



## **TARIFF ORDER**

### **ARR and Tariff Determination**

**for**

**FY 2013-14**

**and**

**True-up for FY 2009-10 & FY 2010-11,**

**Provisional true-up for FY 2011-12 and Review for FY 2012-13**

**Petition No. 96/2013**

**for**

**Electricity Department, Government of Puducherry**

## **JOINT ELECTRICITY REGULATORY COMMISSION**

**for the State of Goa and Union Territories**

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10th April 2013

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2	Public Notice(s) by ED, Puducherry on the Tariff Petition for FY 2013-14 inviting suggestions/comments from stakeholders
3	Public Notice(s) issued by the Commission for intimation of public hearing
4	List of objectors

## List of Abbreviations

A&G	:	Administration & General Expenses
Act	:	The Electricity Act, 2003
ARR	:	Aggregate Revenue Requirement
CAGR	:	Compound Annualized Growth rate
Capex	:	Capital Expenditure
CC	:	Current Consumption
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
CPSU	:	Central Public Sector Undertaking
D/C	:	Double Circuit
DS	:	Domestic Supply
EA 2003	:	The Electricity Act, 2003
EDP	:	Electricity Department, Puducherry
FC	:	Fixed Charges
FPPCA	:	Fuel & Power Purchase Cost Adjustment
FY	:	Financial Year
GFA	:	Gross Fixed Assets
HP	:	Horse Power
HT	:	High Tension
JERC	:	Joint Electricity Regulatory Commission for the state of Goa and union territories
KVA	:	Kilo Volt Ampere
KWh	:	Kilo Watt Hour
LT	:	Low Tension
MU	:	Million Unit
MW	:	Mega Watt
NDS	:	Non-Domestic Supply
NFA	:	Net Fixed Assets

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
SOP	:	Standard of Performance
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

Dr. V K Garg (Chairperson)

S. K. Chaturvedi (Member)

**Petition No. 96/2013**

In the matter of

**Petition filed by Electricity Department, Puducherry for approval of Aggregate Revenue Requirement and Tariff for FY 2013-14 .....Petition No. 96/2013**

And

In the matter of

**Electricity Department, Puducherry .....Petitioner**

**ORDER**

**Date: 10th April 2013**

**1. INTRODUCTION**

**1.1 JERC Formation**

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

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

## **1.2 JERC Tariff Regulations**

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

## **1.3 Filing of Petition by Electricity Department, Puducherry**

The Electricity Department of Government of Puducherry (hereinafter referred to as “ED Puducherry” or “EDP”), a deemed licensee under section 14 of the Electricity Act 2003, is in the business of distribution and retail supply of electricity in Puducherry, Karaikal, Yanam and Mahe regions of the Union Territory of Puducherry.

Electricity Department, Puducherry has filed its petition for determination of Aggregate Revenue Requirement (ARR) & Retail Tariff for distribution and retail sale of electricity for FY 2013-14 under section 61, 62 & 64 of the Electricity Act, 2003. ED-Puducherry filed its petition for ARR and Tariff determination for FY 2013-14 on January 15’ 2013. The true-up petitions for FY 2009-10 and FY 2010-11 were filed on January 10’ 2013.

## **1.4 Admission of Petition**

After initial scrutiny and analysis of the petition, the Commission admitted the petition on ARR & tariff determination for FY 2013-14 on January 18’ 2013 and numbered as petition no. 96/2013. The Petitioner was directed to publish the summary of the ARR petition and the tariff proposal in leading newspapers of the union territory and upload the petition on the website of the Petitioner. The copy of the admission order is enclosed as **Annexure 1** to this order.

## **1.5 Interaction with the Petitioner**

The Commission interacted regularly with the Petitioner to seek clarifications and justification on various issues essential for the analysis of the tariff petition. The Petitioner submitted its replies, in response to the queries raised by the Commission’s office, which have been considered for the computation of the ARR and the resultant tariff thereof, of the Petitioner. The technical validation session was held at the Commission’s office on March 14’ 2013.

**Table 1: List of Correspondence with EDP**

S. No.	Date	Subject
1.	15.03.2013	Queries and additional data sought by the Commission after the technical validation session
2.	18.03.2013	Reply to the queries sought by the Commission
3.	08.04.2013	Response on the query of Depreciation methodology

## 1.6 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 public notice was published by the Petitioner for inviting objections/ suggestions on its petition from different stakeholders. Details of public notice are tabulated below.

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

S. No.	Date	Name of newspaper	Place of circulation
1.	February 7' 2013	The Hindu (English)	Puducherry, Karaikal,
2.	February 7' 2013	The Daily Thanthi (Tamil)	Puducherry, Karaikal
3.	February 7' 2013	The Dinakaran (Tamil)	Puducherry, Karaikal
4.	February 7' 2013	The Dinamalar (Tamil)	Puducherry
5.	February 8' 2013	The Dinamalar (Tamil)	Karaikal
6.	February 8' 2013	The Hindu (English)	Yanam, Mahe
7.	February 8' 2013	The Andhra Jothi	Yanam
8.	February 10' 2013	Mathur Bhoomi	Mahe

Besides, the Petitioner also uploaded the public notice and the petition on its website ([www.electricity.puducherry.gov.in](http://www.electricity.puducherry.gov.in)). Interested parties / stakeholders were requested to file their objections / suggestions on the petition on or before 6<sup>th</sup> March 2013. The copies of public notices are attached as **Annexure 2** to this order.

The Commission published the notice for public hearing regarding approval of Aggregate Revenue Requirement (ARR) & tariff for FY 2013-14 and uniform terms and conditions of tariff in leading newspapers giving due intimation to stake holders, consumers, objectors and the public at large about the public hearing to be conducted by the Commission as per the below mentioned schedule.

**Table 3: Schedule of Public Hearing at Puducherry**

S. No.	Date & Time	Venue of Hearing	Subject
1.	8 <sup>th</sup> March 2013 1000 hours onwards for all category of consumers	Hall at Pondicherry Multipurpose Social Service Society (PMSSS) Complex, #81, Laporte Street, Puducherry - 605001	Petition No. 96/2013 of ED- Puducherry True-up of ARR for FY 2009-10 & FY 2010-11, Review of ARR for FY 2011- 12 & FY 2012-13 and approval of ARR & Determination of Tariff for FY 2013- 14 Uniform consumer categorization, voltage-wise contract load/demand and Terms & Conditions of LT and HT Supply Road map for Cross Subsidy Effectiveness of the functioning of the institution of CGRF

**Table 4: Details of public notice published by the Commission**

S. No.	Date	Name of newspaper	Place of circulation
1.	February 13' 2013	Dinakaran (Tamil)	Trichy, Puducherry
2.	February 13' 2013	Daily Thanthi	Karaikal, Yanam
3.	February 14' 2013	Mathrabhumi (Malayalam)	Mahe, Kannur
4.	February 13' 2013	Andhra Jyoti (Telugu)	Kakinada, Yanam
5.	February 13' 2013	Vijay Bhanu (Telugu)	Kakinada, Yanam
6.	February 13' 2013	New Indian Express (English)	Kozhikode
7.	February 13' 2013	The Hindu (English)	Kochi
8.	February 13' 2013	Malayalam Manorama (Malayalam)	Mahe

The copies of public notice published by the Commission for intimation of public hearing(s) are attached as **Annexure 3** to this order. The public notices were also published on the website of the Commission ([www.jercuts.gov.in](http://www.jercuts.gov.in)). The public notices for due intimation of the public hearing were also published in four newspapers on March 6' 2013, as shown in the below table.



**Table 5: Repeat public notice published by the Commission**

S. No.	Date	Name of newspaper	Place of circulation
1.	March 6' 2013	Dinakaran (Tamil)	Trichy, Puducherry
2.	March 6' 2013	Mathrabhumi (Malayalam)	Kannur
3.	March 6' 2013	Vijay Bhanu (Telugu)	Kakinada
4.	March 6' 2013	The Hindu (English)	Chennai, Kochi, Trichy

During the public hearing, each objector was provided an opportunity to present his views on the petition filed by the Petitioner. All those present in the hearing, irrespective of whether they had given a written objection or not, were given opportunity to express their views. The list of objectors is attached as **Annexure 4** to this order. The issues and concerns expressed by stakeholders have been examined by the Commission. The major issues discussed during the public hearing(s), the comments/replies of the utility and the views of the Commission thereon, have been summarized in **Chapter 4** of this order.

The list includes the stakeholders:

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

All these objections/suggestions were responded to by the Licensee in addition to prior written replies, during the hearing itself. Licensee submitted written replies to all written objections/suggestions of the stakeholders.

## **2. Summary of the True-up for FY 2009-10, True-up for FY 2010-11, Review of Performance for FY 2011-12, Review for FY 2012-13 and ARR & tariff determination for FY 2013-14 filed by the Petitioner**

### **2.1 Introduction**

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

Electricity Department, Puducherry has filed its petition for determination of Aggregate Revenue Requirement and Tariff for FY 2013-14 under sections 61, 62 & 64 of the Electricity Act, 2003 and relevant provisions mentioned in JERC (Terms and Conditions for Determination of Distribution Tariff) Regulations, 2009. As submitted by the Petitioner, information provided in the True Up for FY 2009-10 and FY 2010-11 is based on the audited accounts for the respective years.

**As discussed at Para 1.4 of Chapter 1, after initial scrutiny & analysis of the ARR and Tariff Petition filed by ED-Puducherry for FY 2013-14, the petition was admitted subject to removal of infirmities to the extent possible. The Commission has taken the petition bearing no. 96/2013 on record.**

### **2.2 Summary of the true-up for FY 2009-10 and FY 2010-11 filed by the Petitioner**

The Petitioner has submitted the truing up for FY 2009-10 and FY 2010-11 based on the audited accounts for the respective years. The Petitioner has also prepared the Fixed Asset and the Depreciation Registers for the respective years as per the directive of the Commission in last year's order dated June 12' 2012.

The Petitioner has claimed net revenue requirement of Rs 631.44 Crores and Rs 741.97 Crores for FY 2009-10 and FY 2010-11 respectively. The revenue gap at the end of FY 2009-10 has been claimed as Rs 72.95 Crores and the cumulative gap at the end of FY 2010-11 at Rs 175.84 Crores.

**Table 6: Summary of the true-up for FY 2009-10 and FY 2010-11 filed by the Petitioner (Rs Crores)**

S. No.	Particulars	True-Up FY 2009-10	True-Up FY 2010-11
1	Cost of power purchase	588.07	728.08
2	Employee Costs	53.74	55.44
3	A&G expenses	3.28	3.71
4	R&M Expenses	11.57	10.74
5	Depreciation	17.91	19.23
6	Advance against Depreciation	-	-
7	Interest & Finance Charges	1.30	1.79
8	Interest on Working Capital	6.70	7.81
9	Provision for bad debts	-	-
10	Return on NFA/Equity @ 3% of NFA	8.38	8.85
11	Amortization of regulatory asset proposed for previous years	-	-
12	ARR	690.95	8.85
13	Less Non tariff Income	59.51	93.66
<b>14</b>	<b>Net revenue requirement</b>	<b>631.44</b>	<b>741.97</b>
15	Revenue from tariff	558.49	639.08
<b>16</b>	<b>Revenue Gap/(Surplus)</b>	<b>72.95</b>	<b>102.89</b>
17	Revenue Gap/(Surplus) from previous years	-	72.95
<b>18</b>	<b>Cumulative Revenue Gap/(Surplus)</b>	<b>72.95</b>	<b>175.84</b>
<b>19</b>	<b>Energy Sales (MU)</b>	<b>2161.3</b>	<b>2209.3</b>

### 2.3 Summary of the Review of Performance for FY 2011-12, Review for FY 2012-13 and ARR for FY 2013-14 filed by the Petitioner

The Petitioner has submitted the review for FY 2011-12 based on the unaudited annual accounts. The Petitioner has claimed ARR of Rs 1061.5 Crores for FY 2011-12 against Rs 839.78 Crores approved by the Commission in its order dated June 12'2012. The submission of the Petitioner based on unaudited accounts has been revised to Rs 1061.5 Crores against Rs 966.69 Crores claimed last time based on revised estimates for the year.

Additionally, the Petitioner has submitted the revised estimates for FY 2012-13 and the basis, assumptions and projections of individual elements constituting the determination of ARR for FY 2013-14. Based on the estimates and projections for FY 2013-14, the ARR for ED-Puducherry for FY 2013-14 has been proposed at Rs. 1140.4 Crores. The summary of the proposal is presented below.

**Table 7: Summary of the Review for FY 2011-12, Review for FY 2012-13 and ARR for FY 2013-14 filed by the Petitioner (Rs Crores)**

S. No.	Particulars	Review FY 2011-12 (unaudited actual)	Revised Estimates FY 2012-13	Estimates FY 2013-14
1	Cost of power purchase	1,110.2	1,027.4	1,049.6
2	Employee Costs	56.6	61.0	67.6
3	R&M expenses	16.2	17.1	17.6
4	A&G Expenses	4.4	4.9	5.3
5	Depreciation	20.3	23.4	25.0
6	Interest & Finance Charges	2.4	2.3	2.1
7	Interest on Working Capital	12.864	13.6	13.8
8	Provision for bad debts	-	-	-
9	Return on NFA/Equity @ 3% of NFA	9.3	10.0	11.0
<b>10</b>	<b>Aggregate Revenue Requirement</b>	<b>1,232.3</b>	<b>1,159.7</b>	<b>1,192.1</b>
11	Less: Non tariff Income	170.8	163.0	144.3
12	Add: Amortization of regulatory asset			92.6
<b>13</b>	<b>Net revenue requirement</b>	<b>1,061.5</b>	<b>996.7</b>	<b>1,140.4</b>
14	Revenue from tariff	690.5	772.3	833.8
15	Revenue from FPPCA		20.3	
<b>16</b>	<b>Revenue Gap/(Surplus)</b>	<b>371.0</b>	<b>204.0</b>	<b>306.6</b>
17	Gap/(Surplus) from previous years	175.8	546.9	658.3
<b>18</b>	<b>Cumulative Gap/(Surplus)</b>	<b>546.9</b>	<b>750.9</b>	<b>964.9</b>
<b>19</b>	<b>Additional revenue from proposed tariff</b>			<b>306.6</b>
<b>20</b>	<b>Regulatory Asset</b>		<b>320.6</b>	<b>658.3</b>
<b>21</b>	<b>Energy Sales (MU)</b>	2,321.0	2,382.5	2,470.3

#### 2.4 Summary of the Tariff Proposal for FY 2013-14

The Petitioner has submitted that the average realization from consumers at current tariff is only Rs 3.37/kWh compared to the average cost to serve of Rs 4.62/kWh leading to under realisation of Rs 1.25/kWh. The Petitioner has submitted that since more than 99.16% of electricity is being sold at less than Average CoS, it has no option but to propose a tariff hike across the board for all consumer categories.

Further, the Petitioner has proposed to recover almost the entire gap of the current year alongwith amortisation of regulatory asset amounting to Rs 92.6 Crores through the proposed tariff hike. The Petitioner has proposed additional revenue recovery of Rs 306.6 Crores through the revised tariff. The accumulated gap of previous years amounting to Rs

658.3 Crores is proposed to be treated as a regulatory asset to be amortized in subsequent years. The summary of the existing and proposed tariff is presented below.

