission for FY 2014-15 (Rs./kWh)*

Particular	FY 2013-14 Approved as per Review of ARR	FY 2014-15 Petitioner's Submission	FY 2014-15 Approved
Average cost of Supply (Es/kWh)	3.79	4.12	3.78

7. Compliance of Directives

The Commission had in its previous order issued directives to ED-GOA within the parameters of Section 61 of the Electricity Act, 2003 which stipulates that the Commission shall be guided by the factors which would encourage competition, efficiency, economical usage of resources, grid performance and optimum investment in specifying the terms and conditions for determination of tariff. The directives as provided by the Hon'ble Commission and the status of the said directives are below:

Compliance of Directives pending from the previous orders are shown below

Directive in order for FY 2012-13

1. Annual Statement of Accounts

The Commission had given a time bound direction in its order for FY 2012-13, however the Petitioner has failed to appreciate the requirement of the audited accounts. The Commission would like to reiterate its direction to the Petitioner for getting its accounts audited at the earliest. Further, the Commission also directs the petitioner to file a monthly status report for the above.

Compliance/Action taken as per Tariff order dated March 31, 2013

Quote

"The Hon'ble Commission in its order directed ED–Goa to prepare Annual Statement of Accounts separately and on commercial principles. ED–Goa would like to submit that the accounts for the electricity business are always maintained separately. This is in line with Government of Goa Notification (Pro-forma Accounts), hence commercial principles are already being implemented. Further, ED–Goa would like to submit that the Annual Accounts for FY 2006-07 has been audited and certified. With this certification the audit of accounts for the year FY 2007-08 are already in process and shall be completed at the earliest. ED–Goa assures the Hon'ble Commission that it would complete this exercise of bringing the audited accounts updated on priority basis and inform the Hon'ble Commission from time to time."
Unquote

Commission's observation vide Tariff order dated March 31, 2013

The Commission had given a time bound direction in its order for FY 2012-13, however the Petitioner has failed to appreciate the requirement of the audited accounts. The Commission would like to reiterate its direction to the Petitioner for getting its accounts audited at the earliest. Further, the Commission also directs the petitioner to file a monthly status report for the above.

Compliance/Action taken as per the Petition for this tariff order

Petitioner's submission

Quote

"ED–Goa would like to submit that it has appointed consultant for Preparation of Financial Statements (FS) from FY 2007-08 to FY 2012-13 vide its letter dated 24th September, 2013. The Consultant has submitted the Draft Report on FS for FY 2007-08 on 9th December, 2013. The FS report is being submitted to Hon'ble Commission separately for compliance purposes. The consultant would try to submit FS report for balance years i.e. FY 2008-09 to FY 2012-13 in next 5-6 months time frame. So ED—Goa expects that it would streamline its record by mid 2014."

Unquote

Commission's Comments

The Commission takes note of the Petitioner's submission and directs the Petitioner to file the pending true up and financial statements for FY 2008-09 onwards, strictly in compliance with the accounting standards after getting the accounts audited. This should be complied latest by September 30, 2014.

2. Preparation of Asset and Depreciation Register

ED-Goa is directed to prepare Asset and Depreciation Register functionwise and asset classificationwise. The Petitioner is directed to submit quarterly progress report and the completion date of the preparation of the asset and depreciation registers functionwise after getting them audited.

Compliance/Action taken as per Tariff order dated March 31, 2013

Quote

"The Hon'ble Commission has directed ED – Goa to prepare Asset and Depreciation Register function wise and asset classification wise. ED – Goa hereby submits that there are two functions carried out by ED – Goa viz Transmission and Distribution functions. ED – Goa has already taken steps for preparing the Asset register for both Transmission and Distribution. The classification of Assets is being done similar to the classification heads provided by the Hon'ble Commission in the Tariff Regulations. Further, ED – Goa has sent the formats to various divisions (field offices); which are annexed to this petition at Annexure VIII: Format for Asset & Depreciation Information for reference of the Hon'ble Commission. Further, the depreciation register is also being prepared in line with the Hon'ble Commission's directive. ED – Goa also submits that once the compilation of classification of assets and depreciation register information is received from the field officers, Hon'ble Commission shall be intimated. The required information shall be submitted to Hon'ble Commission after due verification by Accounts Department preferably within a period of 6-8 months." **Unquote**

Commission's observation vide Tariff order dated March 31, 2013

The action taken is noted.

Compliance/Action taken as per the Petition for this tariff order

Petitioner's submission

Quote

"ED–Goa would like to submit that it has appointed consultant for Preparation of Fixed Assets Register (FAR) from FY 2007-08 to FY 2012-13 vide its letter dated 24th September, 2013. The Consultant has submitted the Draft Report on FAR for FY 2007-08 on 9th December, 2013. The FAR report is being submitted to Hon'ble Commission separately for compliance purposes. The consultant would try to submit FAR report for balance years i.e. FY 2008-09 to FY 2012-13 in next 3-4 months time frame. So ED–Goa expects that it would streamline its record by mid 2014."

Unquote

Commission's Comments

The Commission appreciates the efforts taken by the Petitioner and direct the Petitioner that the FAR for all the previous year be submitted to the Commission latest by 30th September, 2014.

3. Energy Audit and T&D Losses

ED–Goa is directed to get its distribution system studied so that appropriate loss reduction trajectory could be fixed. It is also directed that the Petitioner shall furnish six monthly energy audit reports to the Commission as required under Regulation 15(4) of the JERC Tariff Regulations, 2009.

The Petitioner is directed to furnish segregation of losses into transmission, distribution and commercial losses separately in their next petition along with a status report on energy accounting and T&D losses.

The Commission would like the Petitioner to prepare a loss reduction road map for bringing down losses to 10% level and submit to the Commission by 31st October, 2012. The Commission on receipt and acceptance of the loss reduction road map shall approve loss reduction trajectory for subsequent years.

Compliance/Action taken as per Tariff order dated March 31, 2013

Quote

"ED – Goa would like to submit that a Consultant has been appointed in this regards and the process is being carried out. In line with the Hon'ble Commission's directive, ED–Goa shall carry out the Energy Audit for the first 6 months period of FY 2012-13 and submit to Hon'ble Commission. Thereafter upon receipt of comments/suggestions from the Hon'ble Commission, the 2nd Energy Audit for next 6 months period or as may be directed by Hon'ble Commission shall be conducted through consultants." **Unquote**

Commission's observation vide Tariff order dated March 31, 2013

The action taken is noted.

Compliance/Action taken as per the Petition for this tariff order

Petitioner's submission

Quote

"ED-Goa submits that it had appointed a consultant for preparation of Energy Audit for the first 6 months period of FY 2012-13 and loss reduction trajectory along with T&D losses and energy accounting and the same has been submitted to the Hon'ble Commission in October, 2013. Thereafter upon receipt of comments/suggestions from the Hon'ble Commission, the 2nd Energy Audit for next 6 months period or as may be directed by Hon'ble Commission shall be conducted through consultants.

The Consultant has also submitted the report on Best practices to be adopted by ED–Goa.

The Energy Audit Report and Best Practices reports are submitted separately to the Hon'ble Commission. The Report on Loss Reduction Report has been submitted earlier in Case No.76/2012." **Unquote**

Commission's Comments

The action taken is noted. However, the Commission finds that the Energy Audit Report is not upto the mark as it is based on sample network. The Commission also finds that most of the energy meters of the feeders and distribution transformer of even this sample network are non--functional. Hence, replace non-working meters and/or install working meters in all the feeders and DT's and get the Energy Audit done and submit the report latest by September 30, 2014.

4. Employee Cost/Manpower Study

ED–Goa is directed to analyze its employee strength and their relative deployment, and rationalize their requirement to reduce its manpower and related costs.

The Commission has analyzed the trends of the number of employees/1000 consumers since the year 2009-10. The analysis of the previous year's shows one employee was serving 108, 114 and 111 consumers in FY 2009-10, FY 2010-11 and FY 2011-12 respectively. In FY 2012-13, the petitioner has projected one employee would be serving 84 consumers. This number as projected by the Petitioner is too high, considering that the all India average number of employee per thousand consumers is 0.40[5] as per the annual plan of FY 2011-12,

[5]Annexure 4.20 of Annual Report on the working of State Power Utilities & Electricity Departments published by Planning Commission, Government of India in October, 2011.

which translates into one employee catering to 2500 consumers. Here, in the case of ED–Goa one employee is catering to only 84 consumers of the total consumer base as per the submission of Petitioner for FY 2012-13. This shows that ED-Goa is extremely overstaffed.

The Commission direct the petitioner that a detailed work force study should be conducted and report be submitted to the Commission by 31st October, 2012.

Compliance/Action taken as per Tariff order dated March 31, 2013

Quote

"The Hon'ble Commission in its Tariff order has directed ED–Goa to analyze its employee strength and their relative deployment, and rationalize their requirement to reduce its manpower and related costs. ED–Goa would like to submit that a Consultant has been appointed in this regards and the study is under process. ED–Goa would like to submit that this study shall be submitted to the Hon'ble Commission in 3 months time i.e. around end of April, 2013." **Unquote**

Commission's observation vide Tariff order dated March 31, 2013

Action taken is noted

Compliance/Action taken as per the Petition for this tariff order

Petitioner's Submission

Quote

"The Hon'ble Commission in its Tariff order has directed ED – Goa to analyze its employee strength and their relative deployment, and rationalize their requirement to reduce its manpower and related costs and to conduct a detailed work force study.

ED-Goa submits that it had appointed a consultant for study of employee strength and manpower study and the same is complete. The report is submitted separately to the Hon'ble Commission." **Unquote**

Commission's Comments

The Petitioner has submitted the report however, from submitted report, the Commission observes that the existing employees per thousand consumers in Goa is around 10 which is even higher as compared to 8.5 and 5 in Puducherry and Chandigarh respectively. The Commission also observes that ED-Goa is still having the employees such as draughtsman, mechanics, mason mistry, plumber, carpenter, turner/fitter, welder, daftry, lift operator, blue printer etc. which has no contribution to the mainstream business. The Commission is of the view that with development of technology, the requirement of employee per thousand consumers has decreased across utilities in India. In view of this the existing sanctioned post needs review.

5. Interest on Security Deposit

The Petitioner is directed to pay interest on consumer security deposit at the applicable bank rate (presently at 9.5% per annum) for FY 2012-13 and at the bank rate of 6% for FY 2011-12 effective 1st April, 2012.

Direction in Tariff order for FY 2013-14

The Commission directs the Petitioner to pay the interest on security deposit as required under the Electricity Act, 2003 irrespective of the constraints faced by the utility. The Commission in this regard would view any non-compliance seriously.

Compliance/Action taken as per the Petition for this tariff order

Petitioner's Submission

ED-Goa would like to submit that it has started evaluating interest amount status of HT consumers and LTP consumers and will start paying to these categories in Phase 1, the balance categories shall be considered in due course.

Commissions Comments

The Commission had given the direction for payment of interest on security deposit in the Tariff order for FY 2011-12 and all subsequent tariff orders. Rather than complying with the commission's directive, which is also a statutory requirement. The Commission feels that the Petitioner is delaying the compliance of direction with arbitrary reasons. The Commission expresses its strong displeasure and once again directs the Petitioner to make payment of interest on security deposit for all pending years and submit the report latest by June 30, 2014 failing which the commission would be constrained to initiate action under section 142 of the Electricity Act, 2003.

6. Data on the consumption and load profile of Advertisement Hoardings, Signboards, and Signages etc.

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

Direction in order dated March 31, 2013

The data with regard to the above direction was required for the determination of tariff this year. The Commission feels that such an approach to the directives is not appreciated. The Commission however, reiterates its direction and directs the Petitioner to file the details within One week of issuance of this order

Petitioner's Submission

Quote "*ED – Goa would like to submit that the compilation of data regarding consumption and the load profile of advertisement hoardings, signboards etc. is done and provide at* ***Annexure VIII: Advertisement Data for FY 2012-13 & FY 2013-14.***"

Unquote

Commission's Comments

Action taken is noted.

Directives Issued vide Tariff Order dated March 31, 2013

1. Since 2000, some consumers are set to be served by the IPP directly as can be observed from the salient features of PPA submitted by the petitioner executed between Government of Goa and IPP in the State of Goa. Commission cannot overlook the interest of those consumers and such situation where the IPP fails to serve the commitment as per the PPA agreement. In view of the hardship to be faced by the consumers of the State of Goa, the Commission directs the Electricity Department, Goa being an authorised distribution licensee in the State of Goa should device an action plan for providing them with the alternative arrangement for supply of power, so that those consumers should not be left unattended. **The petitioner in accordance with universal supply obligations mandated by Electricity Act, 2003 and ensuring the provisions of the JERC (Electricity Supply Code) Regulations, 2010, should submit within 2 months of this order an action plan in this regard.**

Petitioner's Submission

ED-Goa submits that it has worked upon a PPA for purchase of 100MW power from Chhattisgarh between the Government and KSK Mahanadi for providing supply to the consumers and the same is in final stages of scrutiny by the Government of Goa.

Commission's Comments

The Petitioner's submission is noted. The Commission further directs the Petitioner to file before the Commission the detailed report along with draft PPA for approval.

2. The Commission directs the petitioner to submit the details of the power purchases from the IPP along with details of time slots, frequency and requirement in which purchases were done, corroborated with the evidence that the energy was not sold by way of under drawl or sale to exchange at the same time slot. The rates of sale through UI or exchange at the same time slot and frequency shall also be correlated with the purchases of the IPP.

Petitioner's Submission

The petitioner has not responded to the above directive.

Commission's Comments

The Commission expresses its displeasure on non-compliance of its directive and reiterates its direction. In case of non-compliance of the above directive it would be presumed that the Petitioner has nothing to submit in this regard and agrees with the findings of the Commission that the power purchased from the IPP is uneconomical and not as per merit order.

8. Tariff Philosophy and category-wise tariffs for FY 2014-15

8.1 *Preamble*

The Commission in determining the revenue requirement and retail supply tariff for the financial year 2014-15 has been guided by the provisions of the Electricity Act, 2003 and the Tariff Policy. Section 61 of the Act lays down the broad principles, which shall guide determination of retail tariff.