**Table 8: Existing and Proposed tariff for FY 2013-14 filed by the Petitioner**

	Fixed charges (Rs. Per month per connection/kW/KVA/HP)			Energy charges (Rs./kWh)		
	Existing	Proposed (2013-14)	Change	Existing	Proposed (2013-14)	Change
<b>Domestic</b>						
0 - 100	10.00	20.00	10.00	0.60	1.50	0.90
101-200	10.00	50.00	40.00	0.95	2.50	1.55
201-300	15.00	75.00	60.00	1.80	3.50	1.70
>300	15.00	100.00	85.00	2.35	4.50	2.15
OHOB	20.00	50.00	30.00	-	-	-
<b>Commercial</b>						
0 - 100	30.00	50.00	20.00	2.50	4.50	2.00
101 - 250	30.00	100.00	70.00	3.70	5.25	1.55
250-500	30.00	200.00	170.00	4.30	5.50	1.20
<b>Agriculture</b>						
Small farmers	50	100	50.00	-	-	-
Other farmers	200	300	100.00	-	-	-
Public lighting	-	-	-	3.50	4.75	1.25
<b>LT Industrial</b>						
0 - 1000	30.00	200.00	170.00	3.40	4.25	0.85
> 1000	30.00	200.00	170.00	3.65	4.50	0.85
Water tank	30.00	200.00	170.00	3.80	4.60	0.80
Temporary supply -	-	-	-	6.00	10.00	4.00

LT	Fixed charges (Rs. Per month per connection/kW/KVA/HP)			Energy charges (Rs./kWh)		
HT 1 Industrial						
(A) - CD < 2000						
0 - 100000	180.00	200.00	20.00	3.50	4.50	1.00
>100000	180.00	200.00	20.00	3.65	4.60	0.95
(B) - 2000 < CD < 5000						
>0	190.00	220.00	30.00	3.80	4.70	0.90
(C)						
>0	190.00	220.00	30.00	4.00	4.70	0.70
HT 2 - Government & water tank	220.00	220.00	-	3.40	4.60	1.20
HT 3 - EHT	180.00	220.00	40.00	3.65	4.50	0.85

## 2.5 Prayer to the Commission

The Petitioner has prayed to the Commission:

- i. Admit the True Up petition for FY 2009-10 prepared on the basis of audited accounts of FY 2009-10
- ii. Approve the ARR and Revenue Gap for FY 2009-10 claimed by the Petitioner
- iii. Admit the True Up petition for FY 2010-11 prepared on the basis of audited accounts of FY 2010-11
- iv. Approve the ARR and Revenue Gap for FY 2010-11 claimed by the Petitioner
- v. Review the actual performance of FY 2011-12, and approve the Aggregate Revenue Requirement (ARR), and gap for FY 2011-12, subject to final approval on the basis of true-up based on audited accounts
- vi. Provisionally approve the consolidated gap up to end of FY 2012-13 based on the

- revised estimates and projections, subject to final approval on the basis of true-up based on audited accounts
- vii. Approve the Aggregate Revenue Requirement (ARR), Expected Revenue from Charges (ERC) and the gap for FY 2013-14
  - viii. Approve the proposed revision in tariff to recover the gap for FY 2013-14 and the tariff schedule
  - ix. Approve the revised regulatory asset base to be amortized from FY 2013-14 based on the change in the revenue gap
  - x. Approve the amortization of revised regulatory asset as per regulations
  - xi. Grant approval for the proposed charges for services and approve the proposed schedule of charges
  - xii. Grant any other relief as the Commission may consider appropriate. The petitioner craves leave of the Commission to allow further submission, addition and alteration to this petition as may be necessary from time to time
  - xiii. Pass any other Order as Commission may deem fit and appropriate under the circumstances of the case and in the interest of justice

### 3. Approach of the Order

#### 3.1 Introduction

The Petitioner has submitted the ARR & tariff petition for FY 2013-14 comprising of the review of performance for FY 2011-12 based on the unaudited accounts, revised estimates for FY 2012-13 and projections for FY 2013-14. The petitioner has also filed for the true-up of FY 2009-10 and FY 2010-11 based on the audited accounts for the respective years. The unaudited actual of FY 2011-12, actual available data of FY 2012-13 and revised estimates of FY 2012-13 form the basis of projection for FY 2013-14.

#### 3.2 Approach for True-up for FY 2009-10, True-up for FY 2010-11, Provisional<sup>1</sup> true-up for FY 2011-12 and Review for FY 2012-13

The Petitioner has requested for the True-up of FY 2009-10 and True-up for FY 2010-11 based on the audited accounts. The review for FY 2011-12 has been filed by the Petitioner based on the actual unaudited figures. Review for FY 2012-13 has been filed basis the actual available data of the first half of the year.

The True-up and Review of the respective years is to be carried out as per the provisions of regulation 8 of JERC Tariff Regulations, 2009, which is as under:

#### Quote

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

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

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

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<sup>1</sup> The Commission by Provisional true-up means the true-up based on actual unaudited data



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

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

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

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

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

#### **Unquote**

In line with the above, the Commission has reviewed the variations between approvals and revised estimates/pre-actual of sale of electricity, income and expenditure for FY 2009-10, FY 2010-11, FY 2011-12 and FY 2012-13 submitted by the Petitioner and permitted necessary adjustments/ changes in cases where variations are for reasonable and justifiable reasons.

The detailed analysis & treatment of each component is provided in Chapter 5, Chapter 6, Chapter 7 and Chapter 8 (FY 2009-10, FY 2010-11, FY 2011-12 and FY 2012-13 respectively) of this Order.

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

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

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

- a) The principles and methodologies specified by the Central Commission for determination of the tariff applicable to generating companies and transmission licensees;
- b) The generation, transmission, distribution and supply of electricity are conducted on commercial principles;
- c) The factors which would encourage competition, efficiency, economical use of the resources, good performance and optimum investments;
- d) Safeguarding of consumers' interest and at the same time, recovery of the cost of electricity in a reasonable manner;
- e) The principles rewarding efficiency in performance;
- f) Multi-year tariff principles;
- g) That the tariff progressively reflects the cost of supply of electricity and also, reduces and eliminates cross-subsidies within the period to be specified by the Appropriate Commission;
- h) The promotion of co-generation and generation of electricity from renewable sources of energy;
- i) The National Electricity Policy and tariff policy;

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

The Commission has considered the figures of income & expenditure submitted by the Petitioner in the unaudited accounts for FY 2011-12 and revised estimates for FY 2012-13 to form the basis of projection for income and expenditure for FY 2013-14. Further, the Commission has relied on the audited figures of FY 2009-10, audited figures of FY 2010-11, unaudited figures of FY 2011-12, actual available figures for FY 2012-13 provided by the Petitioner; and validated by the Commission during the technical validation session held after the submission of the petition. The detailed analysis & treatment of each component is provided in Chapter 9 (Aggregate Revenue Requirement for FY 2013-14) of this order.

The tariff has been designed in such a way so as to bring down the cross subsidies within reasonable and sustainable levels and to reduce it gradually without giving 'Tariff Shock' to any category and retail tariff of different categories of consumers is brought within + / - 20% of average cost of supply and that even for BPL category consumers, tariff rates move close to 50% of the average cost of supply. The Commission has determined the tariff so that it progressively reflects the cost of supply of electricity and also reduces cross subsidies within a reasonable period and thereby balancing the interest of the utility and the consumer.

The tariff for various categories is so determined that it is in compliance of the various provisions of the Electricity Act 2003, Tariff Policy, National Electricity Policy and various regulations of the Commission.

## **4. Summary of Objections received, EDP's Responses and Commission's views**

### **4.1 General Issues & Comments**

#### **4.1.1 Stakeholders' Objections/ Comments**

The general issues raised by the public during the hearings (complete list in **Annexure 4**) are summarized below:

a) The stakeholders have raised the point that the Superintending Engineer of the Department, who has filed the petition, is not the authorized personnel to do so. The stakeholders have submitted that the Superintending Engineer who has filed the petition has not claimed any particular Government Order which authorised him to present the Petition. Further, the stakeholders have submitted that all executive actions of the Government of India should be expressed to be taken in the name of the President of India. The entire petition under objection or the affidavit in support of the same has not claimed that the Superintending Engineer who has filed the petition had the required authority of the President of India or Union of India to file the same.

b) The stakeholders have submitted that the Petitioner should have filed the audited accounts for FY 2010-11 alongwith the petition and same should have been subjected to public scrutiny and then public hearing.

c) The stakeholders have objected that the Review of Performance of FY 2011-12 is not maintainable in law. The presentation of FY 2011-12 figures for Review of Review is not maintainable as per law.

d) The stakeholders have further raised the objection that the Petitioner should have submitted the true-up petitions for the respective years including FY 2011-12 in this year's petition as per the Commission's directive on the same in the last year's tariff order.

e) The stakeholders have submitted that the Union of India paid the Petitioner a sum of Rs 150 Crores as Grants in Aid and the total amount of Rs. 143.58 Crores, which the Petitioner claims to have paid TANGEDGO, in November 2012, is from the Grant in Aid received from the Union of India. The stakeholders have submitted to reduce the sum of Rs. 143.58 Crores from the ARR Requirements as per the computation from the respective years.

f) Mr Kaliamurugan has submitted that for taking Meter Reading, staff who are working in field are being used as Meter Readers Consequently the cases of Meter Struck Up, Door Lock etc are

increasing day by day resulting into Revenue loss. Further, he stated that With regard to the bill collection the last date fixed at present goes up to the month end when the majority of salaried people are not having funds in their hands. This needs to be revised.

g) **Collection of Arrears:** The stakeholders pointed out that a lot of arrears are due.

h) Some stakeholders pointed out that the procedures of filing written statements/objections are cumbersome which common public cannot comply by themselves and compelling them to go for professional assistance.

i) **Corporatization of the Department:** The stakeholders objected that the Commission was not transparent in dealing with the petition of the Secretary (Power) seeking the statutory advice on the report submitted by M/s KPMG for corporatizing the Dept. Before the people were informed of the details, the petition was treated closed with the Govt. Order issued dropping the proposal.

j) **Consumer Grievances:** The consumers are facing problems in respect of Meter Struck (MS) and replacement of meters. Bill collection centres are not adequately manpowered and additional staff should be posted in the collection centres for collection of the bill amount and to avoid public criticism.

k) **Metering of the OHOB consumers:** The stakeholders objected to the misuse of power in the OHOB category. They pointed out that illegal use of power is being done in this category.

**Petitioner's submission:**

The Lt.Governor of Puducherry has been authorized by the President of India to exercise the powers and discharge the functions of the State Government under the provisions of Indian Electricity Act 2003(36 of 2003) vide Government of India Notification dt.2/1/2005. The Electricity Department, Government of Puducherry is the deemed licensee under the provisions of Section-14 of the Indian Electricity Act 2003.

The tariff petition for the year 2013-14 has been filed by the Superintending Engineer-I, Electricity Department, Government of Puducherry after obtaining due administrative approval from the Lt. Governor of Puducherry vide Order No. 210162/2/ID(p)/2011-12/P3/PF dated 20.12.12.

On the submission of the audited accounts, the Petitioner has submitted that the audited accounts of 2009-10 & 2010-11 have been submitted along-with the true up petition for the respective years. The same have been uploaded on the Department website.

The Department has submitted the review of performance of FY 11-12 based on the unaudited accounts in the petition to apprise the Commission on actual for the period. These unaudited accounts would in due course be audited and submitted further for true-up, from where the actual would anyway be brought into the tariff framework as per the approval of the Commission. The Petitioner has further submitted that-

**Quote**

When the Hon'ble JERC issued the tariff order on 12th June 2012, the unaudited accounts of the Electricity Department were not ready and therefore the "review" as carried out in the said order was done based on estimates at that time . While preparing the ARR for 2013-14, the unaudited accounts for 2011-12 have been prepared and therefore the respondent has apprised the Hon'ble JERC of the actual financial situation, on the basis of unaudited accounts. It may also be pointed out that as stated in the Regulations above *"The Commission shall undertake a review along with the next Tariff Order of the expenses and revenues approved by the Commission in the Tariff Order"*. The order for 2011-12 was passed along with the order for 2012-13 by the Commission in its order dated 12th June 2012. Therefore the next Tariff Order for the purposes of 2011-12 happens to be the order that the Commission will pass based on this ARR petition for 2013-14.

It is requested that the Hon'ble JERC may consider treatment of variations between the amounts considered for 2011-12 in the Tariff Order dated 12th June 2012 and the unaudited accounts as a provisional true up subject to finalization of the same once the accounts are audited. Keeping in line with the regulations, the respondent would submit audited accounts as per the true up for 2011-12 on completion of audit for the year 2011-12.

**Unquote**

The Petitioner has submitted that the true-up petitions for FY 2009-10 and FY 2010-11 have been filed alongwith the audited accounts for the respective years. The unaudited accounts for FY 2011-12 have been prepared and submitted. The Petitioner would submit the true-up petition for FY 2011-12 on completion of the audit for FY 2011-12.

The Petitioner has submitted that the EDP has made the payment of Rs 143.58 Crores, accruing to TANGEDCO, as per directions of the UT administration. The UT administration has directed

the EDP to recover this amount from tariff. As per the G.O.Rt. No. 123/ID(P)D/2012 dated 15/11/2012, the expenditure is debitable to the Department head of account. The amount so paid by the Department is a cost for EDP and accordingly recoverable from tariff.

Further, the Petitioner has clarified that the amount sanctioned by the Govt. of India is not an exclusive Grant-in-aid but a release of Rs. 150 Crores against the State Annual Grant as communicated vide Lr.No.15039/80/2012-Plg.Cell., dated.29-10-2012 of Ministry of Home Affairs.

As regards the collection of arrears, the Department clarified that a total of Rs. 217 Crores is outstanding as arrears. The Dept. is seriously conducting Disconnection Drive and Rs.30 Crores have so far been realized in this financial year. In respect of arrears from Govt. Departments and Undertakings, the Dept. is to approach the Govt. to allot the funds from the budget of the respective Dept. in order to liquidate the arrears in the financial year 2013-14. Disconnection of Govt. services will also be resorted if need be.

For the Meter Struck cases and replacement thereof, the Petitioner has submitted that orders have been placed for supply of 40,000 meters and another 85,000 meters would be installed free of charge under the Smart Grid Pilot Project. The work will be completed by March 2014.

Further, the Petitioner has submitted that 100% metering would be done by 2014.

**Commission's views:**

The Commission has noted objections of the stakeholders and the submission of the Petitioner. In this case, the Superintending Engineer is the authorized personnel to file the petition on behalf of the Electricity Department – Puducherry.

As regards the Corporatization of the Department, the Commission during the public hearing clarified that the Commission had earlier advised for converting the Department into Corporation. But it was only the Government of Puducherry which had withdrawn the proposal on the grounds of employees not getting certain benefits like pension etc. which are enjoyed by the Government Servants. During the Public Hearing held on this matter earlier, the public itself was opposed to the move of Corporatization of the Department. The Commission thereon had no cause of action.

The Commission reiterates its earlier directive on the collection of arrears should be duly adhered to. The Petitioner must submit quarterly progress reports on the status of the liquidation of the arrears alongwith an action plan for the same.

The Commission agrees that there is a set procedure for the filing of objections; however, at the same time an individual stakeholder is free to send his objections/views with proper identification and evidence for supporting the claims.

The Commission had issued a directive on the metering of the unmetered categories and also a directive on the replacement of the non-functional meters in the last tariff order. The Petitioner has not fully complied with the directive and detailed discussion is in the chapter on Directives. The Commission reiterates its earlier directive and wants the Petitioner to fully comply with it.

The billing and collection efficiency should be further improved. The Commission had given a directive in this regard to the Petitioner. Billing and collection should be improved through various channels and process of speedy implementation of the R-APDRP should be carried out so that related activities can improve.

The Commission underscores that redressal of consumers' complaints and grievances is an important function and responsibility of the distribution licensee, therefore EDP must pay due attention to it. The Commission has put in place an appropriate mechanism for redressal of consumer grievances. Consumer Grievance Redressal Forum (CGRF) is functioning at various levels. Besides that, a full-time Ombudsman is also functional at the JERC office. EDP need to give due publicity to the said Forum and its redressal mechanism so that general public is made aware of the same. EDP 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.

## **4.2 ARR Related**

### **4.2.1 Energy Sales to OHOB consumers**

#### **Stakeholders Objections/Comments:**

The stakeholders have submitted that during the Review of FY 2011-12, the Commission considering the consumption norm of 175.2 units/consumer/year had estimated sales for OHOB category as 6.21 MU and approved the same. As per the unaudited figures of 2011-12, the sales to the OHOB category have been 9.8 MU. The stakeholders have submitted that sales to OHOB should be allowed at 6.21 MU. Similarly, for FY 2012-13 the sales should be approved basis the above norm and allowed at 6.215 MU only.



**Petitioner's submission:**

The Petitioner has submitted that the actual number of OHOB consumers in the UT of Puducherry is 35,466 and sales to this category have been 9.8 MU for FY 2011-12. For the year 2012-13, the overall number of OHOB consumers has been projected to increase by 8. The increase in consumer number is marginal and the consumption has not been expected to increase by this small number of new additions.

**4.2.2 Sales**

**Stakeholders Objections/Comments:**

The stakeholders have submitted that the sales for the domestic category have been projected by the petitioner at a 6 year CAGR of 8%. Further, such projections have been made for the category as a whole and OHOB category has not been kept separate while undertaking such projections. Further, the stakeholders have submitted that CAGR of 3 years should be used for projecting the sales of domestic category i.e. from 2009-10 to 2012-13, as the sales for these years has been approved by the Commission and data is much more credible as compared to past year sales figures (i.e. prior to 2009-10).

**Petitioner's submission:**

The Petitioner has submitted that the consumption for the OHOB category has been maintained same as that for 2012-13 and not as objected. The rationale of using CAGR is to smooth out variations in consumer and sales numbers over a given time period. It may be noted that the Commission in its previous tariff order had assumed a 5 year CAGR for approving the sales numbers. The general extension of the logic used by the JERC for the year 2013-14 has resulted in using a 6 year CAGR by the Petitioner.

**4.2.3 T&D losses**

**Stakeholders Objections/Comments:**

The stakeholders have submitted that the T&D loss approved for FY 2009-10 was 14%. The Commission had approved the losses for the subsequent years taking FY 2009-10 as the base and following a progressive reduction of 0.5% every year i.e. 13.5% for FY 2010-11, 13% for FY 2011-12 and 12.5% for FY 2012-13.

Based on unaudited accounts, the Petitioner has submitted that the losses for 2011-12 have been 13.18% and 13% for next 2 years, higher than that approved by the Commission. The stakeholders have requested the Commission to approve the losses as approved in last tariff order.

**Petitioner's submission:**

The Petitioner has submitted that it faces an enormous financial crunch, due to which capital works leading to loss reduction could not be undertaken. The Petitioner has submitted that in this scenario it has made all efforts to ensure that losses are addressed to the best means possible, given the constraints on financial resources. This has resulted in a marginal overshoot of 0.18% in the loss levels, viz-a-viz the approved loss for FY 2011-12. For FY 12-13 and FY 13-14, the Petitioner has maintained the loss level at 13% as there is no firm commitment on budget available for capital expenditure.

#### **4.2.4 Power Purchase Quantum and Cost**

**Stakeholders Objections/Comments:**

The stakeholders have submitted that in the power purchase cost for FY 2012-13 and FY 2013-14, variable cost for Ramagundam STPS Stage III has been undertaken as 1.088111 Rs. /unit as per the CERC Tariff Order dated 7.5.2012. The variable cost projected by the petitioner is on a higher side at 1.80 Rs/unit.

The power purchase quantum should be arrived based on the firm allocation, instead of the received basis as provided by the Petitioner. Further, the other charges projected by the Petitioner are on higher side. The Petitioner has revised the estimates of Rebate to a lower level.

**Petitioner's submission:**

The Petitioner has submitted that the power purchase cost has been determined based on actual for 11-12 and 6 months actual consumption for 12-13 and projections based on 12-13 numbers, for 13-14. The tariffs have been taken as per the latest CERC orders for various central generating stations at the time of filing the petition.

The Petitioner has made the following submission:

**Quote**

- **“ Ramagundam Stage 3 Energy Charge:** As per the 7/5/2012 CERC order cited by the objectioner, *“Energy Charge Rate (ECR) of 108.81 paisa/kWh has been computed*

*considering the normative transit and handling losses of 0.2% for coal supplied through Order in Petition No. 256-2009 Merry Go Round (MGR) system and 0.8% for coal supplied through Railway system. Accordingly, the weighted average price of coal works out to be Rs. 1611.80/MT. Based on the above weighted average rate price, GCV of fuel procured and burnt for the preceding three months of January, 2009 to March, 2009 and operational norms, the Energy Charge Rate works out to 108.811 paise/kWh”*

The objectioner may please observe that normative cost is used merely as a basis for computation of base rate and monthly variations will occur due to changes in GCV etc for those months. Examples of this are in April 2012, ECR was 1.835 and September 2012 ECR was 1.474. Given that the values vary from month to month, the respondent has assumed the first 6 months average rate of Rs. 1.8/unit for calculation purposes. It may be noted that the Hon'ble JERC in its previous tariff order had approved the station's energy cost at Rs. 1.54/unit.

The objectioner may also take note of the fact that variations due to change in fuel cost are recovered on a monthly basis now. Earlier, variance recovery was done only after approval of CERC through separate petition, reflected in “Other charges”

- The petitioner has projected power purchase cost based on received basis as this presents a true picture of the energy actually received by the territory of Puducherry. The objectioner has instead assumed firm allocation to show that the excess power received would be sold in short term markets at highly incongruous rates, lowering the overall ARR and distorting actual expenditure which is not a realistic situation to assume.
- As per the unaudited accounts for 2011-12, provided in the petition, the Other Charges stand at approximately 75 Crores. The objectioner has only considered the JERC approved numbers as a base, but not considered the unaudited numbers and reduced the power purchase cost for all years to that extent. This is not a correct assumption to take. Other Costs for 13-14 have been assumed the same as the previous year i.e. approximately 60 Crores.

Considering the current financial situation of the PED, Rebate claim has been pruned. The benefit of any increase in the rebate component would be passed on to the consumers.”

### **Unquote**

#### **4.2.5 O&M expenses**

##### **Stakeholders Objections/Comments:**

The stakeholders have submitted that all O&M expenses should be determined on the basis of the Wholesale Price Index (WPI). In the case of employee costs, WPI may be calculated on Gross employee expenses for 2010-11 and from gross employee costs arrived thereof, capitalization of employee expenses be subtracted to arrive at the net employee expenses. In order to undertake a conservative analysis of the same, the revised gross employee expenses for 2012-13 be considered by adjusting gross employee expenses of 2011-12 in the proportion of number of employees at the end in 2012-13 vis-a-vis in 2011-12. The revised gross employee expenses for 2013-14 be considered by adjusting gross employee expenses of 2011-12 in the proportion of number of employees at the end in 2013-14 vis-a-vis in 2011-12.

The stakeholders, in particular Mr P Veerappan, objected to the inclusion of employee expenses towards non-core activities being executed by the Department such as the maintenance of buildings of all Govt. Departments and street lights.

**Petitioner's submission:**

The Petitioner as regards the employee cost has submitted the following:

**Quote**

“

**For 2011-12:** the employee costs are based on actual, as submitted in the unaudited accounts

**For 2012-13:**

The projections for salaries and allowances for FY2012- 13 have been made on the basis of the actuals (un-audited) of FY11-12 and 1<sup>st</sup> half of 12-13. The gradual increase in salary cannot be directly linked with the WPI index as the salary increase is due to increase in dearness allowance, annual increments, MACP, pay revision arrears etc. The costs have been escalated as per the unaudited accounts for 2011-12, which have been provided in the ARR petition. The expenditure saved due to reduction in employees is offset by the increase in employee salaries taking into account the above mentioned increases.

**For 2013-14:**

The projections for salaries and allowances for FY2013- 14 have been made on the basis of the revised estimates of FY12-13. The gradual increase in salary cannot be directly linked with the WPI index as the salary increase is due to increase in dearness allowance, annual increments, MACP, pay revision arrears etc. Wages, stipend and overtime for 13-14 have been assumed the same as 12-13. The expenditure saved due to reduction in employees is offset by the increase in employee salaries taking into account the above mentioned increases.

Calculation of O&M figures should be based on the actuals for the last year i.e. unaudited accounts of 2011-12, which have been uploaded on to the PED website for public reference.”

**Unquote**

#### 4.2.6 Capital Expenditure

**Stakeholders Objections/Comments:**

The stakeholders have submitted that the Commission directed to obtain advance approval of the proposed capex, which has not been taken by the Petitioner. Further, even in the current submissions, the Petitioner has merely submitted the list of capex schemes, along with the amounts proposed to be incurred; but it has failed to establish and demonstrate the cost benefit analysis of each scheme.

As the consumers are underwriting the capital expenditure in terms of higher tariffs, it is crucial that capex should be expensed prudently after establishing the cost benefit analysis.

In such a case, the proposed capex deserves to be outrightly rejected as it is contrary to the directives of the Commission.

**Petitioner's submission:**

The Petitioner has submitted the following:

**Quote**

As is known, the Thane cyclone hit the coast of Puducherry in the last week of December 2011 and caused significant amount of damage to substations, transmission lines, street lights etc. It has taken the PED significant time to estimate the level of damages and subsequent works to be undertaken. While immediate supply was restored, the PED was of the view that this opportunity must be utilized to enhance the distribution system and hence spent further time to plan necessary improvements.

It was at this time that the departmental budget accruing to capital works was slashed due to payment to TANGEDCO based on Hon'ble High Court Judgment. There was also no firm commitment to available budget for capital works to PED by the administration.

This uncertain environment surrounding the capital planning works led PED not submitting the capex plan in advance to Hon'ble JERC's approval.

Incidentally, most of the schemes are all on-going works for FY 2012-13 & 2013-14 and the PED assures that in subsequent years, the proposed capex plan shall be sent for advance approval.

**Unquote**

#### **4.2.7 Asset Capitalization**

##### **Stakeholders Objections/Comments:**

The stakeholders have submitted that the Commission in Tariff Order of 2012-13 had approved the assets capitalisation of Rs. 66.36 Crores and capitalisation of employee cost of Rs. 21.09 Crores for FY 2012-13. Further in the revised estimates of 2012-13, the Petitioner has revised the assets capitalisation to Rs. 52.38 Crores.

The stakeholders have objected that while the asset capitalization has been lowered by 21%, the capitalization of employee cost has been lowered by 45%.

##### **Petitioner's submission:**

The Petitioner has submitted that it had projected a capital expenditure of Rs. 97.48 Crores and capitalisation of Rs. 66.35 Crores in the Tariff Petition for FY 12-13. The Commission had approved the capitalisation of Rs. 66.36 Crores in its Tariff Order for FY 2012-13. As per the revised estimate submitted by EDP, the revised estimated capital expenditure is Rs. 52.38 Crores as against Rs 97.48 Crores (i.e. lower by 46%) and the capitalisation remains same at Rs. 66.35 Crores. The capitalisation here refers to the completion of capital works and transfer to the fixed assets head.

EDP has further pointed out that the asset capitalization and employee cost capitalization need not necessarily be a linear equation and the % would depend upon the quantum / concerned department's employees cost which are involved for a project and this can vary.

#### **4.2.8 Fixed Asset Register**

##### **Stakeholders Objections/Comments:**

The stakeholders have objected that the copies of the fixed asset registers have not been provided by the Petitioner. In fact there is nothing on the record to establish that the fixed asset registers indeed have ever been prepared.

##### **Petitioner's submission:**

The Petitioner has submitted that the fixed asset & depreciation registers for EDP have been prepared and submitted along with the audited accounts for 2009-10 and 2010-11, during the filing of the respective true up petitions.

The Objector has been apprised of the same and public may view the same or documents related to ARR filing at the EDP premises during normal working hours. This is due to the fact that the asset register is voluminous (around 3000 pages per year) and therefore, it is difficult to put it in public domain due to readability and size issues.

#### **4.2.9 Depreciation**

##### **Stakeholders Objections/Comments:**

The stakeholders have submitted that the Depreciation based on the unaudited accounts is on the higher side. The Fixed Asset Register has been prepared and submitted along with the True Up petition for 2009-10 and 2010-11. Since a detailed examination and analysis of the audited accounts, fixed asset register and true up petition is required to check the accuracy of the claims of the petitioner which has not taken place; and since such information is not available in public domain and without detailed examination of the same, assessment of GFA and depreciation is not possible; a pass through of this component would be opposed to section 86 (3) of the Electricity Act, 2003, as aforesaid. The stakeholders have submitted that the Depreciation should be calculated basis the GFA approved in the Commission's last tariff order for FY 2012-13.

##### **Petitioner's submission:**

The Petitioner has submitted that the fixed asset & depreciation registers for PED have been prepared and submitted along with the audited accounts for 2009-10 and 2010-11, during the filing of the respective true up petitions. Further, the Petitioner has submitted that the report of the auditors acknowledges the availability of the fixed asset and depreciation register and that the same matches with the audited accounts for 2009-10 and 2010-11. The Auditor has also noted in his Audit Report that "The Fixed Assets Register has been prepared based on physical verification of Fixed Assets carried out by the Department".

#### **4.2.10 Interest on Working Capital**

##### **Stakeholders Objections/Comments:**

The stakeholders have submitted that the working capital as per the unaudited accounts for FY 2011-12 is Rs. 98.95 Crores, whereas the consumer security deposits available with the Petitioner are to the tune of Rs. 105.13 Crores.

Considering that consumer deposits are higher than the eligible working capital, it entails that no interest on working capital should be allowed to the Petitioner in accordance with the philosophy of the Commission.

**Petitioner's submission:**

The Petitioner has submitted that the security deposit collected from the consumers had been deposited under a non-interest bearing head with the Government following the government system applicable to EDP. As such, the entire deposit is not at the disposal of EDP for capital utilisation.

#### **4.2.11 Interest on Security Deposit**

**Stakeholders Objections/Comments:**

The stakeholders, in particular Mr V. Perumal submitted that the present practice of depositing the Electricity Deposit paid by the public in non-interest bearing purposes should be dispensed with and instead it should be deposited in the interest bearing deposit.

**Petitioner's submission:**

Under R-APDRP scheme, the base line data of each consumer is being updated and programmed to be completed by 31.03.2013. The PED would comply with the directives and necessary arrangement will be made to give interest credit to the respective consumers from 1st April 2012 after modifying the billing program under R-APDRP scheme. The H.T consumers would be advised to convert their existing fixed deposits into cash deposits before March 2013 and interest thereon would be paid to each H.T consumers.