In view of the above, the tariff needs to be designed in such a way that cross subsidy between different categories of consumers is progressively bought within + / - 20% of average cost of supply and that even for BPL category consumers, tariff rates are close to 50% of the average cost of supply. Commission has taken a considerate view in this regard balancing the interest of the utility and the consumer, thus compensating the department with additional revenue and provides the reasonable hike in consumer's tariff.

Keeping view of the above, the Commission has designed the tariff for different categories of consumers as brought out subsequently.

8.2 *Revenue Gap for FY 2014-15 and Recovery*

In its ARR Petition for FY 2014-15, the petitioner projected a revenue gap for FY 2013-14 of Rs. 287.66 Cr at existing tariffs. The Petitioner in its submission of the 'Proposal to meet ARR for FY 2014-15' has submitted that the entire revenue gap for FY 2013-14 as per the revised estimates is to be met through budgetary support and there is no revenue gap of FY 2013-14 to be carried forward in FY 2014-15.

The petitioner in its ARR and Tariff petition for FY 2014-15, has proposed a tariff revision plan, through which it is proposed to recover a part of the projected revenue gap of Rs. 279.15 Crores at existing tariff for FY 2014-15. The petitioner submitted that revenue gap of above-mentioned amount would require tariff increases to the extent of **27%** from existing levels, if require to be met from tariff increases alone. However to avoid tariff shock to the consumers, ED–Goa proposes to meet the above revenue gap for FY 2014-15 partially through Tariff Increases and balance by Budgetary Support by Government of Goa.

As per the proposal for Tariff Increase, Rs. **85.55** Crores of the revenue gap (**31%** of total gap) would be met from tariff increase and balance amount of Rs. **193.60** Crores would be provided by Government of Goa as budgetary support. The above tariff proposal means an average tariff hike of **8%** from existing levels.

The Petitioner has submitted the letter from the Government of Goa for budgetary support for FY 2014-15 dated February 3, 2014, the relevant contents of the said letter is reproduced below. The said letter addressed to Electricity Department of Goa, undersigned by the Under Secretary, Finance (Budget) Department, Government of Goa.

"I am directed to state that the Government of Goa has propsed to raise the tariff of certain categories of consumers in the State during the Financial Year 2014-15 and has decided to provide adequate Budgetary Support to meet the deficit as may be approved by the Hon'ble Commission during the process of finalizing the ARR and Tariff petition for the Financil Year 2014-15."

As elaborated in section 5.20 and 6.20 of this Order, the Commission has projected a net revenue requirement of Rs. 1153.17 Crores in FY 2013-14 and net revenue requirement of Rs. 1162.86 Crores in FY 2014-15 respectively, and after considering the submission made by the petitioner with respect to the budgetary support from the Government of Goa. Commission has therefore considered the entire revenue gap of FY 2013-14 as approved in this Order met through the budgetary support from the Government of Goa.

The Commission has computed the revenue from existing tariffs by considering the revised projection of category wise sales as approved by the Commission in this Order, and the category wise tariffs at the existing tariff.

In order to recover the revenue gap of Rs. 137.20 Cr for FY 2014-15, the average tariffs have to be increased by around 13.38%. Further as submitted by the petitioner; Government of Goa will meet the deficit approved by the Commission through the budgetary support. Under the Electricity Act, 2003, the Commission is mandated to protect the interest of the consumers and to move the tariff towards the average cost of supply. Commission has therefore taken a considerate view in this regard.

8.3 *Tariff Proposal*

Petitioner's submission

The petitioner has proposed a Tariff increase for different categories affecting an aggregated increase of about 8%. The category wise existing and proposed tariff submitted by the Petitioner are as under:

Table 54: *Existing and Proposed Tariff for FY 2014-15 proposed by the Petitioner*

Category/Consumption Slab	Existing Tariff		Proposed Tariff	
	Fixed Charges (Rs.)	Energy Charges (Paisa/Unit)	Fixed Charges (Rs.)	Energy Charges (Paisa/Unit)
Low Tension Supply				
Tariff LTD/Domestic and Non - Commercial				
First 60 Units	5	120	5.00	120
61 - 250 Units	10	160	15	170
251 Units - 500 Units	20	260	25	275

Category/Consumption Slab	Existing Tariff		Proposed Tariff	
	Fixed Charges (Rs.)	Energy Charges (Paisa/Unit)	Fixed Charges (Rs.)	Energy Charges (Paisa/Unit)
Above 500 Units	30	300	40	330
Tariff LTD/Low Income Group	**25**	**0**	**30**	
Tariff LTD/Domestic Mixed				
First 400 Units	20	270	35	310
Above 400 Units	30	370	50	410
Tariff LTC/Commercial				
First 100 Units	20	300	25	300
100 Units - 1000 Units	30	380	50	400
Above 1000 Units	50	410	75	450
Tariff LTP/Motive Power				
Connected Load Upto 50 HP	20	250	25	275
Connected Load Above 50 HP	20	300	25	335
Tariff-LTP/Mixed (Hotel Industries)	**25**	**400**	**25**	**400**
Tariff LTP/Ice Manufacturing	**20**	**300**	**25**	**335**
Tariff-LTAG/Agriculture	5	120	5	120
Tariff-LTPL/Public Lighting	25	300	25	300
Tariff-LT PWW/Public Water Works	20	250	20	250
High Tension Supply				
Tariff HT-Mixed	175	315	315	330
Tariff HTI/Industrial	175	330	330	350
H.T.Industrial (Ferro Metallurgical/Steel Melting/Power Intensive)	450			
First 300 Units/kVA	450	250	525	280
Next 200 Units/kVA	450	275	525	305
Above 500 Units/kVA	450	300	525	330
Tariff-HTAG/Agriculture	25	125	25	125
EHTI/Industrial	175	330	330	350
H.T. PW/Public Water Supply and Sewage	175	300	175	300
H.T. MES/Defense Establishments	125	330	150	350
H.T. Industrial (Steel Rolling)				
First 200 Units/kVA	400	180	450	220
Next 100 Units/kVA	400	225	450	250
Above 300 Units/kVA	400	300	450	310
Tariff HT-Industries (IT High Tech)	175	260	260	270
Tariff HT-Industries (ICE)	175	300	300	315
Temporary Supply				
Tariff-LT/Temporary		750	1000	
Tariff-HT/Temporary		750	1200	

Commission's analysis

The Commission has determined the retail tariff for FY 2014-15 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 in section 8.2 of this Order.

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

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

1) Every State Commission has to ensure that Annual Performance Review, true-up of past expenses and Annual Revenue Requirement and tariff determination is conducted year to year basis as per the time schedule specified in the Regulations.

2) It should be the endeavour of every State Commission to ensure that the tariff for the financial year is decided before 1st April of the tariff year. For example, the ARR & tariff for the financial year 2011-12 should be decided before 1st April, 2011. The State Commission could consider making the tariff applicable only till the end of the financial year so that the licensees remain vigilant to follow the time schedule for filing of the application for determination of ARR/tariff.

3) In the event of delay in filing of the ARR, truing-up and Annual Performance Review, one month beyond the scheduled date of submission of the petition, the State Commission must initiate suo-moto proceedings for tariff determination in accordance with Section 64 of the Act read with clause 8.1 (7) of the Tariff Policy.

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.

The Commission has determined the retail tariff keeping in the mind the guiding principles as stated in Section 61 of the Act and also considered the facts in section 8.2 of this Order. As submitted by the petitioner, *Government of Goa has decided to provide an adequate budgetary support to meet the deficit as may be approved by the Hon'ble Commission during the process of finalizing the ARR and Tariff Petition for the Financial Year 2014-15.* Considering the requirement of funds to maintain reliable distribution network to provide a seamless supply of electricity and to cover the revenue gap the tariff hike is necessitated. Historically, there has been a gap between the actual cost of supply and revenue realized. This gap so far has been borne by the Government of Goa. Therefore keeping this fact in view the assessed gap of Rs. 100.48 for FY 2013-14 and an approved deficit for FY 2014-15 will be borne by the Government of Goa. The Commission has therefore considered an average hike of 7.62% as reasonable and appropriate in the interest of the consumers and the Electricity Department of Goa.

It has been observed that the public hoardings and signboards consume power during the peak hours and considerable losses for the utility. The Commission, in this Tariff Order has created a separate category to cover the consumption for the advertisements and hoardings. This category will be applicable for supply of electricity for lighting external advertisements, external hoardings and displays at departments stores, malls, multiplexes, theatres, clubs, hotels, bus shelters, railway/metro stations shall be separately metered and charged at the Tariff applicable for "Advertisements and Hoardings" category, except such displays which are for the purpose of indicating/displaying the name and other details of the shop, commercial premises itself. Such use of electricity shall be covered under the prevailing tariff for such shops or commercial premises.

The Commission, this time, has rationalized the tariff structure of some of the consumer categories. The Commission has made the following tariff changes in the tariff structure.

- It has been observed that the nature of work under category HT Industrial (Ferro Metallurgical/Steel melting/Power Intensive) and (HT Industrial Steel rolling) is same. Therefore the Commission has merged the two categories which can be seen from the tariff schedule annexed to this order
- Slabs for the merged category have been done away and single tariff for all slabs have been determined

The tariff approved by the Commission is shown in the table below:

Table 55: *Commission's Approved Tariff for FY 2014-15*

S. No.	Category/Consumption Slab	Revised Tariff	
		Fixed Charges (Rs.)	Energy Charges (Paisa per unit)
A	**Low Tension Supply**		
1(a)	Tariff LTD/Domestic and Non-Commercial		
	First 60 Units	10.00	120.00
	61 - 250 Units	15.00	170.00
	251 Units - 500 Units	25.00	275.00
	Above 500 Units	35.00	320.00
1(b)	**Tariff LTD/Low Income Group**	**27.50**	
1(c)	**Tariff LTD/Domestic Mixed**		
	First 400 Units	30.00	290.00
	Above 400 Units	40.00	400.00
2	**Tariff LTC/Commercial**		
	First 100 Units	30.00	315.00
	100 Units - 1000 Units	40.00	400.00
	Above 1000 Units	60.00	450.00

S. No.	Category/Consumption Slab	Revised Tariff	
		Fixed Charges (Rs.)	Energy Charges (Paisa per unit)
3 (a)	**Tariff LTP/Motive Power**		
	Connected Load Upto 50 HP	25.00	260.00
	Connected Load Above 50 HP	25.00	320.00
3(b)	**Tariff-LTP/Mixed (Hotel Industries)**	**25.00**	**400.00**
3 ©	**Tariff LTP/Ice Manufacturing**	**25.00**	**320.00**
4	Tariff-LTAG/Agriculture	10.00	120.00
5	Tariff-LTPL/Public Lighting	35.00	360.00
6	Tariff-LT PWW/Public Water Works	25.00	250.00
B	**High Tension Supply**		
7	Tariff HT-Mixed	200.00	315.00
8	Tariff HTI/Industrial	200.00	330.00
9	H.T.Industrial (Ferro Metallurgical/Steel Melting/Power Intensive)		
	First 300 Units/kVA	275.00	330.00
	Next 200 Units/kVA	275.00	330.00
	Above 500 Units/kVA	275.00	330.00
10	Tariff-HTAG/Agriculture	30.00	130.00
11	EHTI/Industrial	230.00	350.00
12	H.T. PW/Public Water Supply and Sewage	200.00	335.00
13	H.T. MES/Defense Establishments	150.00	330.00
14[6]	H.T. Industrial (Steel Rolling)		
	First 200 Units/kVA	275.00	330.00
	Next 100 Units/kVA	275.00	330.00
	Above 300 Units/kVA	275.00	330.00
15	Tariff HT-Industries (IT High Tech)	200.00	320.00
16	Tariff HT-Industries (ICE)	200.00	300.00
C	**Temporary Supply**		
17	Tariff-LT/Temporary	50.00	750.00
18	Tariff-HT/Temporary	100.00	750.00
19	**Hoardings/Sign Boards**	50	600

8.4 *Average Cost of Supply*

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.

[6] The category has been merged with H.T.Industrial (Ferro Metallurgical/Steel Melting/Power Intensive), however for comparison purpose it has been shown in this table separately.

Table 56: *Tariff as a percentage of ACOS for FY 2014-15*

Category/Consumption Slab	Revenue at Existing Tariff			Revenue from Revised Tariff		
	Average Realisation	ACoS	% of ACoS	Average Realisation	ACoS	% of ACoS
Low Tension Supply	**2.44**	3.78	64%	**2.63**	3.78	70%
Tariff LTD/Domestic and Non - Commercial	**1.79**	3.78	47%	**1.92**	3.78	51%
First 60 Units	1.23	3.78	33%	1.26	3.78	33%
61 - 250 Units	1.66	3.78	44%	1.80	3.78	48%
251 Units - 500 Units	2.72	3.78	72%	2.90	3.78	77%
Above 500 Units	3.19	3.78	84%	3.42	3.78	90%
Tariff LTD/Low Income Group	**1.71**	3.78	45%	**1.88**	3.78	50%
Tariff LTD/Domestic Mixed	**2.88**	3.78	76%	**3.10**	3.78	82%
First 400 Units	2.70	3.78	72%	2.90	3.78	77%
Above 400 Units	3.70	3.78	98%	4.00	3.78	106%
Tariff LTC/Commercial	**3.54**	3.78	94%	**3.76**	3.78	100%
First 100 Units	3.08	3.78	82%	3.27	3.78	87%
100 Units - 1000 Units	3.92	3.78	104%	4.16	3.78	110%
Above 1000 Units	4.30	3.78	114%	4.74	3.78	125%
Tariff LTP/Motive Power	**4.54**	3.78	120%	**5.13**	3.78	136%
Connected Load Upto 50 HP	3.64	3.78	96%	4.03	3.78	107%
Connected Load Above 50 HP	4.59	3.78	122%	5.19	3.78	137%
Tariff-LTP/Mixed (Hotel Industries)	**4.19**	3.78	111%	**4.19**	3.78	111%
Tariff LTP/Ice Manufacturing		3.78	0%	**3.22**	3.78	85%
Tariff-LTAG/Agriculture	1.52	3.78	40%	1.84	3.78	49%
Tariff-LTPL/Public Lighting	3.11	3.78	82%	3.76	3.78	100%
Tariff-LT PWW/Public Water Works	3.25	3.78	86%	3.76	3.78	100%
High Tension Supply	**3.98**	3.78	105%	**4.28**	3.78	113%
Tariff HT-Mixed	4.42	3.78	117%	4.60	3.78	122%
Tariff HTI/Industrial	4.45	3.78	118%	4.61	3.78	122%
H.T.Industrial (Ferro Metallurgical/ Steel Melting/ /Power Intensive)	**3.54**	3.78	94%	**3.86**	3.78	102%
First 300 Units/kVA	3.41	3.78	90%	3.86	3.78	102%
Next 200 Units/kVA	3.66	3.78	97%	3.86	3.78	102%
Above 500 Units/kVA	3.91	3.78	103%	3.86	3.78	102%
Tariff-HTAG/Agriculture	1.72	3.78	45%	1.86	3.78	49%
EHTI/Industrial	4.14	3.78	110%	4.60	3.78	122%
H.T. PW/Public Water Supply and Sewage	3.38	3.78	90%	3.79	3.78	100%
H.T. MES/Defense Establishments	3.41	3.78	90%	3.79	3.78	100%
H.T. Industrial (Steel Rolling)	**3.24**	3.78	86%	**4.17**	3.78	110%
First 200 Units/kVA	3.07	3.78	81%	4.17	3.78	110%
Next 100 Units/kVA	3.52	3.78	93%	4.17	3.78	110%
Above 300 Units/kVA	4.27	3.78	113%	4.17	3.78	110%
Tariff HT-Industries (IT High Tech).	3.12	3.78	83%	3.79	3.78	100%

Category/Consumption Slab	Revenue at Existing Tariff			Revenue from Revised Tariff		
	Average Realisation	ACoS	% of ACoS	Average Realisation	ACoS	% of ACoS
Tariff HT-Industries (ICE)	4.50	3.78	119%	4.72	3.78	125%
Temporary Supply						
Tariff-LT/Temporary	7.50	3.78	199%	7.50	3.78	199%
Tariff-HT/Temporary	7.50	3.78	199%	7.50	3.78	199%
Hoardings/Sign Boards		3.78	0%	7.72	3.78	204%
Total Demand/Sale Within State/UT	**3.33**	3.78	88%	**3.59**	3.78	95%

8.5 *Estimated Revenue and Surplus/Deficit at revised Tariff for FY 2014-15*

The estimated Revenue at revised tariff for FY 2014-15 works out to be as under.

Table 57: *Total Revenue estimated by the Commission at revised tariff for FY 14-15 (in Rs. Crores)*

Category/Consumption Slab	Revenue from Revised Tariff					
	Fixed Charges	Energy Charges	Total Charges	ABR	ACoS	% of ACoS
Low Tension Supply	**34**	**306**	**340**	**2.63**	3.78	70%
Tariff LTD/Domestic and Non - Commercial	**9**	**152**	**161**	**1.92**	3.78	51%
First 60 Units	1.15	21.18	22.33	1.26	3.78	33%
61 - 250 Units	4.84	85.75	90.59	1.80	3.78	48%
251 Units - 500 Units	1.94	34.68	36.62	2.90	3.78	77%
Above 500 Units	0.73	10.76	11.49	3.42	3.78	90%
Tariff LTD/Low Income Group	**0.47**	**0.00**	**0.47**	**1.88**	3.78	50%
Tariff LTD/Domestic Mixed	**0**	**2**	**2**	**3.10**	3.78	82%
First 400 Units	0.00	1.26	1.27	2.90	3.78	77%
Above 400 Units	0.00	0.39	0.39	4.00	3.78	106%
Tariff LTC/Commercial	**4**	**105**	**110**	**3.76**	3.78	100%
First 100 Units	1.69	44.63	46.32	3.27	3.78	87%
100 Units - 1000 Units	2.07	52.17	54.23	4.16	3.78	110%
Above 1000 Units	0.46	8.61	9.07	4.74	3.78	125%
Tariff LTP/Motive Power	**18**	**30**	**48**	**5.13**	3.78	136%
Connected Load Upto 50 HP	0.70	1.28	1.98	4.03	3.78	107%
Connected Load Above 50 HP	17.68	28.42	46.10	5.19	3.78	137%
Tariff-LTP/Mixed (Hotel Industries)	**0.10**	**2.08**	**2.18**	**4.19**	3.78	111%
Tariff LTP/Ice Manufacturing	**0.01**	**2.53**	**2.54**	**3.22**	3.78	85%
Tariff-LTAG/Agriculture	1.03	1.94	2.97	1.84	3.78	49%
Tariff-LTPL/Public Lighting	0.38	8.53	8.91	3.76	3.78	100%
Tariff-LT PWW/Public Water Works	0.87	1.72	2.58	3.76	3.78	100%
					3.78	0%
High Tension Supply	**169**	**595**	**764**	**4.28**	3.78	113%
Tariff HT-Mixed	16.25	35.31	51.56	4.60	3.78	122%
Tariff HTI/Industrial	85.75	216.12	301.87	4.61	3.78	122%
H.T.Industrial (Ferro Metallurgical/ /Steel Melting/Power Intensive)	**30.79**	**183**	**214**	**3.86**	3.78	102%
First 300 Units/kVA	16.63	98.87	115.50	3.86	3.78	102%
Next 200 Units/kVA	11.70	69.57	81.28	3.86	3.78	102%
Above 500 Units/kVA	2.46	14.65	17.11	3.86	3.78	102%

Category/Consumption Slab	Revenue from Revised Tariff					
	Fixed Charges	Energy Charges	Total Charges	ABR	ACoS	% of ACoS
Tariff-HTAG/Agriculture	0.30	0.69	0.98	1.86	3.78	49%
EHTI/Industrial	21.14	67.16	88.30	4.60	3.78	122%
H.T. PW/Public Water Supply and Sewage	6.45	49.21	55.66	3.79	3.78	100%
H.T. MES/Defense Establishments	1.23	8.19	9.41	3.79	3.78	100%
H.T. Industrial (Steel Rolling)	**5**	**20**	**26**	**4.17**	3.78	110%
First 200 Units/kVA	3.80	14.40	18.20	4.17	3.78	110%
Next 100 Units/kVA	1.23	4.67	5.90	4.17	3.78	110%
Above 300 Units/kVA	0.32	1.22	1.54	4.17	3.78	110%
Tariff HT-Industries (IT High Tech).	1.24	6.69	7.93	3.79	3.78	100%
Tariff HT-Industries (ICE).	0.09	0.15	0.24	4.72	3.78	125%
					3.78	0%
Temporary Supply					3.78	0%
Tariff-LT/Temporary		8.19	8.19	7.50	3.78	199%
Tariff-HT/Temporary		0.10	0.10	7.50	3.78	199%
Hoardings/Sign Boards	0.03	0.11	0.14	7.72	3.78	204%
Total Demand/Sale Within State/UT	**203**	**901**	**1,103.82**	**3.59**	3.78	95%

The estimated gap/surplus after incorporating impact of revised tariff for FY 2014-15 from 1st April, 2014 is as under:

Table 58: *Estimation of ARR Gap/Surplus at revised tariff for FY 14-15 (in Rs. Crores)*

Sr. No.	Particulars	Approved by the Commission (FY 2014-15) (Rs. crores)
1	**Net Revenue Requirement**	**1162.86**
2	Gap for the previous year	0
3	**Total Revenue Requirement (1+2)**	**1162.86**
4	**Revenue from existing tariff**	1025.66
5	Total Gap (3 -4)	137.20
6	**Revenue at revised tariff (applicable from 1st April, 2014)**	**1103.82**
7	**Net Gap/(Surplus) (3-6)**	**59.04**

As discussed in earlier para, **this gap shall be borne by the Government of Goa, therefore** the assessed gap of Rs. 59.04 Crores shall be funded as per the present arrangements through non-planned funding in Annual Plan by the Govt. of Goa to the Electricity Department of Goa. As such, the part of the assessed revenue gap will be met through the revised tariffs and the Government of Goa would cover rest through the support and, therefore revenue gap of Rs. 59.04 Crores for FY 2014-15 will not be carried forward to the next financial year 2015-16.

8.6 *Applicability of Tariffs*

The tariffs will be applicable from April 1, 2014 and up to the issuance of next order.

9. Determination of open access charges

Petitioner's Submission

The Petitioner in its petition had not submitted the calculations of the open access charges. However, on enquiry by the Commission the petitioner had submitted the calculations of the open access charges.

The Petitioner submitted that it has computed the open access charges as per the methodology adopted in previous tariff order which is shown in the tables below:

1. *Segregation of Wheeling & Supply ARR for FY 2014-15*

S. No.	Particulars	Ensuing Year (FY 2014-15)	As per T.O.FY 2013-14 Approach			
		Projection (Rs.Crs)	Wheeling	Supply	Wheeling (Rs.Crs)	Supply (Rs.Crs)
1	Power Purchase Expenses	1,066	0%	100%	-	1,066
2	Operation & Maintenance Expenses					
2.1	Employee Expenses	177	70%	30%	124	53
2.2	Administration & General Expenses	10	50%	50%	5	5
2.3	Repair & Maintenance Expenses	25	90%	10%	22	2
3	Depreciation, including advance against depreciation	24	90%	10%	22	2
4	Interest on Long-term Loan Capital & Finance Charges	9	90%	10%	8	1
5	Interest on Working Capital	4	22%	78%	1	3
6	Interest on consumer security deposits	7	0%	100%	-	7
7	Return on Equity Capital/ NFA	11	90%	10%	10	1
8	CGRF Expenses	1	0%	100%	-	1
9	**Aggregate Revenue Requirement**	**1,334**	**14%**	**86%**	**192**	**1,141**
10	Less: Non Tariff Income	23	0%	100%	-	23
11			0%	100%	-	-
12	**Aggregate Revenue Requirement**	**1,310**	**15%**	**85%**	**192**	**1,118**
13	**Aggregate Revenue Requirement**		**192**	**1,118**		
14	**Sales (MUs)**	**3,177**				
15	**Avg Wheeling Charges (Rs/kWh)**		**0.61**			

Voltage wise Energy Input

Particulars	UoM	Amount
Total Input	**MU**	**3,620.57**
Input for HT & EHT Sales	**MU**	**1,875.67**
Losses for HT & EHT	**%**	**3.65%**
Losses	**MU**	**68.46**
Sales at 11 kV & above	**MU**	**1,807.20**
Input for LT	**MU**	**1,744.90**
Losses at LT Level	**MU**	**21.5%**
Losses	**%**	**375.06**
Sales at LT Level	**MU**	**1,369.85**
Balance	**MU**	**-**

2. Voltage wise Loss Details

Particulars	UoM	S.No.	FY 2014-15
Wheeling Cost	Rs.Crs	a	192.22
Wheeling Cost at EHT & HT	Rs.Crs	b=ax53%	101.88
Wheeling Cost at LT	Rs.Crs	c=ax47%	90.34
Energy Input at Discom Periphery	%	d	3,620.57
Wheeling Charge at EHT & HT Level	Rs/kWh	e=b/dx10	0.28
EHT and HT Losses	%	f	3.65%
EHT and HT Losses	MU	g	132.15
Sales at EHT and HT Level	MU	h	1,807.20
Energy Input at LT	MU	i=d-g-h	1,681.21
Wheeling Charge at LT Level	Rs/kWh	j=c/ix10	0.54
Sales at LT Level	MU	k	1,369.85
LT Losses	MU	l=i-k	311.37
Total Losses	MU	m=g+l	443.52
	%	n	12.25%

3. Computation of Top 5% Power Purchase Cost

S No	Source	Purchase (MU)	Reasons	VC (Ps/Unit)	Top 5% Energy (MU)	Cost of Top 5% Energy (Rs Cr)
1	*TAPS*	*71.83*	*Must Run*	*303.56*	-	-
2	*Mouda*	*45.60*		*301.25*	*45.60*	*13.74*
3	*RGPPL*	*27.88*	*Must Run*	*300.00*		-
4	*NVVN Limited / Open Market*	*297.35*		*300.00*	*142.24*	*42.67*
5	*KGPP*	*28.81*		*269.59*		-
6	*GGPP*	*27.61*		*259.67*		-
7	*KAPS*	*116.77*	*Must Run*	*251.87*		-
8	*Goa Sponge & Power Limited*	*5.62*	*Must Run*	*240.00*		-
9	*Sesa Goa Limited*	*55.00*	*Must Run*	*240.00*		-
10	*Goa Energy Private Limited*	*23.57*	*Must Run*	*225.49*		-
11	*RSTPS*	*745.40*		*219.97*		-
12	*SIPAT- II*	*82.11*		*181.79*		-
13	*SIPAT- I*	*147.28*		*175.60*		-
14	*VSTPS - I*	*224.27*		*138.17*		-
15	*VSTPS -IV*	*43.96*		*131.97*		-
16	*VSTPS -III*	*88.89*		*130.37*		-
17	*VSTPS - II*	*101.43*		*130.10*		-
18	*KSTPS-III*	*37.84*		*107.74*		-
19	*KSTPS*	*1,585.55*		*105.21*		-
20	*Renewable Energy Sources*	-	*Must Run*	-		-
21	***Total***	***3,756.76***			***187.84***	***56.41***
Top 5% Volume of Energy		*187.84*	*Must run stations not considered while determining Top 5% Power Purchase Cost.*			
Cost of Top 5% Energy		*56.41*				
Per Unit Cost		***3.0030***				

4. *Computation of Cross Subsidy Surcharge*

Calculation of Total Cost - Based on ARR FY 2014-15					
	Particulars	**Unit**	**Upto 33 kV**	**11 kV**	**LT Level**
C =	Weighted average cost of power purchase of 5% at the margin excluding UI and renewable power	Rs./Unit	3.00	3.00	3.00
D =	Wheeling Charges	Rs./Unit	0.28	0.28	0.54
L =	System Losses for the applicable voltage level	%	3.65%	3.65%	21.49%
Total	**[C (1+ L / 100) + D]**	**Rs./Unit**	**3.29**	**3.29**	**3.55**

Computation of Cross Subsidy Surcharge - FY 2014-15					
Major Consumer Categories		**Proposed Tariff (Rs/kWh)**	**Surcharge upto 33 kV (Rs/kWh)**	**Surcharge at 11 kV (Rs/kWh)**	**Surcharge at LT Level (Rs/kWh)**
8(a)	Tariff HTI/Industrial	4.544	1.258	1.258	0.997
9	H.T.Industrial (Ferro Mettallurgical/ Steel Melting/ Power Intensive)	3.992	0.707	0.707	0.445
11	EHTI/Industrial	4.441	1.155	1.155	0.894
14	H.T. Industrial (Steel Rolling)	3.722	0.436	0.436	0.175

Commission's Analysis

As mentioned above the petitioner has submitted the open access charges for FY 2014-15. The Commission has therefore in order to facilitate the open access has approved the Open Access related charges for FY 2013-14.