#### **4.2.12 Return on Capital Base**

**Stakeholders Objections/Comments:**

The stakeholders have submitted that a detailed examination and analysis of the audited accounts, fixed asset register and true up petition is required to check the veracity of the claims of the petitioner. As such information is not in the public domain, it is not possible to provide any comments on the same.



Till such information is placed in the public domain, in consonance with the Electricity Act, as aforesaid, it is prayed that the Commission may continue with its earlier approach and hence the return on capital base as originally approved for FY 2011-12 by the Commission may be considered.

**Petitioner's submission:**

The Petitioner has submitted that the Puducherry Electricity Department has prepared both Fixed Asset and Depreciation registers. The same has been submitted to the Commission along with the audited accounts for 2009-10 and 2010-11. The Department has also prepared the accounts for FY 2011-12. The Return on Net Fixed Assets calculated on the basis of unaudited accounts for FY 2011-12 is Rs. 9.33 Crores. For this purpose, a rate of 3 % return on Net Fixed Assets at the beginning of the FY 2011-12 had been considered.

**4.2.13 Revenue from outside sales**

**Stakeholders Objections/Comments:**

The stakeholders have submitted that the Petitioner has not provided a detailed explanation for not selling the excess energy in the short term market. If the Petitioner were to have reduced scheduled demand and had sold surplus power in formal short term markets [Over the Counter (OTC), through traders or bilaterally with other utilities in Southern Region], such a strategy would have reduced power prices in Day Ahead Markets (DAM) by making more power available for sale and also enhance Available Transmission Capability (ATC). The Congestion on 400 kV Nunna-Nellore-Sri Perumbudur Corridor could have potentially been reduced) between Andhra Pradesh and Tamil Nadu.

Further, the stakeholders have submitted that the Petitioner's contention that short term sale would draw criticism from other states is therefore misplaced as such an optimization would not only have helped the Petitioner but also would have benefited other states in the region by helping reduce prices in DAMs.

The Petitioner, in fact, needs to actively undertake a demand and supply analysis for the territory and plan in advance the months during which the demand is low/high and accordingly look for avenues to sell or purchase the surplus/deficit power.

**Petitioner's submission:**

The Petitioner has submitted that the load curve of any distribution utility in the country will have morning & evening peaks due to domestic load coming onto the system and accordingly

generation has to be available to meet the peak. The Petitioner has submitted data and it is seen that the maximum surplus energy available in a day was 3.38 MU, on 16<sup>th</sup> January 2012, which was during the time when the cyclone Thane made landfall in Pondicherry & Karaikal. Leaving aside these days, the maximum surplus available was on March 27<sup>th</sup> 2012, of 2.55MU. The Petitioner has submitted that during the morning peak, the surplus at absolute system peak, in the time-slot 10:15 – 10:30 was only 0.09 MU, which shows how thin the margins are.

Quoting from the Petitioner's submission:

**Quote -**

"Arranging a short-term sale for such a thin margin would, at best, be difficult and is fraught with risks as any unexpected shortfall in generation or unexpected spike in demand would cause (a) penalties for not honouring contract for sale, (b) over-drawal to meet demand, or (c) dropping load to prevent over-drawal.

Even though the total quantum of UI sales appears to be large, we submit that the margins available to meet system peak are minimal and is a consequence of the generation available to the PED being mostly from base-load stations.

Ideally, the generation available should consist of base load, load following and peaking plants. However, given the level of development of the industry in the country and general peak & energy shortage, this is not widely prevalent

Further, load following & peaking plants would have higher capacity (on per MW basis) & energy charges.

If the generation portfolio available to PED consisted of appropriate mix of base load, load following & peaking plants, UI sales would likely be absent, but pooled cost would be higher, or at best equal to current pooled cost.

The net result would be that entire cost of power purchase would have to be recovered from consumers through tariff, instead of current scenario where cost of power purchase is offset by entire revenue from UI sales, thus reducing the burden on consumers.

Further, as per Central Electricity Regulatory Commission (Unscheduled Interchange charges and related matters) Regulations, 2009 *"The Cap Rate for the Unscheduled Interchange for the under draws by the buyer or the beneficiaries in excess of 10% of the schedule or 250 MW whichever is less shall be the same as the charges for the Unscheduled Interchange corresponding to grid frequency interval of 'below 49.70 Hz and not below 49.68 Hz' as specified in Schedule "A" of these Regulations.* This value works out to Rs. 4.03/kWh.

As a consequence of load growth, and no new allocated plants coming online, the UI sale forecast has decreased."

**Unquote**

#### **4.2.14 Non-tariff Income**

##### **Stakeholders Objections/Comments:**

The stakeholders have submitted that the non-tariff income should be revised based on the revisions in the constituent heads of revenue from outside sales and other income.

##### **Petitioner's submission:**

The Petitioner has submitted that it has computed the non-tariff income based on the revisions in the revenue from outside sales.

##### **Commission's views on the above objections related to ARR**

The Commission appreciates the concerns of the stakeholders and has noted the submissions made by the Petitioner. The Commission has considered the determination of the various components of the ARR in line with JERC Tariff Regulations. Detailed analysis is given in the chapters of the respective years.

Specifically, as regards the inclusion of the employee expenses towards the non-core activities in the employee cost, the Commission directed the Petitioner to segregate the employee expenses towards maintenance of other Govt. department buildings and submit to the Commission. The Petitioner subsequently submitted the break-up of the employee expenses. For the purpose of the ARR, the Commission has deducted the employee expenses related to the non-core activities from the approved employee expenses for each of the years.

#### **4.3 Tariff Related**

##### **4.3.1 General Comments**

##### **Stakeholders Objections/Comments:**

The main issues raised by the public in their written submissions and during the hearings in brief are as under:

1. The overall tariff hike proposed for recovery of the revenue gap is high
2. Steep increase in the tariff for Domestic consumers

3. Tariff for the agriculture farmer should not be increased
4. Tariff of the street lights is high. The burden will be put on the consumers by the Municipality. The stakeholders suggested the use of solar panels for street/public lighting.
5. Disproportionate increase in the demand charges for the HT consumers has been sought, of the order of 16%. The stakeholders have submitted that the increase in demand charges should be commensurate with the increase in the fixed costs of the distribution system i.e. 7.6%

**Petitioner's submission:**

The Petitioner has submitted the following:

**Quote**

"The tariff proposal has been formulated in line with NTP principles taking into account the total average cost of supply considering various components of tariff. The respondent has highlighted in its petition the need to increase tariff. It may be noted that PED has one of the lowest electricity rates among the southern states. The demand charges of Tamilnadu 300 (Rs./kVA/month); Kerala 300 (Rs./kVA/month), Andhra Pradesh 250 (Rs./kVA/month) etc. are much higher than what currently exists, as well the new proposed demand charges."

**Unquote**

**Commission's views:**

The Commission has taken due cognizance of the objections of the stakeholders. The Commission has made a prudent assessment of the revenue gap of the different years and accordingly arrived at the required tariff hike. The detailed analysis of the tariff of each of the consumer categories is in Chapter 10 of this order.

## 5. True-up of ARR for FY 2009-10

### 5.1 Background

The Petitioner, in their true-up for FY 2009-10 has submitted the details of expenditure and revenue for FY 2009-10 based on the audited accounts submitted by the petitioner for FY 2009-10. The Petitioner has provided the comparison of actual revenue and expenditure against each head with the revenue and expenditure approved by the Commission.

The Commission had approved the ARR for FY 2009-10 along-with the determination of tariff as part of the Tariff Order FY 2009-10. The Petitioner had submitted its application for Review of FY 2009-10 along with ARR & Tariff Petition for FY 2011-12 on 29<sup>th</sup> September 2011. As per the admission order for the ARR & Tariff Petition for FY 2012-13 dated 17<sup>th</sup> February 2012, the ARR & Tariff Petition for FY 2011-12 had been taken up for consideration along with the ARR & Tariff Petition for FY 2012-13 and accordingly the review for FY 2009-10 had been dealt with in the tariff order for FY 2012-13 dated June'12 2012.

In this Chapter, the Commission has analyzed all the elements of actual revenue and expenses for FY 2009-10 based on the audited accounts submitted by the petitioner, and has carried out the true-up of expenses and revenue after due prudence check.

### 5.2 Truing up and Analysis of performance for FY 2009-10

The true-up of FY 2009-10 has been carried out as per the provisions of regulation 8 of JERC Tariff Regulations, 2009. As per the regulation 8 of JERC Tariff Regulations, 2009:

#### **Quote**

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

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

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

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

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

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

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

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

### **Unquote**

The Commission has reviewed the variations between approvals and actual of sale of electricity, power purchase expenses, other income and expenditure for FY 2009-10 as per the audited accounts submitted by the petitioner and has permitted necessary adjustments in cases where variations are for reasonable and justifiable reasons.

## **5.3 Consumers, Connected Load and Energy Sales**

### **Petitioner's Submission**

The Petitioner as per the regulatory formats submitted alongwith the petition has submitted the sales for the year as 2161.3 MU. There is no variation in the sales figures as per the audited accounts and that submitted for the review last year based on provisional/unaudited figures. The sales for the unmetered categories – One Hut One Bulb (OHOB) and the agriculture category have been 14.1 MU and 76.7 MU respectively.

The Petitioner has also submitted the total no. of consumers for the year as 371,100. The connected load for agriculture category has been submitted as 59538 HP. There is no change in the no. of consumers submitted from the unaudited figures.

## **Commission's Analysis**

### **Agriculture Category**

Since there is no variation in the claimed sales of the agriculture category, the Commission reiterates the approach followed by it in the last tariff order for the approval of the sales to the agriculture category. The relevant extract from the last year tariff order is reproduced below.

### **Quote**

"The Petitioner has indicated that they have carried out physical verification of the actual number of agriculture consumers and load of pump set used by them. It is however seen that no assessment has been done of actual consumption by installing sample meters at different locations thereby capturing actual data which could then be used to arrive at the normative consumption of unmetered agriculture consumers. If that were done, it would have given a fair assessment of actual consumption of unmetered consumers and provided more accurate basis for the purpose of energy accounting and billing. The formula given by the Petitioner is entirely based on various assumptions and therefore does not give a reliable basis for acceptance.

The Petitioner has also indicated that the basis adopted by him is followed as in the nearby states as well. In this regard, the Commission took into account the tariff order dated 30.03.2012 passed by Tamil Nadu Electricity Regulatory Commission (TNERC) and found that consumption of un-metered agriculture consumers has been assessed at 896.08units/HP/year for 2010-11 and 951.1units/HP/year for FY2011-12 and FY 2012-13. These normative values have been arrived at by TNERC after conducting actual field studies and capturing actual consumption through installation of large number of representative meters. Thus the finding so arrived by TNERC provides a more accurate and reliable basis than the one arrived merely on the basis of various assumptions as done by the Petitioner. Since a major area of the UT of Puducherry is adjoint to Tamil Nadu state, the consumption pattern of agriculture consumers of Puducherry is not likely to be very much different than that in Tamil Nadu. The Commission, therefore, is of the view that it would be proper and in overall interest of all stakeholders that the consumption assessed by TNERC for unmetered agriculture consumers is taken as the basis for assessing consumption of un-metered agriculture consumers in UT of Puducherry also. Accordingly, the energy supplied to this category of consumers has been arrived at by multiplying the normative consumption in kWh/HP/year with the total load in HP of the pump sets as provided by the Petitioner in the petition. The consumption norm of 896.08 units/HP/year of FY 2010-11 has been considered to be reasonable for assessing the consumption of FY 2009-10.

The Commission considers approved the agricultural sales at 53.35 MU.

## **Unquote**

The Commission accordingly approves the sales for the agriculture category at 53.35 MU against the claimed sales of 76.7 MU.

## **OHOB consumption**

Since there is no variation in the claimed sales of the OHOB category, the Commission reiterates the approach followed by it in the last tariff order for the approval of the sales to the OHOB category. The relevant extract from the last year tariff order is reproduced below.

## **Quote**

“As mentioned by the Petitioner, consumers under One Hut One Bulb (OHOB) category are allowed use of two 40W fluorescent tubelights . Considering this as the basis, consumption of each consumer under OHOB 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 in rural areas.

The Petitioner has claimed consumption of 14.1 MUs for 41200 consumers in OHOB category, thereby giving an average consumption of 342.23 units/consumer/year which is almost twice as much as fairly assessed by the Commission. 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 OHOB consumers at 7.22 MU.”

## **Unquote**

The Commission accordingly approves the sales to the OHOB category at 7.22 MU against the claimed sales of 14.1 MU.

## **Metered Sales**

Metered sales being an uncontrollable factor are approved in entirety.

**The Commission, therefore, approves total sales of 2130.97 MUs for the true-up of ARR for FY 2009-10 against the Petitioner’s submission of 2161.2 MU as detailed in the below table.**



The table below shows consumer category-wise sales as submitted and approved by the Commission. The OHOB sales have been clubbed within the category of 'Domestic' in the below table.

**Table 9: Energy Sales approved by the Commission for true-up of FY 2009-10**

Consumer Category	Proposed In FY 10 petition	Approved TO 2009-10	Actual (unaudited accounts)	Approved (Review) in order dated June 12'12	Petitioner Submission	Approved (True-up)
Domestic	475.3	467.0	513.2	506.3	513.2	506.32
Commercial	160.1	159.0	149.8	149.8	149.8	149.80
Agriculture	81.6	48.0	76.7	53.3	76.7	53.35
Street Lighting	17.8	18.0	16.9	16.9	16.9	16.90
LT Industrial	146.9	148.0	147.0	147.0	147.0	147.00
Temporary Supply	-	-	3.0	3.0	3.0	3.00
HT Industrial	1071.4	974.0	958.2	958.2	958.2	958.20
HT state and Central Govt Establishments	27.4	27.0	34.3	34.3	34.3	34.30
HT Industrial Extra High Tension	286.4	260.0	262.1	262.1	262.1	262.10
<b>Total</b>	<b>2266.9</b>	<b>2101.0</b>	<b>2161.2</b>	<b>2130.9</b>	<b>2161.2</b>	<b>2130.97</b>

**The number of consumers and connected load as submitted by the Petitioner are considered to be reasonable and approved for the true-up of ARR for FY 2009-10.**

## 5.4 Energy Losses

### Petitioner's Submission

The Petitioner had proposed to achieve a T&D loss level of 14% based on the projected sales of 2267 MU and energy input of 2636 MU in the petition for FY 2009-10. The Commission in the tariff order for 2009-10 had approved T&D loss level of 14% based on the submission of the Petitioner, considering the energy sales of 2101 MU and energy input of 2443 MU.

The Petitioner submits that the actual sale for FY 2009-10 has been 2161 MU with a net energy input of 2525.7 MU to meet requirement within the territory leading to T&D loss of 14.43%.

The Petitioner has submitted that the increase in the total quantum of sales and the adverse change in the sales mix in terms of ratio of sales to LT and HT consumers have resulted in a higher quantum of T&D losses. The petitioner has retained the energy loss figure at 14.43% for the true-up and the energy balance remains unchanged from the submission for ‘Review’ of FY 2009-10.