It is also seen from the Petitioner's submission that the Transmission and Distribution business has not been segregated and the ED-GOA continues to function as an integrated utility. The Commission in line with the petitioner's submission and the fact that the expenses of the utility are consolidated has considered "NIL" transmission charges for the open access consumers in the State.

Allocation Matrix

The Commission feels that there has to be proper bifurcation of all expenses pertaining to the Petitioner between functions of wheeling business (wire business) and retail supply business. As the petitioner has not proposed any such bifurcation based on facts the Commission feels prudent to consider the allocation matrix for bifurcation of wheeling and retail ARR as proposed in the 'STAFF PAPER ON OPERATIONALISATION OF OPEN ACCESS (OA) IN THE STATE OF GOA AND THE UTs' in September 2012. The allocation between wheeling and retail supply business for FY 2013-14 and FY 2014-15 as per the approved ARR in this order is provided in the table below:

Table 59: *Allocation of ARR between Wheeling and Retail Supply*

Wheeling and Retail Supply ARR (Rs. Crores) - Goa									
S. No.	Particulars	Allocation (%)		Allocation FY 2013-14			Allocation FY 2014-15		
		Wheeling	Supply	Wheeling	Supply	Total	Wheeling	Supply	Total
1	Cost of Fuel	0%	100%	-	-	-	-	-	-
2	Power Purchase Expenses (incl transmission charges)	0%	100%	-	933	933	-	934	934
3	Employee cost	70%	30%	101	43	144	107	46	152
4	Repair & Maintenance expenses	90%	10%	18	2	20	19	2	21
5	Administration & General expenses	50%	50%	5	5	9	5	5	10
6	Depreciation	90%	10%	14	2	16	22	2	24
7	Interest & Finance Charges	90%	10%	15	2	17	22	2	24
8	Interest on working capital	22%	78%	1	3	4	1	2	3
9	Interest on Security Deposit	0%	100%	-	5	5	-	6	6
10	Return on Net Fixed Assets /Equity	90%	10%	5	1	6	10	1	11
11	Provision for Bad & Doubtful Debt	0%	100%	-	-	-	-	-	-
12	Other expenses	90%	10%	1	0	1	1	0	1
13	**Total Revenue Requirement**			**159**	**995**	**1,155**	**185**	**1,001**	**1,186**
14	Less: Non-Tariff Income	0%	100%	-	23	23	-	23	23
15	Less: Revenue from Sale through UI	0%	100%	-	8	8	-	-	-
16	Less: Revenue from Sale of Power (Exchanges)	0%	100%	-	6	-	-	-	-
17	**Net Revenue Requirement (13-14-15-16)**			**159**	**958**	**1,124**	**185**	**978**	**1,163**

Voltage wise Wheeling Charges

The Petitioner has submitted that the voltage wise bifurcation of expenses and assets are not available. The Commission opines that in the absence of the details of bifurcation of assets and expenses the open access should not be restricted due to lack of information. The Commission in this regard would like to mention that the apportionment of wheeling charges have to account for losses. Therefore, in the absence of the voltage wise details the Commission has considered the bifurcation of wheeling cost based on the sales and losses at each voltage level. The petitioner has considered the losses on assumption basis and not on actual basis. The Commission in the absence of such details the Commission has considered the HT losses equivalent to the approved figures in the previous order for FY 2013-14. Accordingly, the Commission has considered the losses at HT and EHT at 3.636%. The Commission in this order has approved the T&D loss for FY 2014-15 at 11.5%. Accordingly, the balancing loss has been considered at the LT level.

Therefore, to arrive at the network usage the input energy at each level has been arrived and shown in the table below:

Table 60: *Determination of input energy for network usage percentage*

Particulars	UoM	Amount
Total Input	MU	3,478.06
Input for HT and EHT Sales	MU	1,851.93
Losses for HT and EHT	%	3.636%
Losses	MU	67.34
Sales at 11 kV and above	MU	1,784.59

Input for LT	MU	1,626.13
Losses at LT level	%	20%
Losses	MU	332.37
Sales at LT level	Mu	1,293.49
Balance	MU	0.27

Accordingly, the wheeling cost has been considered in the ratio of 53:47 and the wheeling charge so arrived has been shown in the table below

Table 61: *Wheeling charges approved for FY 2014-15*

Particulars	UoM	S. No	FY 2014-15
Wheeling Cost	Rs Crores	A	185.35
Wheeling Cost at EHT and HT (53%)	Rs Crores	B=A*53%	98.69
Wheeling Cost at LT (47%)	Rs Crores	C=A*47%	86.66
Energy Input at Discom Periphery	MU	D	3,478.06
Wheeling Charge at EHT and HT level	Rs per Unit	E=B/D*10	0.28
EHT and HT losses	%	F	3.64%
EHT and HT losses	MU	G	126.46
Sales at EHT and HT level	MU	H	1,784.59
Energy Input at LT	MU	I=D-G-H	1,567.01
Wheeling Charge at LT level	Rs per Unit	J=C/I*10	0.55
Sales at LT level	MU	K	1,293.49
LT Losses	MU	L=I-K	273.51
Total Losses	MU	M=G+L	399.98
	%		11.50%

Cross Subsidy Surcharge

The Cross subsidy surcharge is based on the following formula given in the Tariff Policy as below:

$S = T-[C\ (1+L/100)\ +D]$

Where,

S is the surcharge

T is the Tariff payable by the relevant category of consumers;

C is the Weighted average cost of power purchase of top 5% at the margin excluding liquid fuel based generation and renewable power

D is the Wheeling charges

L is the System losses for the applicable voltage level, expressed as percentage.

The Computation of each item is given below.

Table 62: *Calculation of "T"*

Particular	Sales	Revenue from approved tariff	Average Tariff
Tariff HT-Mixed	112.09	51.56	4.60
Tariff HTI/Industrial	654.90	301.87	4.61
H.T.Industrial (Ferro Metallurgical/ /Steel Melting/ Power Intensive)	554.81	213.88	3.86
EHTI/Industrial	192	88.30	4.60
H.T. Industrial (Steel Rolling)	61	26	4.17
Tariff HT-Industries (IT High Tech).	21	7.93	3.79

Table 63: *Calculation of ''C''*

Station	Energy Procured	Average Rate	Total Power Purchase cost
KGPP	54.00	4.50	24.32
GGPP	73.53	4.21	30.97
RGPPL	54.91	3.98	21.85

The Cross subsidy surcharge based on the above formula is worked out in the table below:

Table 64: *Approved Cross subsidy surcharge for FY 2014-15*

Particular	Sales	Revenue fron	Averge Tariff	Cross Subsidy S
Tariff HT-Mixed	112.09	51.56	4.60	-
Tariff HTI/Industrial	654.90	301.87	4.61	-
H.T.Industrial (Ferro Mettallurgical/ Steel Melting/ Power Intensive)	554.81	213.88	3.86	-
EHTI/Industrial	192	88.30	4.60	-
H.T. Industrial (Steel Rolling)	61	26	4.17	-
Tariff HT-Industries (IT High Tech).	21	7.93	3.79	-

Additional Surcharge

In order to promote competition through open access the Commission in line with the petitioner's submission approved "Nil" Additional Surcharge. This would be revisited at the time of next tariff order based on Open Access implementation.

10. Conclusion of Commission's Order

Having considered the Petitions of Electricity Department, Goa for approval of Review for FY 2013-14 and determination of ARR for 2014-15, the Commission approves the Aggregate Revenue Requirement (ARR) and revised tariff schedule for ED–Goa.

1. *The break-up of the Aggregate Revenue Requirement approved for ED Goa for FY 2014-15 is given below.*

Sr. No.	Particulars (In Rs. Cr)	FY 2014-15
		Approved
1	Cost of power purchase	933.95
2	Employee costs	152.42
3	R&M expenses	20.73
4	Administration and general expenses	9.60
5	Depreciation	24.42
6	Int and Finance Charges	24.35
7	Interest on Working Capital	2.85

Sr. No.	Particulars (In Rs. Cr)	FY 2014-15
		Approved
8	Interest on Security Deposit	5.89
9	Return on NFA	11.12
10	Provision for Bad Debts	
11	Other Expenses	0.75
12	**Total Revenue Requirement**	**1,186.08**
13	Less: Non-Tariff Income	23.22
14	Less: Revenue from Sale of Power - UI Pool	
15	**Aggregate Revenue Requirement**	**1,162.86**
16	Revenue from Retail Sales at Existing Tariff	1,025.66
17	FPPCA Charge	
18	**Revenue Gap/ (Surplus) at existing tariff**	**137.20**
19	**Additional revenue due to revised tariff**	**78.16**
20	Budgetary Support from Government	59.04
21	**Net Final Revenue Gap/ (Surplus) at existing tariff**	**-**

2. *The break-up of the Aggregate Revenue Requirement approved under the review for ED–Goa for FY 2013-14 is given below:*

Sr. No.	Particulars (In Rs. Cr)	FY 2013-14
		Approved
1	Cost of power purchase	933.41
2	Employee costs	144.21
3	R&M expenses	19.61
4	Administration and general expenses	9.08
5	Depreciation	16.00
6	Int and Finance Charges	16.70
7	Interest on Working Capital	3.84
8	Interest on Security Deposit	5.42
9	Return on NFA	5.86
10	Provision for Bad Debts	
11	Other Expenses	0.56
12	**Total Revenue Requirement**	**1,154.68**
13	Less: Non-Tariff Income	22.55
14	Less: Revenue from Sale of Power-UI Pool	8.38
15	Less: Revenue from Sale of Power-Exchanges	
16	Less: Revenue from Sale/Banking of Power	
17	Provision for RPO Obligation for previous years	29.42
17	**Aggregate Revenue Requirement**	**1,153.17**
18	Revenue from Retail Sales at Existing Tariff	990.36
19	FPPCA Charge	23.68
20	**Revenue Gap/(Surplus) at existing tariff**	**139.12**
21	**Additional revenue due to revised tariff**	
22	Budgetary Support from Government	139.12
23	**Net Final Revenue Gap/(Surplus) at existing tariff**	**-**

3. *The approved retail tariff for FY 2014-15 is as below:*

S. No.	Category/Consumption Slab	Revised Tariff		K Factor
		Fixed Charge[7]	Variable Charge[8]	(Applicable for FY 2014-15)
A	**Low Tension Supply**			
1(a)	Tariff LTD/Domestic and Non - Commercial			
	First 60 Units	10.00	120.00	0.33
	61 - 250 Units	15.00	170.00	0.48
	251 Units - 500 Units	25.00	275.00	0.77
	Above 500 Units	35.00	320.00	0.90
1(b)	**Tariff LTD/Low Income Group**	**27.50**		**NA**
1(c)	**Tariff LTD/Domestic Mixed**			
	First 400 Units	30.00	290.00	0.77
	Above 400 Units	40.00	400.00	1.06
2	**Tariff LTC/Commercial**			
	First 100 Units	30.00	315.00	0.87
	100 Units - 1000 Units	40.00	400.00	1.10
	Above 1000 Units	60.00	450.00	1.25
3 (a)	**Tariff LTP/Motive Power**			
	Connected Load Upto 50 HP	25.00	260.00	1.07
	Connected Load Above 50 HP	25.00	320.00	1.37
3(b)	**Tariff-LTP/Mixed (Hotel Industries)**	**25.00**	**400.00**	1.11
3 ©	**Tariff LTP/Ice Manufacturing**	**25.00**	**320.00**	0.85
4	Tariff-LTAG/Agriculture	10.00	120.00	NA
5	Tariff-LTPL/Public Lighting	35.00	360.00	1.00
6	Tariff-LT PWW/Public Water Works	25.00	250.00	1.00
B	**High Tension Supply**			
7	Tariff HT-Mixed	200.00	315.00	1.22
8	Tariff HTI/Industrial	200.00	330.00	1.22
9	H.T.Industrial (Ferro Metallurgical/ Steel Melting/ Power Intensive/ Steel Rolling)	275.00	330.00	1.03
10	Tariff-HTAG/Agriculture	30.00	130.00	NA
11	EHTI/Industrial	230.00	350.00	1.22
12	H.T. PW/Public Water Supply and Sewage	200.00	335.00	1.00
13	H.T. MES/Defense Establishments	150.00	330.00	1.00
14	Tariff HT-Industries (IT High Tech).	200.00	320.00	1.00
15	Tariff HT-Industries (ICE).	200	300	1.25
C	**Temporary Supply**			
16	Tariff-LT/Temporary	50.00	750.00	NA
17	Tariff-HT/Temporary	100.00	750.00	NA
18	**Hoardings/Sign Boards**	50.00	600.00	2.04

[7] Rs. per connection/HP/kW/kVA on monthly basis as applicable and detailed in the tariff schedule
[8] Rs. Per kWh

4. The approved tariff shall come in force with effect from 1st April 2014 and shall remain valid till issuance of the next order. All existing provisions, which are not modified by this order, shall continue to be in force. 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/regulations being separately notified by the Commission. For the purpose of calculation using FPPCA formula to be notified by the Commission separately, **the approved per unit cost of power purchase ($R_{approved}$) for use in the FPPCA formula (paisa per unit) is 273 paisa per unit for FY 2014-15**.

6. Copy of this order may be sent to Petitioner, CEA and Administration of UT of Goa. It shall be placed on the website of the Commission.

SH. S K CHATURVEDI

Chairman

Place: Gurgaon

Date: April 15' 2014

Certified Copy

RAJEEV AMIT

Secretary

11. General Conditions and Tariff Schedule

General Conditions and Definitions

1) These tariffs are applicable from 1st April, 2014 and shall remain valid till the issuance of next order.

2) The tariffs are exclusive of electricity duty and taxes 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.

3) Unless otherwise agreed to, these tariffs for power supply are applicable for supply at one point only.

4) Unless specifically stated to the contrary the figures of energy charges relate to paise per unit (kWh) charge for energy consumed for the month.

5) If energy supplied for a specific purpose under a particular tariff is used for a different purpose, not contemplated in the contract for supply and/or for which higher tariff is applicable, it will be deemed as unauthorized use of electricity and shall be dealt with for assessment under the provisions of section 126 of the Electricity Act, 2003 & Supply Code Regulation notified by JERC:

Provided that (a) if a portion of the domestic premises limited to only one room is used for running small household business having connection under domestic category, such connection shall be billed under domestic category provided that the total monthly consumption of the consumer (including consumption for above mentioned small household business) does not exceed 150 kWh.

(b) If either more than one room or only one room having monthly consumption exceeding 150 kWh for consecutive three months is detected in the domestic premises being used for mixed purposes having domestic connection, such connection shall further be billed under commercial category until a separate connection of appropriate tariff is taken for that portion used for non-domestic purpose.

6) If connected load of a domestic category is found to be at variance from the sanctioned/contracted load as a result of replacement of appliances such as lamps, fans, fuses, switches, low voltage domestic appliances, fittings, it shall not fall under section 126 and section 135 of the EA 2003.

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) 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 and Supply Code Regulations.

9) Late payment surcharge of 2% per month or part thereof shall be levied on all delayed payments 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.

10) **Power Factor Charges for HT and EHT**

(a) The consumer shall maintain the monthly average power factor of the supply not less than 0.90 (lagging). If the monthly average power factor of a consumer falls below 90% (0.9 lagging), such consumer shall pay a surcharge in addition to his normal tariff @ 1% on billed demand and energy charges for each fall of 0.01 in power factor upto 0.7 (lagging).

(b) In case the monthly average power factor of the consumer is more than 95% (0.95 lagging), a power factor incentive @ 0.5% on demand and energy charges shall be given for each increase of 0.01 in power factor above 0.95 (lagging).

(c) If the average power factor falls below 0.70 (lagging) consecutively for 3 months, the licensee reserves the right to disconnect the consumer's service connection without prejudice for the levy of the surcharge.

(d) The power factor shall be rounded off to two decimal places. For example, 0.944 shall be treated as 0.94 and 0.946 shall be treated as 0.95.

This clause shall be applicable to 7, 8(a), 8(b), 8(c), 9, 11, 12, 13, 14 &15.

11) "Seasonal Consumers" mean all consumers who work only during a part of the year up to a maximum of nine months such as cotton, corning, agriculture and pressing factories. It shall also include Ice Factories, Oil Mills, Sugar Factories etc., which may work throughout the year but intermittently, and any other consumers, which may be classified by the Department from time to time and approved by the Commission as seasonal consumers.

12) The consumption for factory lighting/pump house lighting will be billed as per respective main tariff category. A separate energy meter for recording energy consumed

towards factory lighting for new installation need not be provided. For the existing installations, till the factory lighting meter's mains are shifted to main meter, the total energy consumption shall be arrived by adding the energy consumption of main energy meter and factory lighting meter.

13) For staff quarters, rest/guest houses, street lighting in the colony of a factory which is situated separately from the main factory and when distribution lines, service lines, etc. are permitted to be owned and maintained by the HT consumer owning the factory, there shall be a separate connection and all energy consumed shall be charged under "Tariff LTD/Domestic Mixed".

14) LT Connection is applicable with Sanctioned Load of less than 100 KVA or 90 KW or 120 HP as the case may be and HT Connection is applicable with Contract Demand of 100kVA and above.

15) Supply of power in all cases shall be subject to the execution of Agreement between Electricity Department, Goa and consumers and as per JERC (Electricity Supply Code) Regulation, 2010. The Other Conditions, Definitions etc. shall be applicable as per Provisions of Electricity Act, 2003 and various JERC Regulations issued from time to time such as Standards of performance, Supply Code, Distribution Code etc.

16) Billing Demand and Billing of extra Demand :

The billing 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 energy rate.

The definition of the Maximum demand would be in accordance with the provisions of the JERC (Electricity Supply Code) Regulations, 2010.

If such overdrawl is more than 20% of the contracted demand then the connection shall be disconnected immediately.

Explanation:

Assuming the contract demand as 100 kVA, maximum demand at 120 kVA and total energy consumption as 12000 units, then the consumption corresponding to the contract demand will be 10,000 units (12000 X 100/120) and consumption corresponding to the excess demand will be 2000 units. This excess demand of 20 kVA and excess consumption of 2000 units will be billed at twice the respective normal rate. e.g. in case of HTI/Industrial category, excess demand and consumption will be billed at the rate of Rs. 350 per kVA per month and Rs. 6.60/kWh respectively. Such connection drawing more than 120 kVA shall be disconnected immediately.

17) Advance Payment Rebate: If payment is made in advance well before commencement of consumption period for which bill is prepared, a rebate @ 1% per month shall be given on the amount (excluding security deposit) which remains with the licensee at the end of the month. Such rebate, after adjusting any amount payable to the licensee, shall be credited to the account of the consumer.

18) Prompt Payment Rebate: If payment is made at least 7 days in advance of the due date of payment a rebate for prompt payment @ 0.25 % of the bill amount shall be given. Those consumers having arrears shall not be entitled for such rebate.

19) The adjustment because 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.

20) The values of the 'K' factor applicable for the different consumer categories for use in the FPPCA formula shall be as specified in this Tariff Order for FY 2013-14.

21) **Time of Day tariff (ToD)**

(i) Under the Time of Day (ToD) Tariff, electricity consumption and maximum demand in respect of HT/EHT consumers for different periods of the day, i.e. normal period, peak load period and off-peak load period, shall be recorded by installing a ToD meter.

(ii) The maximum demand and consumption recorded in different periods shall be billed at the following rates on the tariff applicable to the consumer.

Time of use	Demand Charges	Energy Charges
Normal period (6:00 a.m. to 6:00 p.m)	Normal Rate	Normal rate of energy charges
Evening peak load period (6:00 p.m. to 10.00 p.m.)	Normal Rate	120% of normal rate of energy charges
Off-peak load period (10:00 p.m. to 6:00 a.m.)	Normal Rate	90% of normal rate of energy charges

(iii) Applicability and Terms and Conditions of TOD tariff:

(a) TOD tariff shall be optional unless otherwise specifically stated to the contrary in the tariff order.

(b) The facility of aforesaid TOD tariff shall not be available to HT/EHT consumers having captive power plants and/or availing supply from other sources through wheeling of power.

(c) The HT/EHT industrial consumers who have installed standby generating plants shall also be eligible for the aforesaid TOD tariff.

(d) In the event of applicability of TOD tariff to a consumer, all other terms and conditions of the applicable tariff shall continue to apply.

22) Schedule of other charges would be as approved by the Commission in its order dated 31-03-2013 which is annexed as **Annexure 5**.

Tariff Schedule

Tariff Schedule -LT Consumers

1 (a) TARIFF LTD/DOMESTIC AND NON-COMMERCIAL

APPLICABILITY

This schedule shall apply to private house, bungalows, charitable or educational institutions approved by Goa Board/Central Board, colleges approved by Goa University and religious institutions etc. for consumption of energy on lights, fans, radios, domestic heating and other household appliances with Sanctioned Load less than 100 KVA or 90 KW or 120 HP as the case may be.

TARIFF

Consumption Slab	Fixed Charges (Rs./connection/month)	Energy Charges (Paise/kWh)
(a) First 60 Unit	10.00	120
(b) 61 to 250 units	15.00	170
(c) 251 to 500 units	25.00	275
(d) Above 500 units	35.00	320

The method of billing of charges shall be as explained below

(a) Say units billed in a month are 80 units. Then, the fixed charges will be Rs. 10/month and energy charges Rs. 104 (60 X 1.2 + 20 X 1.6)

(b) In case the units billed are 275, then the fixed charges will be Rs. 20/month and energy charges Rs 441/- (60 units X Rs. 1.2/kWh + 190 units X Rs. 1.6/kWh + 25 units X Rs. 2.6/kWh)

1 (b) TARIFF LTD/LOW INCOME GROUP

APPLICABILITY

This schedule shall apply to consumers of low Income Group with a Sanctioned Load 2 x 40 watts only.

TARIFF

Description	Rs./connection/ Month
Upto 2 Point	27.50

Note:-

For any unauthorised increase in load beyond 2 x 40 watts, penal charges at the rate of Rs. 25/- per month per point shall be levied and the installation shall be liable for disconnection.

1 (c) TARIFF LTD/DOMESTIC MIXED

APPLICABILITY

This schedule shall apply to Houses with the rent back facilities, clubs, hospitals, staff quarters, rest/guest houses, street lighting in the colony of a factory which is situated separately from the main factory and when distribution lines, service lines etc. are permitted to be owned and maintained by HT consumers with Sanctioned Load less than 100 KVA or 90 KW or 120 HP as the case may be.

TARIFF

Consumption Slab	Fixed Charges (Rs./connection/month)	Energy Charges (Paise/kWh)
First 400 units	30.00	290
Above 400 units	40.00	400

2) TARIFF-LTC/COMMERCIAL

APPLICABILITY

This schedule shall apply to shops, offices, railway stations, race course, computer training schools, photo studio, photo copier, colour laboratories, private guest house, messes, bus stand of KTC, private agriculture nurseries, dry cleaners, film studio, X ray installations, cinema theatres, AIR and TV station and studios, telephone exchanges, petrol pumps, battery charging units, tyre vulcanizing centers, ice parlors, bars and cold drink houses, commercial complexes, petrol, diesel and oil storage plants, for lights, fans, TV, radio, heating and other appliances with Sanctioned Load less than 100 KVA or 90 KW or 120 HP as the case may be.

TARIFF

Consumption Slab	Fixed Charges (Rs./connection/month)	Energy Charges (Paise/kWh)
First 100 units	30.00	315
101 units- 1000 units	40.00	400
Above 1000 units	60.00	450

3 (a) TARIFF-LTP/MOTIVE POWER

APPLICABILITY

This schedule shall apply to consumers such as industrial units, workshops, flour mills, wet grinding, rice mills, milk dairies, ice cream manufacturing units, dairy testing process, garment manufacturing, tyre retreading units, ice manufacturing plants, bakery, motive power load, industrial units engaged in manufacturing process or project activities with Sanctioned Load less than 100 KVA or 90 KW or 120 HP as the case may be.

TARIFF

Description	Fixed Charges (Rs./HP/month)	Energy Charges (Paise/kWh)
(a) Upto 50 HP	25.00	260
(b) Above 50 HP	25.00	320

3 (b) TARIFF-LTP/ICE MANUFACTURING

APPLICABILITY

This schedule shall apply to industrial units engaged in ice manufacturing where the total sanctioned load of the installation is less than 100 kVA or 90 kW or 120 HP as the case may be.

TARIFF

Fixed Charges (Rs./HP/month)	Energy Charges (Paisa/kWh)
25.00	320

3 (c) TARIFF-LTP/MIXED (HOTEL INDUSTRIES)

APPLICABILITY

This schedule shall apply to Hotels, restaurants, lodging and boarding where the total Sanctioned Load is less than 100 KVA or 90 KW or 120 HP as the case may be.

TARIFF

Fixed Charges Rs./kW/month	Energy Charges (Paise/kWh)
25.00	400

Note:-

Consumer intend to avail the facility of this tariff should produce the certificate from Tourism Department stating that the intending applicant is registered under Goa Registration of Tourist

Trade Act, 1982 and in Hotel business on regular basis. Such tariff shall be made applicable only from the date of receipt of such certificate.

4) TARIFF-LTAG/AGRICULTURE

APPLICABILITY

This schedule shall apply to irrigation pumping and agricultural purposes, poultry, piggery, pisciculture etc. for consumption of energy on pump motors, lights, fans, heating and other appliances with sanctioned load less than 100 KVA or 90 KW or 120 HP as the case may be.

TARIFF

Fixed Charges Rs./HP/month	Energy Charges (Paise/kWh)
10.00	120

Note:-

This tariff shall be applicable from the date of production of a certificate from the Directorate of Animal Husbandry or Fisheries Department of Government of Goa to the effect that the consumer carried on the said activity on regular basis.

5) TARIFF-LTPL/PUBLIC LIGHTING

APPLICABILITY

This schedule shall apply to public lighting systems including signal systems, road and parking lighting belonging to local authorities such as Municipality/Panchayat etc. with sanctioned load less than 100 kVA or 90 kW or 120 HP as the case may be. This shall also be applicable to public lighting of Government/Semi-Government Establishments but shall not be applicable in case of private establishment.

TARIFF

Fixed Charges Rs./kW/month	Energy Charges (Paise/kWh)
35.00	360

6) TARIFF-LT PWW/PUBLIC WATER WORKS

APPLICABILITY

This schedule shall apply to public water supply and sewage pumping stations and treatment plants where Sanctioned Load is less than 100 KVA or 90 KW or 120 HP as the case may be.

TARIFF

Fixed Charges Rs./HP/month	Energy Charges (Paise/kWh)
25.00	250

Tariff Schedule – HT Consumers

7) TARIFF HT-MIXED

APPLICABILITY

This schedule shall apply to bulk supply of power at 11 KV and above for a Contract Demand 100kVA and above such as railway, educational institutions, non-industrial establishment etc. having mixed load with predominantly lighting or non-industrial load of more than 50% of connected load.

TARIFF

Fixed Charges Rs./kVA/month	Energy Charges (Paise/kWh)
200	315

8 (a) TARIFF HTI/INDUSTRIAL

APPLICABILITY

This schedule shall apply to supply of power at 11 KV and above for a Contract Demand of 100 KVA and above for industries, factories and other industrial purpose as may be decided by the Chief Electrical Engineer.