**Commission’s analysis**

The Commission in Tariff Order FY 2009-10 had approved T&D losses at 14% based on the estimates submitted by the Petitioner. The Commission had also issued direction to further reduce the T&D losses, conduct an energy audit and take steps to reduce the technical losses and control pilferage of energy. However, adequate steps in this direction have not been taken up resulting in higher T&D losses.

The Commission considers the approved T&D loss of 14% as reasonable and approves the same for true-up of FY 2009-10. Since the energy balance figures have remained unchanged in the submission for true-up from the review figures submitted last time; the Commission has retained the T&D loss figure as approved in the ‘Review’ for FY 2009-10.

**Table 10: Energy losses approved by the Commission for true-up of FY 2009-10**

Particulars	Proposed in FY 2009- 10 petition	Approved in TO 2009-10	Actual (unaudited accounts)	Approved (Review) in order dated June 12’12	Petitioner Submission	Approved (True-up)
Energy Losses	14%	14%	14.43%	14%	14.43%	14%

**The Commission, therefore, has retained the T&D loss of 14% as approved in its order dated June 12’ 2012 as reasonable and approves the same for true up of FY 2009-10.**

**5.5 Energy Balance**

**Petitioner’s submission**

The Petitioner has submitted that due to higher sales and marginally higher internal losses, the actual energy requirement for the territory has been 2526 MU. The actual power purchase has been 2786 MU and due to marginally higher external losses, the actual availability at the periphery has been 2681 MU. Based on the actual, the UI sales have been 155.3 MU.

The Petitioner requests to consider the actual and approve the same. The energy balance remains unchanged from the submission for 'Review' for FY 2009-10.

**Commission's analysis**

The Commission has approved the sales as explained above at 2130.97 MU, and approved the inter-state loss of 14% resulting in a net energy requirement of 2477.87 MU for the territory.

The Commission has allowed the sales outside the state/UI sales at 155.29 MU resulting in the net energy requirement at the periphery of 2633.16 MU.

The gross energy purchase approved by the Commission is 2736.70 MU, considering external losses of 103.53 MU.

The table below captures the values as submitted by the Petitioner and that approved by the Commission as part of the true-up of ARR for FY 2009-10.

**Table 11: Energy Balance approved by the Commission for true-up of FY 2009-10**

Particulars	Proposed in FY 10 petition	Approved TO 2009-10	Actual (unaudited accounts)	Approved (Review)	Petitioner Submission (Audited accounts)	Approved (True-up)
<b>ENERGY REQUIREMENT</b>						
Energy sales in the UT (MU)	2267.00	2101.00	2161.30	2130.97	2161.30	2130.97
Distribution losses (%)	14%	14%	14.43%	14%	14.43%	14%
Energy required for sale in the UT (MU)	2636.05	2443.02	2525.77	2477.87	2525.77	2477.87
Add: Sales to common pool consumers/ UI (MU)	-	164.92	155.29	155.29	155.29	155.29
<b>Energy Requirement @ periphery (MU)</b>	<b>2636.05</b>	<b>2608.00</b>	<b>2681.06</b>	<b>2633.16</b>	<b>2681.06</b>	<b>2633.16</b>
<b>ENERGY AVAILABILITY</b>						
Gross Energy Purchase	<b>2756.00</b>	<b>2706.20</b>	<b>2786.40</b>	<b>2738.56</b>	<b>2786.40</b>	<b>2736.70</b>
External losses (MU)	120.00	98.20	105.40	105.40	105.40	103.53
<b>Net Energy Availability (MU)</b>	<b>2636.00</b>	<b>2608.00</b>	<b>2681.00</b>	<b>2633.16</b>	<b>2681.00</b>	<b>2633.16</b>

## 5.6 Power Purchase Quantum and Cost

### **Petitioner's submission**

The Petitioner has submitted that due to higher sales and marginally higher energy losses of 14.43 %, the actual energy requirement at the periphery has been 2526 MU. The actual power purchase has been 2786 MU and due to marginally higher external losses, the actual availability at the periphery has been 2681 MU.

The Cost of Power Purchase comes to Rs. 588.07 Crores as per the audited accounts of FY 2009-10. There is a difference of Rs. 10.77 Crores in the Cost of Power Purchase from the figure approved by the Commission in the Review of ARR for FY 2009-10 as per the order dated June 12' 2012. The Petitioner has submitted that is because the Commission had disallowed the Cost of Power Purchase to the extent of Rs. 10.77 Crores, which was incurred by the petitioner. However, as can be observed from the audited accounts, there is no change in the Cost of Power Purchase in the Truing Up petition from the figure claimed by the petitioner in the Review petition.

### **Commission's Analysis**

As discussed in the section on energy balance in para 5.5, the power purchase quantum approved is 2736.70 MU for FY 2009-10. The Commission maintains the approach followed in the 'Review' for approving the power purchase cost for FY 2009-10.

While full fixed (capacity) charges have been considered but the variable charges corresponding to the costliest source of power have not been considered, in respect of energy not considered for purchase (according to the merit order dispatch principles) resulting in the power purchase cost approved of Rs. 578.92 Crores for the true-up of FY 2009-10. The additional/penal UI charges corresponding to overdrawal beyond the allowed frequency have not been considered.

The Commission in the review for FY 2009-10 had considered partial purchase from PPCL as per merit order principles; however considering the Petitioner's submission that PPCL be treated as must run as it is an indispensable source for supply to Karaikal region, the Commission has re-worked the calculation this time keeping this in mind. Only the variable charges have been disallowed, allowing full recovery of the fixed charges and other charges from all plants.

**Table 12: Power Purchase Quantum and Cost approved for true-up of FY 2009-10**

Source	Purchase (MU)	VC (Rs/Unit)	Fixed Charges (Rs Cr)	VC (Rs Cr)	Others (Rs Cr)	Total (Rs Cr)
NPC - Madras APS	24.70	1.92		4.70		4.70
NPC Kaiga APS Stage I	80.10	3.06		24.50		24.50
KSEB	31.20	3.30		10.30		10.30
NTPC Talcher STPS Stage II	522.70	1.09	49.50	57.00	3.9	110.50
NLC TS I Expn	114.00	1.14	11.10	13.00	1.6	25.70
NLC TS II Stage I	434.80	1.21	14.40	52.40	7.1	73.90
NLC TS II Stage II	157.90	1.21	5.10	19.00	2.6	26.70
NTPC Ramagundam STPS Stage I & II	588.5	1.31	18.9	76.90	2.8	98.60
NTPC Ramagundam STPS Stage III *	157.20	1.31	13.80	20.44	1	35.24
NTPC-ER *	-	1.67	3.3	-		3.30
TNEB (Pondy)	67.30	1.91		12.90		12.90
TNEB (Karaikal)	320.3	1.91		61.30		61.30
PPCL	207.00	2.08		43.00		43.00
UI	31.00	2.59		8.00		8.00
PGCIL						50.90
Less: Rebate						9.70
<b>Power Purchase Cost</b>	<b>2,736.70</b>		<b>116.10</b>	<b>403.44</b>	<b>19.00</b>	<b>579.84</b>
Less: Additional/Penal UI Charges						0.92
<b>Net Power Purchase Cost</b>						<b>578.92</b>

*\* partial purchase has been considered from these plants because of merit order*

The Commission is of the view that adequate and prudent planning needs to be done by EDP, as overall energy availability is much higher than the overall energy requirement.

**Table 13: Summary of Power Purchase approved by the Commission for true-up of FY 2009-10**

Particulars	Proposed in FY 2009- 10 petition	Approved in TO 2009-10	Actual (unaudited accounts)	Approved (Review)	Petitioner Submission (Audited accounts)	Approved (True-up)
<b>Power Purchase Quantum (MU)</b>	2756.0	2706.2	2786.4	2738.5	2786.4	2736.70
<b>Power Purchase Cost (Rs Cr)</b>	614.1	576.8	588.1	577.31	588.07	578.92

The Commission considers the power purchase quantum and cost of 2736.70 MU and Rs 578.92 Crores respectively as reasonable and approves the same for the true-up of ARR for FY 2009-10.

## 5.7 Operation and Maintenance Expenses

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

- Employee cost,
- Repairs & Maintenance expenses, and
- Administrative and General Expenses.

### Employee Cost

The cost of employees includes salary, dearness allowance payable to employees and other allowances such as bonus, HRA, LTC, medical reimbursement, etc.

### **Petitioner’s submission**

The Petitioner has submitted that the Employee Cost as per the audited accounts for FY 2009-10 is Rs 53.74 Crores and this has been included in the Truing Up petition. There is an increase of Rs 6.27 Crores in Employee Cost in the Truing Up petition from the Commission approved Employee Cost in the ‘Review’ of FY 2009-10.

In the Review petition for FY 2009-10, the petitioner had quoted an amount of Rs 47.47 Crores as Employee Cost, which was net of capitalisation. The Commission had approved the same in its Review of ARR for FY 2009-10.

The Employee Cost as per the unaudited and audited accounts for FY 2009-10 is tabulated below:

**Table 14: Break-up of Employee Cost in unaudited and audited accounts for FY 2009-10**

Particulars (Rs. Crores)	Unaudited Figures for FY 2009-10	Audited Figures for FY 2009-10
Salary	57.07	57.07
Wages	0.15	0.15
Stipend	0.16	0.16
Overtime Payment	0.75	0.75
Subtotal	58.14	58.14
Less: Departmental Charges	2.93	2.93
Less: Salary Costs Capitalised	7.73	1.47
<b>Total</b>	<b>47.47</b>	<b>53.74</b>

Therefore, the increase in Employee Cost in the Truing Up for FY 2009-10 by Rs 6.27 Crores is due to the reduced capitalisation of Salary Costs in the audited accounts by Rs 6.27 Crores and all other figures have remained unaltered. The increase has been due to adjustments made during audit for difference in treatment of certain employee cost between capital expenditure and O&M expenditure.

The Petitioner requests the Commission to allow the above Employee Costs.

### **Commission's analysis**

The Commission had approved employee expenses of Rs. 47.47 Crores in the 'Review of ARR for FY 2009-10' as per the unaudited accounts submitted for FY 2009-10.

As per the sub-regulation 2 (i) of regulation 8 of JERC tariff regulations 2009, **the Commission has considered the figures of employee expenses of Rs 53.74 Crores as per the audited accounts as reasonable; however the Commission has disallowed the employee expenses**

related to the non-core activities and approves Rs 51.95 Crores as employee expenses for the true-up of ARR for FY 2009-10.

**Table 15: Employee expenses approved by the Commission for true-up of FY 2009-10**

Particulars	Proposed in FY 2009- 10 petition	Approved in TO 2009- 10	Actual (unaudited accounts)	Approved (Review)	Petitioner Submission (audited accounts)	Approved (True-up)
<b>Employee Expenses</b>	66.84	61.91	47.47	47.47	53.74	51.95

### **Administrative and General Expenses**

The A&G expenses primarily comprise of the following components:

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

### **Petitioner’s submission**

The Administrative and General Expenses approved by the Commission in the Review of ARR for FY 2009-10 was Rs. 3.18 Crores. The Administrative and General Expenses as per the audited accounts of FY 2009-10 is Rs. 3.28 Crores. There is a slight increase in the Administrative and General Expenses as per the audited accounts over the figure approved by the Commission in last year’s order as per the provisional/unaudited accounts.

### **Commission’s analysis**

The Commission had approved A&G expenses of Rs. 3.18 Crores in the ‘Review of ARR for FY 2009-10’ as per the unaudited accounts submitted for FY 2009-10.

As per the sub-regulation 2 (i) of regulation 8 of JERC tariff regulations 2009, the **Commission considers the administration and general expenses of Rs. 3.28 Crores as per the audited accounts as reasonable and approves the same for the true-up of the ARR for FY 2009-10.**



**Table 16: A&G expenses approved by the Commission for true-up of FY 2009-10**

Particulars	Proposed in FY 2009- 10 petition	Approved in TO 2009-10	Actual (unaudited accounts)	Approved (Review)	Petitioner Submission (audited accounts)	Approved (True-up)
<b>A&amp;G Expenses</b>	8.51	7.28	3.18	3.18	3.28	3.28

### **Repair and Maintenance Expenses**

#### **Petitioner’s submission**

The Petitioner has submitted that the Repair and Maintenance Expenses as per the audited accounts of FY 2009-10, which has been included in the Truing Up petition is Rs. 11.57 Crores. The Repair and Maintenance Expenses approved by the Commission in the Review of ARR for FY 2009-10 was Rs. 9.6 Crores. There is an increase of Rs. 1.97 Crores in Repair and Maintenance Expenses in the audited accounts for FY 2009-10 over the figures approved by the Commission in the Review of ARR for FY 2009-10. The increase has been due to adjustments made during audit for difference in classification of certain expenditure between capital expenditure and O&M expenditure.

#### **Commission’s analysis**

**It is observed that the Petitioner has not submitted the detailed break-up of the R&M expenses as required as per the regulatory formats and the Commission directs the petitioner to provide the detailed break-up of the R&M for the next ARR filing.** However, the Commission has approved the claimed R&M expense as the same is considered necessary for maintenance of infrastructure and for ensuring proper Standard of Performance of the integrated utility.

As per the sub-regulation 2 (i) of regulation 8 of JERC tariff regulations 2009, the **Commission considers the repair and maintenance expense of Rs. 11.57 Crores as per the audited accounts as reasonable and approves the same for the true-up of ARR for FY 2009-10.**

**Table 17: R&M expenses approved by the Commission for true-up of FY 2009-10**

Particulars	Proposed in FY 2009- 10 petition	Approved in TO 2009-10	Actual (unaudited accounts)	Approved (Review)	Petitioner Submission (Audited accounts)	Approved (True-up)
<b>R&amp;M Expenses</b>	6.83	6.16	9.6	9.6	11.57	11.57

**Summary of O&M Expenses approved for true-up of ARR for FY 2009-10**

The O&M expenses as submitted by the Petitioner and approved by the Commission for FY 2009-10 are as below:

**Table 18: O&M expenses approved by the Commission for true-up of FY 2009-10**

Particulars	Proposed in FY 2009- 10 petition	Approved in TO 2009-10	Actual (unaudited accounts)	Approved (Review)	Petitioner Submission (Audited accounts)	Approved (True-up)
<b>O&amp;M Expenses</b>	66.84	75.35	60.25	60.25	68.59	66.80

**5.8 GFA and Depreciation**

**Petitioner’s submission**

The Petitioner has submitted that the Depreciation as per the audited accounts of FY 2009-10, which has been included in the Truing Up petition is Rs. 17.91 Crores. The Depreciation approved by the Commission in the Review of ARR for FY 2009-10 was Rs. 0.84 Crores.

The Petitioner has submitted that there is a significant difference in the Depreciation as per the audited accounts of FY 2009-10 as included in the Truing Up petition over the Depreciation approved by the Commission in the ‘Review’. The difference arises because the Commission had disallowed the GFA at the beginning of FY 2009-10 claimed by the petitioner in Review petition for FY 2009-10 on the basis that the petitioner needed to submit audited accounts and the Fixed Asset and Depreciation Registers.

The Petitioner has stated that the Asset and Depreciation registers have now been prepared and duly audited fixed assets’ gross amount, accumulated depreciation and depreciation for the year have been shown in the audited accounts for the year 2009-10.