TARIFF

Fixed Charges Rs/kVA/month	Energy Charges (Paise/kWh)
200	330

8 (b) TARIFF-HTI/HOTEL INDUSTRIES

APPLICABILITY

This schedule shall apply to Hotels, restaurants, lodging and boarding where the total Contract Demand of such installation is 100 kVA & above.

TARIFF

Fixed Charges Rs/kVA/month	Energy Charges (Paise/kWh)
200	330

8 (c) TARIFF-HTI/ICE MANUFACTURING

APPLICABILITY

This schedule shall apply to industrial units engaged in ice manufacturing where supply of power is made at 11 kV and above for a Contract Demand of 100 kVA and above.

TARIFF

Fixed Charges Rs/kVA/month	Energy Charges (Paise/kWh)
200	330

9) H.T. INDUSTRIAL (FERRO METALLURGICAL/STEEL MELTING/POWER INTENSIVE/ /STEEL ROLLING)

APPLICABILITY

This schedule shall apply to supply of power having a Contract Demand from 100 KVA upto 1000 KVA at 11 KV and above 1000 KVA at 33 KV for **Steel rolling industry** and Metal Alloy, Steel Melting, Ferro Alloy, and Ferro metallurgical industries all types of Ferro alloy units where melting is involved using electric power.

TARIFF

Particulars	Fixed Charges Rs./kVA/month	Energy Charges (Paise/kWh)
For all units	275	330

10) TARIFF HT-AG/AGRICULTURE

APPLICABILITY

This schedule shall apply to supply of power at 11 KV and above to agricultural consumer, lift irrigation schemes, agricultural farms etc. with Contract Demand of 100 KVA and above.

TARIFF

Fixed Charges Rs./kVA/month	Energy Charges (Paise/kWh)
30.00	130

11) EHTI/INDUSTRIAL

APPLICABILITY

This schedule shall apply to bulk supply of power at 110 KV and above for industries, factories and other industrial purpose as may be decided by the Chief Electrical Engineer.

TARIFF

Fixed Charges Rs./kVA/month	Energy Charges (Paise/kWh)
230	350

12) H.T. PW/PUBLIC WATER SUPPLY AND SEWAGE

APPLICABILITY

This schedule shall apply to supply of power at 11 KV and above for a Contract Demand of 100 KVA and above for public water supply and sewage pumping stations and public water treatment plant.

TARIFF

Fixed Charges Rs./kVA/month	Energy Charges (Paise/kWh)
200	335

13) H.T. MES/DEFENCE ESTABLISHMENTS

APPLICABILITY

This schedule shall apply to supply of power at 11 KV and above for a Contract Demand of 100 KVA and above for defence installation establishments, having mixed load with predominantly lighting or non industrial load of more than 50% of connected load.

TARIFF

Fixed Charges Rs./kVA/month	Energy Charges (Paise/kWh)
150	330

15) TARIFF HT-INDUSTRIES (IT HIGH TECH)

APPLICABILITY

This schedule shall apply to bulk supply of power at 11 kV and above for a Contract Demand of 100 kVA and above for industries such as Information Technology Industries and information Technology Parks, etc.

TARIFF

Fixed Charges Rs./kVA/month	Energy Charges (Paise/kWh)
200	320

Tariff Schedule – Temporary Supply

16) TARIFF-LT/TEMPORARY

APPLICABILITY

This schedule shall apply to lights, fans and small appliances for all purposes at low voltage for sanctioned load less than 100 kVA or 90 kW or 120 HP as the case may be.

TARIFF

Fixed Charges Paise/unit	Minimum Charges
750	Rs. 50 per kW per day or part thereof subject to a minimum of Rs. 300/- per connection per month

Note:-

a) The above temporary connection shall be released through a proper meter.

b) The above temporary tariffs are applicable for temporary supply at low voltage for Sanctioned Load less than 100 kVA or 90 KW or 120 HP for a period not exceeding three month which may be extended beyond that period only with the prior permission of the Electricity Department, upto a maximum period of six months.

c) Security deposit shall be collected for an assessed 3 months billing.

17) Tariff HT/Temporary

APPLICABILITY

This schedule shall apply to lights, fans and small appliances for all purposes at high voltage for Contract Demand of 100 kVA and above.

TARIFF

Energy Charges Paise/unit	Minimum Charges
750	Rs. 100 per kVA per day or part thereof

Note:-

a) The above temporary connection shall be released through a proper meter.

b) The above temporary tariffs are applicable for temporary supply at high voltage for a period not exceeding six months which may be extended with prior permission of the Electricity Department, upto a maximum period of one year.

c) Security deposit shall be collected for an assessed 3 months billing.

18) Hoarding/Sign Board

APPLICABILITY

This schedule shall Electricity for lighting external advertisements, external hoardings and displays at departments stores, malls, multiplexes, theatres, clubs, hotels, bus shelters, Railway Stations shall be separately metered and charged at the tariff applicable for "Advertisements and Hoardings" category, except such displays which are for the purpose of

Indicating/displaying the name and other details of the shop, commercial premises itself. Such use of electricity shall be covered under the prevailing tariff for such shops or commercial premises.

TARIFF

Energy Charges Paise/kWh	Fixed Charge
600	Rs. 50 per kVA per Month or part thereof

ANNEXURE 1

Admission Order dated January 16, 2014 issued by Joint Electricity Regulatory Commission for the State of Goa and Union Territories.

ANNEXURE 2

Public Notices published by the Petitioner for inviting objections/suggestions on the ARR for FY 2014-15 (Petition No. 122/2014).

THE TIMES OF INDIA. GOA
FRIDAY, JANUARY 24, 2014

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ELECTRICITY DEPARTMENT, GOVERNMENT OF GOA
CHIEF ELECTRICAL ENGINEER
Vidyut Bhavan, Panaji Goa - 403 001
PUBLIC NOTICE IN RESPECT OF

PETITION FOR APPROVAL OF AGGREGATE REVENUE REQUIREMENT (ARR) AND TARIFF FOR FY 2014-15 FILED BY CHIEF ELECTRICAL ENGINEER, ELECTRICITY DEPARTMENT OF GOA BEFORE THE JOINT ELECTRICITY REGULATORY COMMISSION FOR GOA AND UNION TERITORIES.

1. Notice is hereby given to all consumers and stakeholders that the Electricity Department of Goa, a deemed licensee engaged in the distribution and retail sale of electricity has filed before the Joint Electricity Regulatory Commission (for State of Goa and UTs), the Aggregate Revenue Requirement (ARR) and tariff for retail sale of electricity for the financial year 2014-15 under Section 62 of the Electricity Act, 2003 and Regulation No. JERC-10/2009 of Joint Electricity Regulatory Commission (Terms and Conditions for Determination of Tariff) Regulations, 2009 and including Annual Performance Review (APR) for FY 2013-14.
2. The filing has been taken on record by the Hon'ble Commission vide petition No 122/2014 on 16/01/2014.

The summary of ARR for FY 2013-14 & FY 2014-15 is given in the table below:

Summary of Annual Performance Review & Gap for FY 2013-14 & FY 2014-15

Sr. No.	Item of expense	Approved FY13-14 (Rs.Crs)	Rev. Est FY13-14 (Rs.Crs)	Projection FY14-15 (Rs.Crs)
1	Cost of power purchase	909.86	1,087.69	1,065.53
2	Employee costs	148.64	165.00	177.14
3	R&M expenses	20.21	23.38	24.71
4	Administration and General expenses	9.36	11.39	9.97
5	Depreciation	16.03	16.00	24.42
6	Interest on Loan & Finance charges	16.70	10.01	8.96
7	Interest on Working Capital	1.68	6.44	4.32
8	Interest on Security Deposit	6.15	5.49	6.76
9	Return on NFA /Equity	5.86	5.86	11.12
11	CGRF Expenses	1.02	0.56	0.75
12	**Total Revenue Requirement**	**1,135.52**	**1,331.82**	**1,333.68**
13	Less: Non Tariff Income	22.53	22.55	23.22
14	Less: Revenue from Sale of Power - UI Pool	-	5.09	-
15	**Net Revenue Requirement (12-13-14)**	1,112.99	1,304.16	1,310.46
16	Revenue from Retail Sales at Existing Tariff including FPPCA Charges	981.11	992.83	1,031.31
17	Revenue from FPA Charges		23.68	-
18	Net Gap (15-16-17)	**131.88**	**287.66**	**279.15**

3. The net ARR is to be met through retail tariffs with nominal hike and budgetary support. The Government of Goa has agreed to provide budgetary support to meet revenue gap after considering tariff increases for FY 2014-15.

Sr. No.	Item of expense	Projection FY14-15 (Rs.Crs)
1	Net ARR for FY 2014-15	1,310.46
2	Less: Revenue at Existing Tariff	1,031.31
3	**Gap at Existing Tariff**	**279.15**
4	Less: Additional Revenue from Revised Tariffs	85.55
5	Less: Budgetary Support	193.60
6	**Balance Revenue Gap**	-

The proposal for retail tariffs for FY 2014-15 is as under:

(a) LT Tariff Proposal

Retail Proposal for LT Categories for FY 2014-15

Consumption Slab	Fixed Charges (Rs/Connection/month)		Energy Charges (Ps/Unit)	
Charges	Existing	Proposed	Existing	Proposed
Tariff LTD/Domestic and Non - Commercial				
(a) First 60 Unit	5	5	120	120
(b) 61 to 250 units	10	15	160	170
(c) 251 to 500 units	20	25	260	275
(d) Above 500 units	30	40	300	330
Tariff LTD/Low Income Group				
Upto 2 point	25	30	-	-
Tariff LTD/Domestic Mixed				
First 400 Units	20	35	270	310
Above 400 Units	30	50	370	410
Tariff LTC/Commercial				
First 100 units	20	25	300	300
101 units- 1000 units	30	50	380	400
Above 1000 units	50	75	410	450
Tariff LTP/Motive Power *				
Upto 50 HP	20	25	250	275
Above 50 HP	20	25	300	335
Tariff LTP/Ice Manufacturing*				
All Units	20	25	300	335
Tariff LTP/Mixed (Hotel Industries)				
All Units	25	25	400	400
Tariff LTAG/Agriculture *				
All Units	5	5	120	120
Tariff LTPL/Public Lighting				
All Units	25	25	300	300
Tariff LTPWW/Public Water Works				
All Units	20	20	250	250

**Fixed Charges in Rs/HP/Month*

(b) HT Tariff Proposal

Retail Proposal for HT Categories for FY 2014-15

Consumption Slab	Fixed Charges (Rs/kVA/month)		Energy Charges (Ps/Unit)	
Charges	Existing	Proposed	Existing	Proposed
Tariff - HT Mixed				
All Units	175	200	315	330
Tariff HTI/ Industrial				
All Units	175	200	330	350
Tariff HTI/ Hotel Industries				
All Units	175	200	330	350
Tariff HTI/ Ice Manufacturing				
All Units	175	200	300	315
Tariff HT Industrial (Ferro Metallurgical/Steel Melting/Power Intensive)				
First 300 units per kVA			250	280
Next 200 units per kVA	450	525	275	305
Above 500 units per kVA			300	330
Tariff HT-AG / Agriculture				
All Units	25	25	125	125
Tariff EHTI /Industrial				
All Units	175	200	330	350
HT PW/Public Water Supply and Sewage				
All Units	175	175	300	300
Tariff HT MES / Defence Establishments				
All Units	125	150	330	350
Tariff HT Industrial (Steel Rolling)				
First 200 units per kVA		180	220	
Next 100 units per kVA	400	450	225	250
Above 300 units per kVA			300	310
Tariff HT Industries (IT High Tech)				
All Units	175	200	260	270

(c) Temporary Categories Proposal

Tariff LT - Temporary

Energy Charges (paise/ Kwh)		Minimum Charges ((Rs./kW/day)	
Existing	Proposed	Existing	Proposed
750	1000	Rs 50 per kW per day or part thereof subject to a minimum of Rs 300/-per connection per month or part thereof	Rs 50 per kW per day or part thereof subject to a minimum of Rs 300/- per connection per month or part thereof

Tariff HT - Temporary

Energy Charges (paise/ Kwh)	Minimum Charges ((Rs./kVA/day)	
750 1200	Rs. 100 per KVA per day or part thereof	Rs. 100 per KVA per day or part thereof

5. The transmission and distribution loss and the aggregate technical and commercial loss (AT&C) projected are detailed below.

Description	FY 2013-14 (Rev Est)	FY 2014-15 (Projections)
T & D losses	12.50%	12.25%
AT & C losses	14.25%	14.01%

6. Copies of the following documents can be obtained on written request from the Head Office of ED-Goa mentioned below from 29-01-2014.

(a) Detailed petition documents along with CD (in English) (on payment of Rs. 250/- by cash / DD / Cheque drawn on "Chief Electrical Engineer".

(b) Detailed petition documents (in English) (on payment of Rs. 200/-).

(c) CD of detailed petition document (in English) (on payment of Rs. 50/-)

Head office address: Office of Chief Electrical Engineer, Head Office, 3rd Floor, Vidyut Bhavan, Panaji, Goa-403001.

7. Interested parties may inspect the said petition and take note thereof during office working hours at head office free of charges.

8. The detailed petition document is also available on ED-Goa's website http://electricity.goa.gov.in in downloadable format (free of cost).

9. The Commission has directed ED-Goa to invite objections and comments / suggestions from the public on the above petition through this notice. Suggestions or objections, if any, on the ARR filing submitted by the Chief Electrical Engineer, Electricity Department, Goa together with supporting material may be filed with the Secretary, Joint Electricity Regulatory Commission for the State of Goa and Union Territories, 2nd Floor, HSIIDC Complex, Vanijya Nikunj Complex, Udyog Vihar, Phase V, Gurgaon - 122016 (Haryana) in person or through registered post so as to reach him on or before 10th February 2014.

10. The objections / suggestions as above should be filed in **six copies** and carry full name and postal address of the person sending the objections and should be supported by an affidavit. If the objection is filed on behalf of any organization or any class of consumers, it should be so mentioned. It may also be specifically mentioned if the person putting in objections / comments also wants to be heard in person.