The Auditor has also noted in his Audit Report as under:

*“Fixed Assets: The Fixed Assets Register has been prepared based on physical verification of Fixed Assets carried out by the Department”.*

The Asset and Depreciation registers have been prepared after following a very comprehensive methodology. A softcopy having more than 2600 pages of the Asset and Depreciation register has been provided along with the petition for the Commission’s reference.

The Petitioner has stated that in view of the Commission’s directives regarding the Fixed Asset and Depreciation Registers been complied with and duly audited accounts prepared, it is requested to kindly allow the above Depreciation.

### **Commission’s analysis**

#### **GFA and Capitalization**

The Commission in the ‘Review’ of FY 2009-10 had disallowed the opening GFA in absence of the audited accounts and Fixed Asset and Depreciation Registers and given a directive to the Petitioner to furnish the same. The analysis of the Commission for ‘Review’ is reproduced below.

#### **Quote**

“The Commission is of the view that in the absence of the Fixed Asset Register, the opening value of assets is driven by assumptions.

As 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 31<sup>st</sup> 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 this case, the Petitioner is unable to provide the actual value of the fixed assets. The Commission had directed in Tariff Order FY 2009-10 to provide the physical inventory of assets and construct asset /depreciation registers and file the same along with next tariff petition but the same has not been submitted till date by the Petitioner and in the absence of the same, the Commission is unable to provide any depreciation on the opening Gross Fixed Assets, as claimed by the Petitioner.”

## Unquote

However, this time the Petitioner has furnished the audited accounts and the fixed asset and depreciation register for FY 2009-10. The Commission has also taken note of the fact that the Petitioner has prepared the Fixed Asset Register based on physical verification of Fixed Assets carried out by the Department.

The Commission has made note of the submissions and allows the opening GFA from FY 2009-10 to be considered for the purpose of ARR computation.

The opening GFA of Rs 404.80 Crores is admitted for FY 2009-10. The same is in accordance with the Fixed Asset Register and the audited accounts furnished by the petitioner. The addition in GFA of Rs. 18.69 Crores is considered admissible for the purpose of trueing up of FY 2009-10 and the same is as per the audited accounts for the year.

**Table 19: Gross Fixed Assets approved by the Commission for true-up of FY 2009-10**

Particulars	Proposed in FY 2009- 10 petition	Approved in TO 2009-10	Actual (unaudited accounts)	Approved (Review)	Petitioner Submission (Audited accounts)	Approved (True-up)
Opening Value of Assets at the beginning of the year (Rs.Cr)	386.30	-	420.33	-	404.80	404.80
Additions during the year(Rs.Cr)	25.96	25.96	31.88	31.88	18.69	18.69
<b>Gross Fixed Assets at the end of year(Rs.Cr)</b>	<b>412.26</b>	<b>25.96</b>	<b>452.21</b>	<b>31.88</b>	<b>423.49</b>	<b>423.49</b>

## Depreciation

As per Regulation 26 of JERC Tariff Regulations, depreciation for the assets shall be calculated annually at the rates specified by CERC from time to time. The same have been applied on the different asset categories. The Commission on carrying out its analysis had raised a query to the Petitioner, on the depreciation methodology followed by it. The Petitioner in its response vide email dated April 8' 2013 responded as –

### Quote

*“Depreciation on the opening block of assets is not a direct function of the depreciation rate to be applied on the opening block amount. Depreciation has not been calculated based on the opening gross block amount directly.*

*It may be noted that PED now has a full-fledged Asset register in place and gross block, depreciation, accumulated depreciation and net block numbers are available for each asset in the Asset register. Because the asset wise details are available, those assets for which 90% value has been depreciated – have been excluded from further depreciation as per CERC policy. The balance 10% of these assets continues to be reflected in the opening block. While calculating the Depreciation, these assets are removed. Hence the depreciation worked out and claimed by PED is less than the amount derived based on direct application of the depreciation rate on the opening block amount.*

*This is the correct manner in which depreciation is to be calculated as per CERC requirements. The above procedure is adopted for the years 2009-10, 10-11 &11-12.” Unquote*

Further, in a follow-up mail, the Petitioner also clarified as –

“It is confirmed that the depreciation for additions during the year has been calculated on prorata basis. The same procedure has been adopted for 12-13 &13-14 Projections”

The Commission is satisfied with the response of the Petitioner, and has accordingly considered the submission of the Petitioner. The Commission has not applied the applicable CERC rates on the average assets in place, since some of these assets have already attained the 90% limit. In the absence of the complete break-up of the assets which have attained the 90% depreciation limit, the Commission has considered the submission of the Petitioner as per the audited accounts as reasonable and approves the same for FY 2009-10.

The table below captures the depreciation as submitted by the Petitioner and that approved by the Commission for FY 2009-10.

**Table 20: Depreciation approved by the Commission for true-up of FY 2009-10**

Particulars	Proposed in FY 2009- 10 petition	Approved in TO 2009-10	Actual (unaudited accounts)	Approved (Review)	Petitioner Submission (Audited accounts)	Approved (True-up)
<b>Depreciation</b>	21.08	0.62	19.87	0.84	17.91	17.91

**The Commission considers the depreciation of Rs. 17.91 Crores as reasonable and approves the same for the true-up of ARR for FY 2009-10.**

## 5.9 Interest and Finance Charges

### Petitioner's submission

The Petitioner has submitted that the Interest and Finance Charges as per the audited accounts for FY 2009-10 is Rs. 1.30 Crores against the Commission approved figure of Rs 1.38 Crores in the Review of ARR for FY 2009-10. The Petitioner has submitted that there has been a slight change in the Interest and Finance Charges in the audited accounts from the figure claimed in the Review petition for FY 2009-10.

### Commission's analysis

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

#### Quote

“

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

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

#### Quote

##### **“23. Debt-Equity Ratio**

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

- 2) *Provided that the Commission may, in appropriate cases, consider equity higher than 30% for the purpose of determination of tariff, where the generating company or the licensee is able to establish to the satisfaction of the Commission that deployment of equity more than 30% is in the interest of the general public: .*
- 3) *(2) The debt and equity amounts arrived at in accordance with sub-regulation (1) above shall be used for all purposes including for determining interest on loan, return on equity, Advance against Depreciation and Foreign Exchange Rate Variation.*
- 4) *Provided that in the case of an Integrated Utility, till the time it remains Integrated Utility, it shall be entitled to return on its capital base as per Schedule VI to the repealed Electricity (Supply) Act, 1948.”Unquote*

**The above stated regulations mandate the debt equity ratio for assets deployed, post the commencement of the JERC Tariff Regulations. It is pertinent to mention here that the first application filed by the petitioner before this Commission under the above stated regulation was for FY 2009-10, wherein the Commission had determined tariff as per the JERC Tariff Regulations 2009.**

The Commission has considered the normative interest on the assets created during the year FY 2009-10 onwards excluding the opening capital base as per the audited accounts for the year and has accordingly allowed interest on normative loan at Rs 0.80 Crores for FY 2009-10.

**The normative interest under the JERC Tariff Regulations has therefore been considered on the assets created during the year FY 2009-10 onwards excluding the opening capital base for FY 2009-10.** The Commission has considered an addition of Rs. 18.69 Crores in the Gross Fixed Assets for FY 2009-10 which are considered funded through normative debt to the tune of 70%. The Commission has considered the capitalization of assets as per the audited accounts for the year. The Commission for the purpose of funding of the capitalization has considered the normative debt equity ratio of 70:30, whereby it has considered the addition in normative loan at Rs 13.08 Crores for FY 2009-10. The calculation of the interest on the normative loan is given below.

**Table 21: Normative interest on loan approved by the Commission for true-up of FY 2009-10**

Sr. No.	Particulars	Approved (FY 2009-10)
1	Opening Normative Loan	-
2	Add: Normative Loan during the year	13.08
3	Less: Normative Repayment	-
4	Closing Normative Loan	13.08
5	Average Normative Loan	<b>6.54</b>
6	Rate of Interest (@SBAR rate)	12.25%
<b>7</b>	<b>Interest on Normative Loan</b>	<b>0.80</b>

The Commission has also analyzed the nature of interest and finance charges as submitted by the Petitioner, and considering the reasonableness of the expenditure incurred by EDP, it allows Rs. 1.30 Crores for FY 2009-10. The Commission has observed from the audited accounts that the petitioner had not taken any loan to meet the capital expenditure for FY 2009-10. The Commission has considered the normative interest on the actual capital expenditure incurred during FY 2009-10 and has therefore considered it as an allowable expense as a special case for the purpose of truing up of ARR of FY 2009-10. **The Commission therefore considers Rs. 2.10 Crores on account of Interest and Finance Charges as reasonable and approves the same for true-up of ARR for FY 2009-10.**

**Table 22: Interest and Finance Charges approved by the Commission for true-up of FY 2009-10**

Particulars	Proposed in FY 2009-10 petition	Approved in TO 2009-10	Actual (unaudited accounts)	Approved (Review)	Petitioner Submission (Audited accounts)	Approved (True-up)
Interest & Finance Charges (Rs.Cr)	23.59	NIL	1.38	1.38	1.30	2.10

## 5.10 Interest on Working Capital

### Petitioner's submission

The Petitioner has submitted interest on working capital as per JERC Tariff Regulations. The Petitioner has submitted on the basis of the audited accounts for FY 2009-10, the working capital comes to Rs. 54.72 Crores. Further, the Petitioner has submitted that when the Review petition was filed by the petitioner before the Commission, the Working Capital calculated on



the basis of unaudited accounts for FY 2009-10 and as per Regulation 29 of JERC Tariff Regulations came to Rs 53.97 Crores.

The Interest on Working Capital approved by the Commission in the Review of ARR for FY 2009-10 was Nil. The Interest on Working Capital has been calculated in line with Regulation 29 of the JERC Tariff Regulations. The SBI PLR on 1<sup>st</sup> April 2009 has been considered at 12.25%. The Interest on Working Capital calculated on the basis of the audited accounts of FY 2009-10 using 12.25 % interest rate which is included in the Truing Up petition is Rs. 6.70 Crores.

### **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 on the basis of the above-stipulated norms as per the values approved in the respective sections of the true-up for FY 2009-10. The Commission has considered the amount collected from the consumers as security deposit available with the Petitioner. Further, it is noted that the Petitioner is not paying any interest on the security deposit to the consumers. In accordance with *Clause 47(4) of the Electricity Act 2003, the distribution licensees are required to pay interest on security deposit collected from the consumers.* The security deposit available with the Petitioner has been treated as available to meet the working capital required for FY 2009-10.

The Commission has observed that the Department has deposited the consumer security deposit under a non-interest bearing head with the Government, following the government system applicable to EDP. Further, the Department has submitted that it does not gain any interest from this amount.

As per the notes to the accounts submitted –

**Quote**

*“As per the guideline issued by the JERC, PED needs to provide interest on the deposits taken from the consumers. However, PED has not made any provision for the interest in the accounts on the deposit amount because the total amount outstanding on account of security deposits is not ascertainable. The department is in the process of reconciling the deposit account to ascertain the liability toward the security deposit and the provision will be made once the liability is determined.”* **Unquote**

The Commission’s regulation provides for collection of security deposit equivalent to 2 month/3 month average billing depending on the consumer category.

The Commission has, therefore, considered the receivables equivalent to two months billing, as security deposit available with the Petitioner as a source to meet working capital requirements and has deducted this estimated amount from the working capital considered for calculation of the interest on working capital as part of the true-up for FY 2009-10.

The Commission clarifies that the SBI PLR rate has now been substituted as SBI Advance Rate. The Commission has considered the SBI advance rate of 12.25% as on 1<sup>st</sup> April 2009 for true-up of ARR of FY 2009-10.

The table below captures the submission of the Petitioner and that approved by the Commission.

**Table 23: Interest on Working Capital approved by the Commission for true-up of FY 2009-10**

Particulars (Rs Cr)	Proposed in FY 2009- 10 petition	Approved in TO 2009-10	Actual (unaudited accounts)	Approved (Review)	Petitioner Submission (Audited accounts)	Approved (True-up)
Power Purchase Cost for one month		48.07	49.01	45.52	49.01	43.67
Employee Cost for one month		5.16	3.96	3.96	4.48	4.33

A&G Expenses for one month		0.51	0.25	0.27	0.27	0.27
R&M Expenses for one month		0.61	0.76	0.80	0.96	0.96
<b>Total Working Capital for one month</b>		<b>54.35</b>	<b>53.97</b>	<b>50.54</b>	<b>54.72</b>	<b>49.24</b>
Consumer Security Deposit amount with EDP)				93.08	-	93.08
<b>Total Working Capital considered for one month</b>	<b>137.53</b>	<b>54.35</b>	<b>53.97</b>	<b>(42.54)</b>	<b>54.72</b>	<b>(43.84)</b>
<b>SBI PLR Rate</b>	<b>12.25%</b>	<b>12.25%</b>	<b>12.25%</b>	<b>12.25%</b>	<b>12.25%</b>	<b>12.25%</b>
<b>Interest on Working Capital</b>	<b>16.85</b>	<b>6.66</b>	<b>6.61</b>	<b>NIL</b>	<b>6.70</b>	<b>NIL</b>

The Commission accordingly approves the interest on working capital as NIL against the Rs. 6.70 Crores claimed by the Petitioner for the true-up of ARR for FY 2009-10.

Since no interest on the security deposit has been paid for, it has not been considered for in the true-up of ARR for FY 2009-10.

#### 5.11 Provision for bad and doubtful debts

##### Petitioner's submission

The Petitioner has submitted that Provision for Bad Debt has not been considered in the Truing Up petition as no such provisions have been made in the audited accounts for FY 2009-10. It was also not considered in the Review petition for ARR of FY 2009-10.

##### 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.	<u>Provision made for debts in ARR</u>	

JERC tariff regulation allows a provision for bad and doubtful debts up to 1% of receivables in the revenue requirement. It is seen that the licensee has not actually written off any bad and doubtful debts for FY 2009-10 as per the audited accounts submitted alongside. The Commission therefore has not considered any bad and doubtful debts for true-up of FY 2009-10.

**Table 24: Provision for bad debts approved by the Commission for true-up of FY 2009-10**

Particulars (Rs Cr)	Proposed in FY 2009- 10 petition	Approved in TO 2009-10	Actual (unaudited accounts)	Approved (Review)	Petitioner Submission (Audited accounts)	Approved (True-up)
<b>Provision for bad and doubtful debts</b>	1.42	0.55	Not Claimed	NIL	NIL	NIL

**The Commission, therefore, has not considered any expenses on account of bad & doubtful debt for true-up of ARR for FY 2009-10.**

## 5.12 Return on Capital Base

### Petitioner's Submission

The Petitioner has submitted that the Return on Net Fixed Assets approved by the Commission in the Review of ARR for FY 2009-10 was Nil. The Return on Net Fixed Assets calculated on the basis of audited accounts for FY 2009-10 is Rs 8.38 Crores. For this purpose, a rate of 3 % return on Net Fixed Assets at the beginning of the FY 2009-10 had been considered; however this was not approved by the Commission.

There is a variation in the Return on Net Fixed Assets as claimed by the petitioner in this Trueing Up petition from the figure approved by the Commission in the Review of ARR for FY 2009-10 as the Commission had disallowed the opening GFA.