Sd/-
Chief Electrical Engineer
Electricity Department,
Government of Goa,
Panaji -Goa

DI/Advt/1886/2014

'Gomantak' Dated 23-01-2014

गोवा सरकार

वीज खाते

मुख्य अभियंता कार्यालय

विद्युत भवन, पणजी - गोवा ४०३००१

जाहीर सूचना

विषय : गोवा व केंद्रशासित प्रदेशांसाठी संयुक्त वीज नियमन आयोगासमोर मुख्य अभियंता, वीज खाते, गोवा यांनी सादर केलेल्या आर्थिक वर्ष २०१४-१५ साठी एकूण महसुली गरज (अॅग्रिगेट रेव्हेन्यू रिक्वायरमेंट-एपीपी) च्या मंजुरीसाठी याचिका

१. सर्व ग्राहक व लाभार्थींना याद्वारे सूचना देण्यात येते की, वीजेची विक्री व वितरणात गुंतलेल्या गोवा वीज खाते जे स्वायत्त परवानाधारक आहेत, त्यांनी संयुक्त वीज नियमन आयोग (दर प्रणाली निश्चित करण्याच्या अटी व शर्ती) च्या नियमन क्र. जेईआरसी - १०/२००९ आणि वीज कायदा २००३ च्या कलम ६२ खाली **आर्थिक वर्ष २०१४-१५ साठी विजेच्या किरकोळ** विक्रीसाठीचे दर आणि गोवा व केंद्रशासित प्रदेशांसाठी संयुक्त वीज नियमन आयोगासमोर आर्थिक वर्ष २०१३-१४ साठी वार्षिक संपादणूक आढाव्यासह (एपीआर) विजेचे वितरण व किरकोळ विक्री करण्यासाठी एकूण महसुली गरज (एआरआर) व दर अर्ज सादर केला होता.

मा. आयोगाच्या नोंदीवर विनंती अर्ज क्र. १२२/२०१४ दि. १६.०१.२०१४ रोजी घेण्यात आला.

२. आर्थिक वर्ष २०१३-१४ व आर्थिक वर्ष २०१४-१५ साठीची एआरआरचा सारांश खालील कोष्टकात दिला आहे.

आर्थिक वर्ष २०१३-१४ व आर्थिक वर्ष २०१४-१५ साठीचा वार्षिक संपादणूक आढावा (एपीआर) व त्यातील फरक (गॅप)

अ. क्र.	खर्चाची बाब	आर्थिक वर्ष २०१३-१४ साठी मंजूर रु. कोटीमध्ये	सुधारित अंदाज आर्थिक वर्ष २०१३-१४ साठी रु. कोटीमध्ये	अंदाज आर्थिक वर्ष २०१४-१५ साठी रु. कोटीमध्ये
१	ऊर्जा खरेदी किंमत	९०९.८६	१०८७.६९	१०६५.५३
२	कर्मचाऱ्यांवरील खर्च	१४८.६४	१६५.००	१७७.१४
३	दुरुस्ती व देखभाल (आर अँड एम) खर्च	२०१.२१	२३.३८	२४.७१
४	प्रशासकीय व सामान्य खर्च	९.३६	११.३१	९.१७
५	घसारा	१६.०३	१६.००	२४.४२
६	कर्ज व आर्थिक शुल्कांवरील व्याज	१६.७०	१०.०१	८.९६
७	कार्यकारी भांडवलावरील व्याज	१.९८	१.४४	४.३२
८	सुरक्षा ठेवींवरील व्याज	६.१५	५.४९	६.७६
९	आरओई/समभागावरील परतावा	५.८६	५.८६	११.१२
१०	सीजीआरएफ खर्च	१.०२	०.५६	०.७५
११	**एकूण महसुली गरज**	**१,१३५.५२**	**१,३३१.८२**	**१,३३३.९८**
१२	वजा : दर नसलेले उत्पन्न	२२.५३	२२.५५	२३.२२
१३	वजा : ऊर्जा विक्रीमधून महसूल - यूआय पूल	-	५.०१	-
१४	**निव्वळ महसुली गरज (११-१२-१३)**	**१,११२.९९**	**१,३०४.२८**	**१,३१०.४६**
१५	एफपीपीसीए शुल्कासह सद्य दरातील किरकोळ विक्रीमधूनचा महसूल	९८१.११	९९२.८३	१,०३१.३१
१६	एफपीपीसीए शुल्कामधूनचा महसूल	-	२३.६८	
१७	**निव्वळ फरक (१४-१५-१६)**	**१३१.८८**	**२८७.६६**	**२७९.१५**

३. निव्वळ एआरआर किरकोळ दर व अंदाजपत्रकिय आधाराने घेतली जाईल. आर्थिक वर्ष २०१४-१५ साठी वाढीव दर विभागात [illegible] महसुली फरकाची मिळवणी करण्यासाठी गोवा सरकारने अंदाजपत्रकिय आधार देण्याचे मान्य केले आहे.

अ. क्र.	खर्चाचा तपशील	आर्थिक वर्ष २०१४-१५ साठी प्रस्ताव वा अंदाज (रु. कोटीमध्ये)
१	आर्थिक वर्ष २०१४-१५ साठी निव्वळ एकूण महसुली गरज (एआरआर)	१,३१०.४६
२	वजा : सद्य दरानुसार महसूल	१,०३१.३१
३	सद्य दरातील फरक	२७९.१५
४	वजा : सुधारित दरांमधून मिळणारा अतिरिक्त महसूल	८५.५५
५	वजा : अंदाजपत्रकिय आधार	१९३.६०
६	शिल्लक महसुली फरक	-

४. आर्थिक वर्ष २०१४-१५ साठी किरकोळ दरांसाठी प्रस्ताव खालीलप्रमाणे :

(अ) कमी दाब वीज दर प्रस्ताव

आर्थिक वर्ष २०१४-१५ साठी कमी दाब श्रेणीसाठी किरकोळ वीज प्रस्ताव

वापर टप्पा	कायम शुल्क (रुपये/जोडणी/महिना)		ऊर्जा शुल्क (पैसे/युनिट)	
शुल्क	सद्य	प्रस्तावित	सद्य	प्रस्तावित
एलटीडी/घरगुती/अ-व्यावसायिक दर				
(अ) पहिले ६० युनिट्स	५	५	१२०	१२०
(ब) ६१ ते २५० युनिट्स	१०	१५	१६०	१७०
(क) २५१ ते ५०० युनिट्स	२०	४०	३००	३३०
(ड) ५०० युनिट्सचे वर	३०	४०	३००	३३०
एलटीडी/कमी उत्पन्न गटांसाठी दर				
१ पॉईंटसाठी	२५	३०	-	-
एलटीडी/घरगुती एकत्र साठी दरप्रणाली				
पहिले ४०० युनिट्स	२०	३५	२७०	३१०
४०० युनिट्सचे वर	३०	५०	३३०	४२०
एलटीसी/व्यावसायिक दरप्रणाली				
पहिले १०० युनिट्स	२०	२५	३००	३००
१०१ युनिट्स - १००० युनिट्स	३०	५०	३८०	४००
१००० युनिट्सचे वर	५०	७५	४१०	४५०
एलटीपीएल/मोटीव्ह पॉवर* दरप्रणाली				
५० एचपी पर्यंत	२०	२५	२५०	२७५
५० एचपी चे वर	२०	२५	३००	३३५
एलटीपी/बर्फ तयार करणे* दरप्रणाली				
सर्व युनिट्स	२०	२५	३००	३३५
एलटीपी/एकत्र (हॉटेल उद्योग) दरप्रणाली				
सर्व युनिट्स	२५	२५	४००	४००
एलटीएजी/कृषी दरप्रणाली*				
सर्व युनिट्स	५	५	१२०	१२०
एलटीपीएल/सार्वजनिक प्रकाशीकरण दरप्रणाली				
सर्व युनिट्स	२५	२५	३१०	३००
एलटीपीडब्ल्यूडब्ल्यू/सार्वजनिक पाणीपुरवठा पंप दरप्रणाली				
सर्व युनिट्स	२०	२०	२५०	२५०

* कायम शुल्क रु./एचपी/महिना

(ब) उच्च दाब दरप्रणाली प्रस्ताव

आर्थिक वर्ष २०१४-१५ साठी उच्च दाब श्रेणीसाठी किरकोळ दर प्रस्ताव

वापर टप्पा	कायम शुल्के (रुपये/केव्हीए/महिना)		ऊर्जा शुल्के (पैसे/युनिट)	
शुल्के	सद्य	प्रस्तावित	सद्य	प्रस्तावित
एचटी एकत्र दरप्रणाली				
सर्व युनिट्स	१७५	२००	३१५	३३०
एचटीआय/औद्योगिक दरप्रणाली				
सर्व युनिट्स	१७५	२००	३३०	३५०
एचटीआय/हॉटेल दरप्रणाली				
सर्व युनिट्स	१७५	२००	३३०	३५०
एचटीआय/बर्फ उत्पादन दरप्रणाली				
सर्व युनिट्स	१७५	२००	३००	३१५
एचटी औद्योगिक दर प्रणाली (फेरो मेटॉलर्जिकल/स्टील वितळवणे/पॉवर इन्टेन्सिव्ह)				
प्रति केव्हीए पहिले ३०० युनिट्स	४५०	५२५	२५०	२८०
प्रति केव्हीए पुढचे २०० युनिट्स			२७५	३०५
प्रति केव्हीए ५०० युनिट्सचे वर			३००	३३०
एचटी-एजी/कृषी दरप्रणाली				
सर्व युनिट्स	२५	२५	१२५	१२५
ईएचटीआय/औद्योगिक दरप्रणाली				
सर्व युनिट्स	१७५	२००	३३०	३५०
उच्च दाब पीडब्ल्यू/सार्वजनिक जलपुरवठा व मलनिःसारण				
सर्व युनिट्स	१७५	१७५	३००	३००
उच्च दाब एमईएस/संरक्षण वसाहती				
सर्व युनिट्स	१२५	१५०	३३०	३५०
उच्च दाब औद्योगिक (स्टील रोलिंग)				
प्रति केव्हीए पहिले २०० युनिट्स	४००	४५०	१८०	२२०
प्रति केव्हीए पुढचे १०० युनिट्स			२२५	२५०
प्रति केव्हीए ३०० युनिट्सचे वर			३००	३१०
उच्च दाब औद्योगिक (माहिती तंत्रज्ञान हायटेक)				
सर्व युनिट्स	१७५	२००	२५०	२७०

(क) तात्पुरती श्रेणी प्रस्ताव

कमी दाब -तात्पुरती दरप्रणाली

ऊर्जा शुल्के (पैसे/केडब्ल्यूएच)		किमान शुल्के (रुपये/केडब्ल्यू/प्रति दिन)	
सद्य	प्रस्तावित	सद्य	प्रस्तावित
७५०	१०००	प्रति महिना प्रति जोडणी रु. ३०० या त्याचा भाग असल्यास प्रति दिन प्रति केडब्ल्यू रु. ५० या त्याचा भाग	प्रति महिना प्रति जोडणी रु. ३०० या त्याचा भाग असल्यास प्रति दिन प्रति केडब्ल्यू रु. ५० या त्याचा भाग

उच्च दाब - तात्पुरता दर प्रणाली

ऊर्जा शुल्के (पैसे/केडब्ल्यूएच)		किमान शुल्के (रुपये/केडब्ल्यूए/दिन)	
७५०	१२००	प्रति दिन प्रति केव्हीए रु. १०० या त्याचा भाग	प्रति दिन प्रति केव्हीए रु. १०० या त्याचा भाग

५. प्रस्तावित पारेषण व वितरण तोटा व एकूण तांत्रिक व वाणिज्य तूट (एटीअँड सी)चा तपशील खाली दिला आहे :

वर्णन	आर्थिक वर्ष २०१३-१४ (महसुली अंदाज)	आर्थिक वर्ष २०१४-१५ (प्रस्तावित)
पारेषण व वितरणातील तोटा (टी व डी लॉस)	१२.५०%	१२.२५%
एकूण तांत्रिक व वाणिज्य तोटा (एटी अँड सी)	१४.२५%	१४.०१%

६. खालील कागदपत्रांच्या प्रती गोवा वीज खात्याच्या मुख्य कार्यालयात लेखी विनंती केल्यावर दि. २९.०१.२०१४ पासून उपलब्ध होतील.

(अ) मुख्य विद्युत अभियंता यांचे नावे रोख या डीडी या धनादेश (चेक) ने रु. २५०.०० चा भरणा केल्यावर सीडी (इंग्रजी) सह तपशीलवार याचिका कागदपत्रे (पेटिशन)

(ब) रु. २००.०० चा भरणा केल्यावर तपशीलवार याचिका कागदपत्रे (पेटिशन) (इंग्रजी)

(क) रु. ५०.० चा भरणा केल्यावर इंग्रजीतील तपशीलवार याचिका कागदपत्रांची सीडी.

मुख्य कार्यालयाचा पत्ता : मुख्य अभियंता कार्यालय, मुख्य कार्यालय, ३ रा माळा, विद्युत भवन, पणजी-गोवा ४०३००१.

७. इच्छुक व्यक्तींना मुख्य कार्यालयात कार्यालयीन वेळेत सदर याचिका मोफत पाहता येईल व त्यावर नोंदी करता येतील.

८. तपशीलवार विनंती अर्ज वीज खाते गोवा राज्य यांच्या http://electricity.goa.gov.in या संकेतस्थळावर मोफत उपलब्ध असून ते उतरवून घेता येईल अशा फॉरमॅट मध्ये आहे.

९. आयोगाने या सूचनेद्वारे वीज खाते, गोवा यांना वरील पेटिशनवर नागरिकांकडून मते, हरकती वा सूचना, काही असल्यास, मागविण्यासाठी आदेश दिला आहे. मुख्य विद्युत अभियंता, वीज खाते, गोवा यांनी सादर केलेल्या एपीआर वर हरकती वा सूचना, काही असल्यास त्या आधारभूत कागदपत्रांसह मुख्य विद्युत अभियंता, वीज खाते, गोवा यांनी व्यक्तिशः वा रजिस्टर्ड पोस्टाने १० फेब्रुवारी २०१४ रोजी वा त्यापूर्वी सचिव, गोवा व केंद्रशासित प्रदेशांसाठी संयुक्त वीज नियमन आयोग (जेईआरसी), दुसरा मजला, एचएसआयआयडीसी कार्यालय संकुल, वाणिज्य निकुंज संकुल, उद्योग विहार, फेज - ५, गुरगाव - १२२०१६ (हरियाना) यांचेकडे सादर करावेत.