The Petitioner has submitted that the Department has prepared both Fixed Asset and Depreciation registers and got the accounts audited for FY 2009-10 which include the audited

figures of fixed assets. The Net Fixed Assets at the beginning of FY 2009-10 and the Return @ 3 % of the Net Fixed Assets as per the audited accounts of FY 2009-10 are tabulated below:

Particulars (Rs. Cr)	Claimed by Petitioner in the Truing Up petition
Gross block at the beginning of the year	404.79
Opening CWIP	66.90
LESS Accumulated Depreciation	174.28
LESS Accumulated Consumer Contribution	1.97
LESS Opening Debt	16.08
Net Fixed Assets at beginning of year	279.37
<b>Return @ 3 % of NFA</b>	<b>8.38</b>

The Petitioner requests the Commission to allow the Return on Net Fixed Assets at Rs 8.38 Crores for FY 2009-10.

### Commission's Analysis

The Commission in the 'Review' of FY 2009-10 had disallowed the opening GFA in absence of the audited accounts and Fixed Asset and Depreciation Registers and given a directive to the Petitioner to furnish the same. The relevant extract from the last year's tariff order is reproduced below.

### Quote

*ED Puducherry is an integrated utility in its present form as defined in Regulation 2(9) of the JERC Tariff Regulations. Accordingly, it is entitled to return on capital base, as per Regulation 23 of the said regulations. The basic requirement for consideration of either return on capital base or return on equity is the audited accounts including the statement of assets and depreciation register besides other data. ED Puducherry has not provided the required data and details to the Commission.*

*The Commission, as also explained in the section on 'GFA and Depreciation', has only allowed additional capitalization for the year and has disallowed opening GFA till such time the asset and depreciation registers are prepared and got audited. Since the Commission has not considered the opening GFA, return @ 3% of Net Fixed Assets at the beginning of the year*

cannot be allowed and may be considered at the time of true-up subject to the provisions of the regulations.

**Unquote**

However, this time the Petitioner has furnished the audited accounts and the fixed asset and register for FY 2009-10. The Commission has also taken note of the fact that the Petitioner has prepared the Fixed Asset Register based on physical verification of Fixed Assets carried out by the Department. In view of the submissions made by the Petitioner, the Commission considers it reasonable to allow the opening GFA from FY 2009-10 and allow return on capital base @3% of the Net Fixed Assets on the opening GFA. The calculation of the return on capital base approved is as below.

**Table 25: Return on Capital calculation by the Commission for true-up of FY 2009-10**

Sr. No.	Particulars	Approved True-up FY 2009-10
1	Gross block at beginning of the Year/Opening GFA	404.80
2	Opening CWIP	66.90
3	Less accumulated depreciation	174.28
4	Less accumulated consumer contribution	1.97
5	Less opening debt	16.08
6	Net fixed assets at beginning of the year	279.37
7	<b>Reasonable return @3% of NFA</b>	<b>8.38</b>

**Table 26: Return on Capital Base approved by the Commission for true-up of FY 2009-10**

Particulars	Proposed in FY 2009- 10 petition *	Approved in TO 09-10	Actual (unaudited accounts)	Approved (Review)	Petitioner Submission (Audited accounts)	Approved (True-up)
<b>Return on Capital Base</b>	31.53	NIL	9.98	NIL	8.38	8.38

\* Return on equity was claimed in the petition for FY 2009-10

**The Commission considers the Return on Capital Base of Rs. 8.38 Crores as reasonable and approves the same for the purpose of true-up of FY 2009-10.**

### 5.13 Revenue from outside sales/UI sales

#### Petitioner's submission

The Petitioner has submitted that the Revenue from Outside Sales/ UI Sales approved by the Commission in the Review of ARR for FY 2009-10 was Rs 54.85 Crores. The Revenue from Outside Sales/ UI Sales as per audited accounts for FY 2009-10 is Rs 54.87 Crores for sale of 155.29 MU. There is only a minor change in the Revenue from Outside Sales / UI Sales figures in the audited accounts for FY 2009-10 from the unaudited figures included in the Review petition.

Further, the Petitioner has submitted that this income should be treated under the head of 'Non Tariff Income' and should be reduced from the gross ARR to arrive at the net ARR.

#### Commission's analysis

The Commission has considered outside sales to be 155.29 MU as explained in para 5.5 and approves the revenue from outside/UI sales at Rs 54.87 Crores as per the audited accounts to be reasonable to be treated as part of the 'Non tariff Income'.

The 'revenue from outside sales' as submitted by the Petitioner and as approved by the Commission, as part of the true-up for FY 2009-10 is tabulated below.

**Table 27: Revenue from outside sales approved by the Commission for true-up of FY 2009-10**

Particulars	Proposed in FY 2009- 10 petition	Approved in TO 2009-10	Actual (unaudited accounts)	Approved (Review)	Petitioner Submission (Audited accounts)	Approved (True-up)
Revenue from UI sales	-	49.5	54.85	54.85	54.87	54.87

### 5.14 Non-Tariff Income

#### Petitioner's submission

The non-tariff income comprises of metering, late payment charges, interest on staff loans, reconnection fee, miscellaneous revenue etc. In the Tariff Order FY 2009-10, the Commission had approved an amount of Rs 1.77 Crores as non tariff income against the claim of Rs 3.25 Crores by EDP. The actual non tariff income for the year is Rs 4.64 Crores consisting of reactive energy charges, short term open access charges, CTU charges etc. which come under the broad head of 'non tariff income'.

The Non-Tariff Income approved by the Commission in the Review of ARR for FY 2009-10 was Rs. 4.64 Crores. There is no variation in Non-Tariff Income as per the audited accounts for FY 2009-10 from the figures approved by the Commission in the Review of ARR for FY 2009-10.

The 'Revenue from UI sales' amounting to Rs 54.87 Crores has also been considered under the broad head of non-tariff income and EDP has requested the Commission to approve the total sum of Rs 59.51 Crores as non- tariff income.

**Commission’s analysis**

The revenue from outside/UI sales approved by the Commission as explained earlier is Rs 54.87 Crores and considering the actual non tariff income of Rs 4.64 Crores as reasonable, the total non tariff income approved for FY 2009-10 is Rs 59.51 Crores.

The non tariff income as submitted by the Petitioner and as approved by the Commission, as part of the true-up for FY 2009-10 is tabulated below:

**Table 28: Non tariff income approved by the Commission for true-up of FY 2009-10**

Particulars	Proposed in FY 2009- 10 petition	Approved TO 2009-10	Actual (unaudited accounts)	Approved (Review)	Petitioner Submission (Audited accounts)	Approved (True-up)
<b>Non Tariff Income</b>	3.25	1.77	59.49	59.49	59.51	59.51

As per the sub-regulation 2 (i) of regulation 8 of JERC tariff regulations 2009, **Commission has considered the final figure of non-tariff income of Rs. 59.51 Crores as per the audited accounts as reasonable and approves the same for true up of ARR for FY 2009-10.**

**5.15 Aggregate Revenue Requirement (ARR) for FY 2009-10**

**Petitioner’s submission**

Based on the above submissions, the Petitioner requests the Commission to approve the net revenue requirement at Rs. 631.44 Crores as per audited accounts against the claimed amount of Rs 626.7 Crores as per the provisional accounts in the review petition for FY 2009-10.



### Commission's analysis

The Commission has considered and approved the true-up of ARR for FY 2009-10 based on the items of expenditure discussed in the preceding sections and the same has been summarized in the table below. The Commission approves the ARR at Rs. 614.60 Crores for FY 2009-10.

**Table 29: Aggregate revenue requirement approved by the Commission for true-up of FY 2009-10**

Particulars (Rs Cr)	Proposed in FY 2009- 10 petition	Approved in TO 2009-10	Actual (unaudited accounts)	Approved (Review)	Petitioner Submission (Audited accounts)	Approved (True-up)
Cost of power purchase	614.1	576.8	588.1	577.3	588.07	578.92
Employee Costs	66.8	61.9	47.5	47.47	53.74	51.95
A&G expenses	8.5	7.3	3.2	3.18	3.28	3.28
R&M Expenses	6.8	6.2	9.6	9.6	11.57	11.57
Depreciation	21.1	0.6	19.9	0.84	17.91	17.91
Interest & Finance Charges	23.6	-	1.38	1.38	1.30	2.10
Interest on Working Capital	16.9	6.7	6.6	0.00	6.70	0.00
Provision for bad debts	1.4	0.6	-	NIL	NIL	NIL
Return @ 3% of NFA	31.5	-	10	0	8.38	8.38
Amortisation of regulatory asset proposed for previous years	-	-	-	-	-	-
<b>Total</b>	<b>790.7</b>	<b>660.0</b>	<b>686.2</b>	<b>639.78</b>	<b>690.95</b>	<b>674.11</b>
Less Non tariff Income	3.3	1.8	59.5	59.49	59.51	59.51
<b>Aggregate revenue requirement</b>	<b>787.5</b>	<b>658.2</b>	<b>626.7</b>	<b>580.3</b>	<b>631.44</b>	<b>614.60</b>

### 5.16 Revenue from tariff for FY 2009-10

#### Petitioner's submission

The total revenue from charges for FY 2009-10 based on the audited accounts is Rs 558.49 Crores.

#### Commission's analysis

As per the sub-regulation 2 (i) of regulation 8 of JERC tariff regulations 2009, the **Commission has considered the figures of revenue of Rs. 558.49 Crores from the sale of power within the state as per audited accounts as reasonable and approves the same for trueing up of FY 2009-10.**

**Table 30: Revenue from tariff approved by the Commission for true-up of FY 2009-10**

Particulars	Proposed in FY 2009- 10 petition	Approved in TO 2009-10	Actual (unaudited accounts)	Approved (Review)	Petitioner Submission (Audited accounts)	Approved (True-up)
Revenue from tariff	569.7	585.4	558.5	558.5	558.49	558.49

The Commission notes that out of the total revenue, Rs 0.16 Crores is the tariff subsidy on the sale of power received from the Government of Puducherry.

### 5.17 Revenue Gap for FY 2009-10

The revenue gap approved as part of the true-up exercise for FY 2009-10 is Rs 56.11 Crores (excluding carrying cost) and the table below captures the submission by the Petitioner and approval of the revenue gap by the Commission.

**Table 31: Revenue Gap approved by the Commission for true-up of FY 2009-10**

Particulars	Proposed in FY 2009- 10 petition	Approved in TO 2009-10	Actual (unaudited accounts)	Approved (Review)	Petitioner Submission (Audited accounts)	Approved (True-up)
Aggregate Revenue Requirement	787.5	658.2	626.7	580.3	631.44	614.60
Revenue from tariff	569.7	585.4	558.5	558.5	558.49	558.49
Revenue Gap/(Surplus)	217.7	72.9	68.3	21.8	72.95	56.11
Carrying Cost	-	-	-	-	-	3.44
Cumulative Gap	<b>217.7</b>	<b>72.9</b>	<b>68.3</b>	<b>21.8</b>	<b>72.95</b>	<b>59.54</b>

The revenue gap for FY 2009-10 works out at Rs 56.11 Crores; including the carrying cost the total gap for FY 2009-10 works out at Rs 59.54 Crores.

The Commission considers the revenue gap of Rs 59.54 Crores as reasonable and approves the same for the true-up of ARR for FY 2009-10. This revenue gap is carried over to the next year and has accordingly been considered in the true-up of ARR for FY 2010-11. The Commission has also considered the carrying cost on this revenue gap to be allowed as part of the true-up exercise.

## 6. True-up of ARR for FY 2010-11

### 6.1 Background

The Petitioner did not file any petition for FY 2010-11. The Petitioner in the petition for FY 2011-12 had prayed to the Commission to provisionally approve the consolidated gap upto the end of FY 2010-11 based on the provisional accounts prepared by EDP, subject to final approval on the basis of true-up based on the audited accounts. The petition for FY 2012-13 also had a similar submission. The Commission in its tariff order for FY 2012-13 dated June 12' 2012 took note of the plea of the Petitioner and considered the approval of the revenue gap for FY 2010-11 based on the provisional accounts for the year.

The Petitioner, in their true-up petition for FY 2010-11 has submitted the details of expenditure and revenue for FY 2010-11 based on the audited accounts for FY 2010-11. The Petitioner has provided the comparison of actual revenue and expenditure against each head with the revenue and expenditure approved by the Commission.

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

The following sections discuss each component of the aggregate revenue requirement and the revenue gap approved for the year.

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

The true-up of FY 2010-11 has been carried out as per the provisions of regulation 8 of JERC Tariff Regulations, 2009. As per the regulation 8 of JERC Tariff Regulations, 2009:

#### **Quote**

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

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

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

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

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

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

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

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

### **Unquote**

The Commission has reviewed the variations between approvals and actual of sale of electricity, power purchase expenses, other income and expenditure for FY 2010-11 as per the audited accounts submitted by the petitioner and has permitted necessary adjustments in cases where variations are for reasonable and justifiable reasons.

## **6.3 Consumers, Connected Load and Energy Sales**

### **Petitioner's Submission**

The Petitioner as per the regulatory formats submitted alongwith the petition has submitted the sales for the year as 2209.3 MU. There is no variation in the sales figures as per the audited accounts and that submitted last time based on the unaudited figures. The sales for the unmetered categories – One Hut One Bulb (OHOB) and the agriculture category have been 10.2 MU and 76.7 MU respectively.

The Petitioner has submitted the total no. of consumers for the year as 377,752.

## **Commission's Analysis**

The Commission observes that there is no variation in the figures of energy sales as per the true-up submission from the submission made last time. The Commission reiterates the approach followed by it in the last tariff order for the approval of the sales to the metered and unmetered category. The relevant extract from the last year tariff order is reproduced below.

### **Quote**

“The Commission has considered sales of 2182.48 MU for FY 2010-11 against the 2209.3 MU submitted by the Petitioner based on provisional accounts subject to final approval at the time of true-up.

For the unmetered categories - OHOB and the agriculture consumers, the Commission has followed the methodology as discussed in para 5.3 of this order. In the case of OHOB consumers, the Commission has considered the consumption norm of 175.2 units/consumer/year. Based on the provisional actual numbers of the consumers for FY 2010-11, the Commission approves the sales to this category at 6.83 MU against the claim of 10.2 MU by EDP.

In the case of agriculture consumers, the Commission as also discussed in para 5.3 has considered it appropriate to take the consumption norm of 896.08 units/HP/annum for FY 2010-11 as per the TNERC tariff order dated 30<sup>th</sup> March 2012. This multiplied with the provisional connected load of 59538 HP gives the total consumption for this category at 53.35 MU.

Rest of the sales for the metered categories, have been considered to be reasonable as per the actual submitted by EDP and hence approved.”

### **Unquote**

**The Commission, therefore, approves sales of 2182.48 MUs for true-up of ARR for FY 2010-11 against the claim of 2209.3 MU by the Petitioner.**

**The number of consumers and connected load as submitted by the Petitioner are considered to be reasonable and approved for the true-up of FY 2010-11.**

**Table 32: Energy Sales approved by the Commission for FY 2010-11 (MUs)**

Consumer Category	FY 2010-11			
	Actual (unaudited accounts)	Approved in TO dated June 12' 2012	Petitioner Submission	Approved (True-up)
Domestic	518.5	515.13	518.5	515.13
Commercial	156.3	156.30	156.3	156.30
Agriculture	76.7	53.35	76.7	53.35
Street Lighting	22.1	22.10	22.1	22.10
LT Industrial	149.7	149.70	149.7	149.70
Temporary Supply	7.9	7.90	7.9	7.90
HT Industrial	1005.7	1005.70	1005.7	1005.70
HT state and Central Govt Establishments	34.9	34.90	34.9	34.90
HT Industrial Extra High Tension	237.4	237.40	237.4	237.40
<b>TOTAL</b>	<b>2209.3</b>	<b>2182.48</b>	<b>2209.3</b>	<b>2182.48</b>

## 6.4 Energy Losses

### Petitioner's Submission

The Petitioner has submitted the T&D loss of 13.57% for FY 2010-11 based on actual, same as that submitted last time based on provisional accounts.