१०. वरील पेटिशनवरील हरकती वा सूचना **सहा प्रतींमध्ये** सादर कराव्यात आणि हरकती/सूचना [illegible]

सही/-

मुख्य विद्युत अभियंता,

वीज खाते

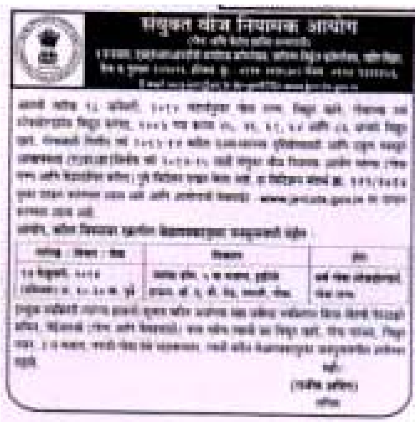
गोवा सरकार

डीआय/जाहिरात/१८८६/२०१४

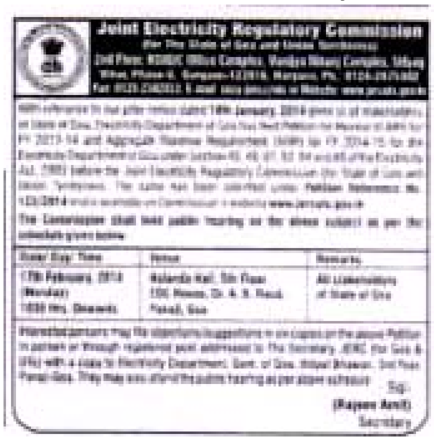
ANNEXURE 3

Public Notices published by the Commission for intimation of public hearing on the ARR for FY 2014-15 (petition No. 122/2014).

Gomantak dated 16th February, 2014


संयुक्त वीज नियामक आयोग

Herald dated 16th February, 2014


Joint Electricity Regulatory Commission

Sd/-
(Rajeev Amit)
Secretary

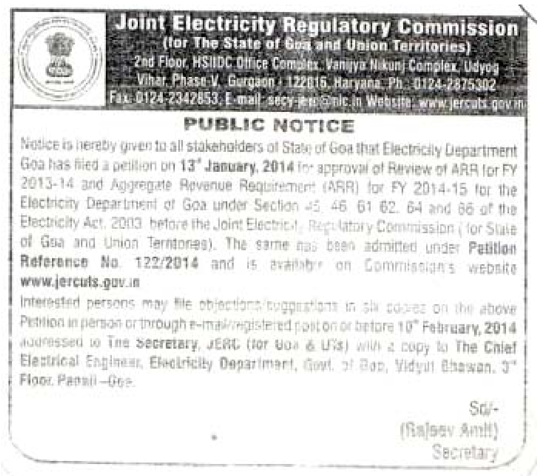
Sunaprant dated 16th February, 2014


जोड वीज नियामक आयोग

www.jercuts.gov.in

सय/
(राजीव अमित)
सचिव

Gomantak dated18th January, 2014


Joint Electricity Regulatory Commission
(for The State of Goa and Union Territories)
2nd Floor, HSIIDC Office Complex, Vanijya Nikunj Complex, Udyog Vihar, Phase-V, Gurgaon - 122016, Haryana. Ph.: 0124-2875302
Fax: 0124-2342853, E-mail: secy-jerc@nic.in Website: www.jercuts.gov.in

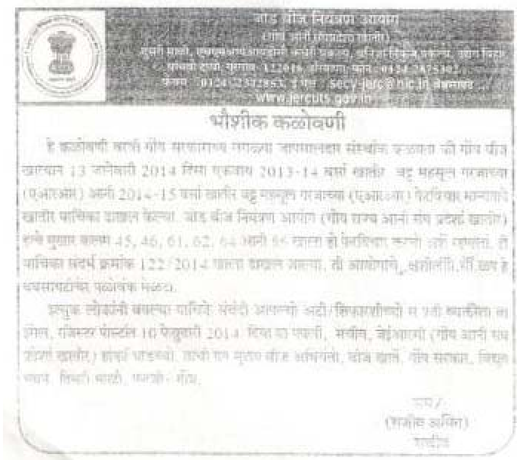
PUBLIC NOTICE

Notice is hereby given to all stakeholders of State of Goa that Electricity Department Goa has filed a petition on 13th January, 2014 for approval of Review of ARR for FY 2013-14 and Aggregate Revenue Requirement (ARR) for FY 2014-15 for the Electricity Department of Goa under Section 45, 46, 61, 62, 64 and 86 of the Electricity Act, 2003 before the Joint Electricity Regulatory Commission (for State of Goa and Union Territories). The same has been admitted under Petition Reference No. 122/2014 and is available on Commission's website www.jercuts.gov.in

Interested persons may file objections/suggestions in six copies on the above Petition in person or through e-mail/registered post on or before 10th February, 2014 addressed to The Secretary, JERC (for Goa & UTs) with a copy to The Chief Electrical Engineer, Electricity Department, Govt. of Goa, Vidyut Bhawan, 3rd Floor, Panaji –Goa.

Sd/-
(Rajeev Amit)
Secretary

Sunaprant dated 18th January, 2014


जोड वीज नियामक आयोग

भौशीक कळोवणी

ANNEXURE 4

List of objectors

JOINT ELECTRICITY REGULATORY COMMISSION FOR GOA AND UTS PUBLIC HEARING ON 17-02-2014 AT PANAJI - GOA IN RESPECT OF ANNUAL REVENUE REQUIREMENT AND TARIFF PETITION FOR THE F.Y. 2014 - 15 FILED BY ELECTRICITY DEPARTMENT, GOVERNMENT OF GOA

PARTICIPATION OF PUBLIC IN THE PUBLIC HEARING TO BE HELD ON 17-02-2014 AT PANAJI - GOA

Sr. No.	Name	Address	Contact No.	E-mail ID	Whether to Comment (Tick mark here)	
1.	M/s Pratik Alloys Pvt ltd	108 Kundaim Industrial Estate	9594230370	Pratikalloys@G-mail.com	-	-
2	M/s Shivam Ispat Pvt ltd	333, Kundaim Industrial Estate	9225909167	Sipl6300@g-mail.com	-	-
3.	M/s R.L. Biyani Mohit steels Mandovi castings	Kundaim industrial Estate	9325001585	Biyani@mohitsteel.com	Yes.	-
4.	M/s H.V. Mittal Mohit Ispat Westcoast ingots pvt ltd	Kundaim Industrial Estate	9225987071	Hirvardhanmittal@yahoo.in	-	-
5.	M/s Prashant K Anvekar Inoval Energy Services	603 Hill Queen Andheri, Mumbai	9967875190	Prashant.anvekar@gmail.com	YES.	-
6	Jayesh Chauhan, Feedback Infra	Mumbai-69.	9322596108	jayesh.chauhan@feedbackinfra.com	—	—
7	Yogesh Goel Shirdi steel pvt. ltd	L-8 L-9 Cuncolim Industrial Estate	9822486868	Yogeshgoel.goa@g-mail.com	-	-
8	Pooja Ferro Alloys Pvt Ltd	Cuncolim Industrial Estate	9823619188	Pankaj@poojaferro.co.in	Yes	-
9	Kundil Alloys / Mandovi metals	Kundaim Industrial Estate	9822123970	Kalpesh1985@g-mail.com	-	-
10	Sri Balaji Rollings Pvt ltd	Cuncolim Industrial Estate	9225072900	Sbrpl6300@yahoo.com	-	No.
11	Global Ispat Ltd	Cuncolim Ind. Est.	9823619167	Globalispat@G-mail.com	—	No
12	Sahanu Sponge & Power Ltd	Bicholim, Goa - India	9822122563	goosspl@gmail.com	—	-
13	Maa durga Enterprises Ltd	Cuncolim Ind. Estate	9823412121	Vijay.durga2010@g-mail.com	-	No
14	Alloy Steel Manufacturing As. Goa.					
15	Mr D.N. Dalgani					

ANNEXURE 5

Schedule of Miscellaneous charges approved by the Commission for FY 2014-15.

Description	Approved Charges
1) Meter Rental Charges (as per provision of Regulations 7.3(1) of JERC (Electricity Supply Code) Regulations, 2010)	
Single Phase LT Meter	Rs. 5/month
Three Phase LT Meter	Rs. 10/month
Three Phase LT meter with CTs	
50/5 Amp	-
100/5 to 400/5 Amps	-
LT meter with MD Indicator	-
Tri-vector Meter	Rs. 500/month
Temporary Supply	Shall be twice as applicable in above meter types
Changing or moving a Meter board	Actual Cost + 15%
Note: (a) For all domestic and other LT loads less than 50 kW loads in Urban and Rural areas-Static phase/three phase meter (b) For LT (contracted load> 50 KW)/HT/EHT consumer-Static, 3 Phase Tri-vector meters with MDI (MD Display)	
2) Reconnection Charges (as per provisions of Regulation 9.3 (c) of JERC (Electricity Supply Code) Regulations, 2010)	
LT services - At Cut outs	
o Single Phase	Rs. 10/-
o Three Phase	Rs. 20/-
LT services - At overhead Mains	
o Single Phase	Rs. 15/-
o Three Phase	Rs. 30/-
LT services - At underground Mains	
o Single Phase	Rs. 50/-
o Three Phase	Rs. 100/-
HT Services	Rs. 100/-
Note : If the same consumer is reconnected within 12 months from the date of reconnection, 50% will be added to above charges	
3) Re-rating of installations	
Lightining Installation	Rs. 10/-
Motive Power Installation	Rs. 25/-
4) Replacement of meter reading card	
Domestic Supply	Rs. 2/card
Other LT Supply	Rs. 2/card
All HT Industrial Supply	Rs. 2/card
5) Testing Fee for various metering equipments (as per provisions of Regulations 7.4 of JERC (Electricity Supply Code) Regulation, 2010)	
Single Phase LT	Rs. 10/energy meter
Poly Phase LT without CT	Rs. 25/energy meter

Description	Approved Charges
L.T. meter CTs/Demand or Special Type Meters	Rs. 100/energy meter
H.T. & E.H.T. metering equipment	-
Transformer oil	Rs. 100/-
3- Phase Tri-vector Meter (0.5 class) Industrial LT consumer	-
3- Phase Tri-vector Meter (0.5 class) 11kV HT consumer	-
Three Phase Tri-vector Meter (0.2 class) 66 KV EHT Consumers	No testing facility with MRT
Combined CTPT unit for 11 kv consumer	Rs. 1000/-
66 KV CT/PT Unit	Rs. 1000/-
Three Phase CT Block	Rs. 200/unit
6) Service Connection Charges [as per provisions of Regulation 3.3(3) of JERC (Electricity Supply Code) Regulations, 2010].	
Single Phase	Rs. 150
Three Phase	Rs. 300 to Rs. 900
HT (first 500 KVA)	Rs. 5,000
HT (Beyond 500 KVA)	Rs. 1,500
Extra Length for Single Phase	Rs. 15/meter
Extra Length for Three Phase	Rs. 40/meter
7) Testing Consumer's Installation [as per provisions of Regulation 4.10 (6) of JERC (Electricity Supply Code) Regulations, 2010].	
For First test of new installation on or off an extension to an existing installation if the installation is found to be defective	
For Subsequent test of the new installation or of an existing installation if the installation is found to be defective	
o Single phase LT	-
o Three Phase	-
o MS/BS loads upto 100 kW	-
o LS/BS/RT (loads above 100 kW)	Rs. 4850 +ST
8) Changing the meter or its position in the same premises as the request of the consumer when no additional materila is required [as per provisions of Regulation 3.3(3) of JERC (Electricity Supply Code) Regulations, 2010].	
Single Phase	-
3-Phase without C.T.s	-
L.T. Meter with C.T.s	-
H.T. & E.H.T. metering equipment	Rs. 4850 +ST
9) Re-sealing charges irrespective of the number of seals involved against each item below and where seals found to be broken by the consumer	
Meter cupboard/Meter Cubical/Box	-
Where cut-out is independently sealed	-
Meter cover or Meter terminal cover	-
Meter cover or Meter terminal cover (3 phase)	-
Maximum demand indicators or C.T.s chamber	-

Description	Approved Charges
10) Service charges	
General Supply	
o Single Phase	Rs. 5/-
o Three phase below 200 kW	-
o Three phase above 200 kW	Rs. 5/-
Industrial/bulk/agriculture/Street Lightning Supply	
o Upto 20 kW	-
o Above 2kW and upto 100 kW	Rs. 25/-
o above 100 kW and upto 500 kW	-
o Above 500kW	-
11) Replacement of broken glass	
Replacement of broken glass of meter cupboard (when there is default on consumer side)	-
Replacement of broken glass of meter cupboard (when there is default on consumer side)	-
Replacement of broken glass of three phase meter if the consumer has broken or tamper and with meter	-
12) Supply of duplicate copies of electricity bills	
Domestic consumers	-
LT industrial upto 20 kW & AP consumer	-
HT Industrial & Bulk supply consumer	-
13) Review of electricity bills	
Single phase	-
Three phase	-
o Load upto 20 kW	-
o Load above 20 kW upto 100 kW	-
o Load above 100 kW	-
14) Meter Installation Charges	
Single Phase meter	
Three Phase meter without CT's	
Three Phase meter with CT's & PT's	
15) Checking of the capacities at the request of the consumer	
Consumer receiving supply at	
o 230/400 v	
o Above 400 v upto 11 kV	

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Published and Printed by the Director, Printing & Stationery,
Government Printing Press,
Mahatma Gandhi Road, Panaji-Goa 403 001.

Price–Rs. 130.00

PRINTED AT GOVERNMENT PRINTING PRESS, PANAJI-GOA 46/350—5/2014.