### Commission's Analysis

The Commission in its tariff order for FY 2009-10 had allowed T&D losses of 14% for FY 2009-10 based on the estimates submitted by the Petitioner. The Commission had also issued directions to further reduce the T&D losses, conduct an energy audit and take steps to reduce the technical losses and control pilferage of energy. However, adequate steps in this direction have not been undertaken resulting in higher T&D losses. The Petitioner as part of the tariff petition for FY 2012-13 had submitted T&D losses of 13.57% based on the unaudited accounts for FY 2010-11. However, the Commission had considered the T&D loss level of 13.50%, a reduction of 0.5% compared to the approved value of FY 2009-10 as reasonable and approved the same for FY 2010-11 in its tariff order dated June 12' 2012.

The Commission observes that the energy availability and requirement figures at the periphery have remained unchanged in the submission for true-up from the figures submitted last time;

the Commission has retained the T&D loss figure as approved in the last tariff order dated June 12' 2012, for the true-up of FY 2010-11.

**Table 33: Energy losses approved by the Commission for FY 2010-11**

Particulars	FY 2010-11			
	Actual (unaudited accounts)	Approved in TO dated June 12' 2012	Petitioner Submission	Approved (True-up)
<b>Energy Losses</b>	13.57%	13.5%	13.57%	13.5%

**The Commission, therefore, has retained the T&D loss of 13.5% as approved in its order dated June 12' 2012 as reasonable and approves the same for true up of FY 2010-11.**

## 6.5 Energy Balance

### Petitioner's Submission

The Petitioner has kept the figures of the energy requirement at the periphery and the energy availability at the periphery unchanged at 2818 MU. The Petitioner has submitted the gross power purchase of 2967.4 MU and external losses of 149.2 MU, to arrive at the energy availability at the periphery of 2818.2 MU for FY 2010-11.

### Commission's Analysis

Based on approved sales of 2182.48 MU and approved T&D losses level of 13.5%, net energy requirement of 2523.10 MU has been considered for sale to consumers in the territory.

The actual sales to common pool consumers/UI as submitted by the Petitioner have been considered to be reasonable and allowed at 262.40 MU. This results in the energy requirement at the periphery of 2785.50 MU.

The gross energy purchase considered allowed by the Commission is 2932.97 MU, considering the external losses of 147.47 MU to be reasonable.

**Table 34: Energy Balance approved by the Commission for FY 2010-11**

Particulars	FY 2010-11			
	Actual (unaudited accounts)	Approved in TO dated June 12' 2012	Petitioner Submission	Approved (True-up)
<b>ENERGY REQUIREMENT</b>				
Energy sales in the UT	2,209.29	2182.48	2,209.29	2182.48
Distribution losses (%age)	13.57%	13.50%	13.57%	13.50%
Energy required for the Territory (MU)	2556.16	2523.10	2556.16	2523.10
Add: Sales to common pool consumers/ UI	262.4	262.40	262.4	262.40
<b>Energy Requirement @ periphery</b>	<b>2818.56</b>	<b>2785.50</b>	<b>2818.56</b>	<b>2785.50</b>
<b>ENERGY AVAILABILITY</b>				
Gross Power Purchase	2961.6	2928.90	2967.4	2932.97
External losses (MU)	143.4	143.40	149.2	147.47
<b>Net Energy Availability @ periphery</b>	<b>2818.2</b>	<b>2785.50</b>	<b>2818.2</b>	<b>2785.50</b>

## 6.6 Power Purchase Quantum and Cost

### Petitioner's Submission

The Petitioner has submitted that the cost of power purchase comes to Rs. 728.08 Crores as per the audited accounts of FY 2010-11. There is a difference of Rs. 11.12 Crores in the Cost of Power Purchase from the figure approved by the Commission in its order dated 12<sup>th</sup> June 2012 for FY 2010-11. This is because the Commission had disallowed from the petitioner's claims the Cost of Power Purchase to the extent of Rs. 11.12 Crores. However, the Cost of Power Purchase has remained unaltered in both the audited and unaudited accounts for FY 2010-11 and the audited figures are based on actual bills raised by the generating companies and paid by EDP.

### Commission's Analysis

As discussed in the section on energy balance, the power purchase quantum approved is 2932.97 MU restricting the purchase corresponding to the sales to consumers within the territory and the outside/UI sales as per actual. Considering the merit order dispatch principles, the variable charges corresponding to the costliest source of power purchase have not been considered, thus, approving the power purchase cost at Rs 721.50 Crores. The additional/penal UI charges corresponding to overdrawal beyond the allowed frequency have not been considered. The penal charges disallowed have been considered at Rs 0.42 Crores,



based on the SRPC summary submitted by the Petitioner as per its latest submission to the Commission on the queries raised during the technical validation session.

The Commission in the review for FY 2010-11 had considered partial availability from PPCL as per merit order principles; however considering the Petitioner's submission that PPCL be treated as must run as it is an indispensable source for supply to Karaikal region, the Commission has worked the calculation this time keeping this in mind. Only the variable charges have been disallowed, allowing full recovery of the fixed charges and other charges.

**Table 35: Power Purchase Quantum and Cost approved by the Commission for FY 2010-11**

Source	Purchase (MU)	VC (Rs/ Unit)	Fixed Charges (Rs Cr)	VC (Rs Cr)	Others (Rs Cr)	Total (Rs Cr)	(Rs/KWh)
NPC Madras APS	30.9	1.79	-	5.5	0.7	6.2	2.01
NPC Kaiga APS Stage I	121.8	2.8	-	34.8	5.1	39.6	3.25
KSEB	31.8	3.36		11.6	-	11.6	3.65
NTPC Ramagundam STPS Stage III	175.4	1.1	13.7	19.3	12.2	45.2	2.58
NTPC Talcher STPS Stage II	510.5	1.11	35.2	56.9	35.3	127.4	2.50
NLC TS II Stage I&II	650.9	1.21	22.3	78.8	13.0	114.1	1.75
NTPC Ramagundam STPS Stage I & II	659.7	1.21	19.6	79.6	32.8	132	2.00
NLC TS I Expn	113.6	1.52	14.5	17.2	0.7	32.4	2.85
PPCL	182.9	1.72		21.39	24.5	55.9	3.06
NTPC-ER*	20.37	1.79	3	3.65	4.57	11.22	5.22
TNEB (Pondy)	91.0	1.91		16.0	-	16.0	1.76
TNEB (Karaikal)	324.9	1.91		62.2	-	62.2	1.91
UI	19.2	0.7		1.3		1.3	0.68
PGCIL						61.6	
<b>Total</b>	<b>2932.97</b>		<b>108.30</b>	<b>417.95</b>	<b>128.87</b>	<b>716.72</b>	
Add: Additional payment due to arrears/credit/debit notes						17.5	
Less: Rebate						12.3	
<b>Power Purchase Cost</b>						<b>721.92</b>	
Less: Additional/Penal UI Charges						0.42	
<b>Net Power Purchase Cost</b>						<b>721.50</b>	

*\*Partial purchase due to merit order*

**Table 36: Power Purchase Quantum and Cost approved by the Commission for FY 2010-11**

Particulars	FY 2010-11			
	Actual (unaudited accounts)	Approved in TO dated June 12' 2012	Petitioner Submission	Approved (True-up)
<b>Power Purchase Quantum (MU)</b>	2961.6	2928.90	2967.4	2932.97
<b>Power Purchase Cost (Rs Cr)</b>	727.30	716.96	728.08	721.50

## 6.7 Operation and Maintenance Expenses

Operation and Maintenance (O&M) expenses primarily comprise of the following three components:

- Employee cost,
- Repairs & Maintenance expenses, and
- Administrative and General Expenses.

Each has been discussed separately as shown below:

### Employee Cost

#### **Petitioner's Submission**

The Petitioner has claimed employee expenses of Rs 55.44 Crores as per the audited accounts of FY 2010-11. The Petitioner had claimed an amount of Rs. 49.88 Crores as per the unaudited accounts, last time. The Petitioner has submitted that the increase in Employee Cost in the Truing Up for FY 2010-11 by Rs. 5.56 Crores is due to the reduced capitalisation of Salary Costs in the audited accounts by Rs. 5.56 Crores; all other components of the employee cost remaining unaltered. The increase has been due to adjustments made during audit for difference in treatment of certain employee cost between capital expenditure and O&M expenditure.

#### **Commission's Analysis**

The Commission had approved employee expenses of Rs. 49.88 Crores in its tariff order dated June 12' 2012 as per the unaudited accounts submitted for FY 2010-11.

As per the sub-regulation 2 (i) of regulation 8 of JERC tariff regulations 2009, **the Commission considers the final figures of employee expenses of Rs 55.44 Crores as per the audited accounts are considered reasonable; however the Commission has deducted the employee expenses corresponding to the non-core activities from this and approves Rs 53.22 Crores for the true-up of ARR for FY 2010-11.**

**Table 37: Employee expenses approved by the Commission for FY 2010-11**

Particulars	FY 2010-11			
	Actual (unaudited accounts)	Approved in TO dated June 12' 2012	Petitioner Submission	Approved (True-up)
Employee expenses(Rs Cr)	49.88	49.88	55.44	53.22

### **Administrative and General Expenses**

#### **Petitioner's Submission**

The Administrative and General Expenses as per the audited accounts of FY 2010-11 is Rs. 3.71 Crores. There is a slight increase in the Administrative and General Expenses as per the audited accounts over the figure approved by the Commission in last year's order as per the provisional accounts of Rs 3.53 Crores.

#### **Commission's Analysis**

The Commission had approved A&G expenses of Rs. 3.53 Crores in its tariff order dated June 12' 2012 as per the provisional accounts submitted for FY 2010-11.

The A&G expenses as per the audited accounts of Rs 3.71 Crores form approximately 0.51% of the total ARR for FY 2010-11 approved by the Commission, which is considered reasonable.

As per the sub-regulation 2 (i) of regulation 8 of JERC tariff regulations 2009, **the Commission has considered the administration and general expenses of Rs. 3.71 Crores as per the audited accounts as reasonable and approves the same for true-up of ARR for FY 2010-11.**

**Table 38: A&G expenses approved by the Commission for FY 2010-11**

Particulars	FY 2010-11			
	Actual (unaudited accounts)	Approved in TO dated June 12' 2012	Petitioner Submission	Approved (True-up)
<b>A&amp;G Expenses (Rs Cr)</b>	3.53	3.53	3.71	3.71

### Repair and Maintenance Expenses

#### **Petitioner's Submission**

The Petitioner has submitted that the Repair and Maintenance Expenses as per the audited accounts which has been included in the Truing Up petition is Rs. 10.74 Crores. The Repair and Maintenance Expenses approved by the Commission in its order dated June 12' 2012 was Rs. 7.95 Crores. There is an increase of Rs. 2.79 Crores in Repair and Maintenance Expenses in the audited accounts for FY 2010-11 over the figures approved by the Commission in the ARR for FY 2010-11. The increase has been due to adjustments made during audit for difference in classification of certain expenditure between capital expenditure and O&M expenditure.

#### **Commission's Analysis**

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

**As per the sub-regulation 2 (i) of regulation 8 of JERC tariff regulations 2009, the Commission has considered the repair and maintenance expense of Rs. 10.74 Crores as per the audited accounts as reasonable and approves the same for true-up of ARR for FY 2010-11.**

**Table 39: R&M expenses approved by the Commission for FY 2010-11**

Particulars	FY 2010-11			
	Actual (unaudited accounts)	Approved in TO dated June 12' 2012	Petitioner Submission	Approved (True-up)
<b>R&amp;M Expenses (Rs Cr)</b>	7.95	7.95	10.74	10.74

**Summary of O&M Expenses approved for FY 2010-11****Table 40: O&M expenses approved by the Commission for FY 2010-11**

Particulars (Rs Cr)	FY 2010-11			
	Actual (unaudited accounts)	Approved in TO dated June 12' 2012	Petitioner Submission	Approved (True-up)
<b>O&amp;M Expenses</b>	61.36	61.36	69.89	67.67

**6.8 GFA and Depreciation****Petitioner's submission**

The Petitioner has submitted that the Depreciation as per the audited accounts of FY 2010-11, which has been included in the Truing Up petition is Rs. 19.23 Crores. The Depreciation approved by the Commission in the ARR of FY 2010-11 was Rs. 3.03 Crores.

The Petitioner has submitted that there is a significant difference in the Depreciation as per the audited accounts as included in the Truing Up petition over the Depreciation approved by the Commission in the ARR of FY 2010-11. The difference arises because the Commission had disallowed the GFA at the beginning of FY 2009-10 claimed by the petitioner in Review petition for FY 2009-10 on the basis that the petitioner needed to submit audited accounts and the Fixed Asset and Depreciation Registers.

The Petitioner has stated that the Asset and Depreciation registers have now been prepared and duly audited fixed assets' gross amount, accumulated depreciation and depreciation for the year have been shown in the audited accounts for FY 2010-11.

The Auditor has also noted in his Audit Report as under:

*"Fixed Assets: The Fixed Assets Register has been prepared based on physical verification of Fixed Assets carried out by the Department".*

The Asset and Depreciation registers have been prepared after following a very comprehensive methodology. A softcopy having more than 2600 pages of the Asset and Depreciation register has been provided along with the petition for the Commission's reference.

The Petitioner has stated that in view of the Commission's directives regarding the Fixed Asset and Depreciation Registers been complied with and audited accounts duly prepared, it is requested to kindly allow the above Depreciation.

### Commission's analysis

#### GFA and Capitalization

The Commission in its order dated June 12' 2012 had disallowed the opening GFA in absence of the audited accounts and Fixed Asset and Depreciation Registers and given a directive to the Petitioner to furnish the same.

However, this time the Petitioner has furnished the audited accounts and the fixed asset and register for FY 2010-11. The Commission has also taken note of the fact that the Petitioner has prepared the Fixed Asset Register based on physical verification of Fixed Assets carried out by the Department, based on the auditor's comment in the audited accounts and the same is discussed in para 5.8 of this order.

The Commission has made note of the submissions and allows the opening GFA from FY 2009-10 to be considered for the purpose of ARR computation.

The opening GFA of Rs 423.49 Crores is being considered allowed for FY 2010-11. The same is in accordance with the Fixed Asset Register and the audited accounts furnished by the petitioner. The addition in GFA of Rs. 34.85 Crores is considered admissible for the purpose of trueing up of FY 2010-11 and the same is as per the audited accounts for the year.

**Table 41: Gross Fixed Assets approved by the Commission for FY 2010-11**

Particulars	FY 2010-11			
	Actual (unaudited accounts)	Approved in TO dated June 12' 2012	Petitioner Submission	Approved (True-up)
Opening Value of Assets at the beginning of the year (Rs Cr)	452.19	31.88	423.49	423.49
Additions during the year (Rs Cr)	50.86	50.86	34.85	34.85
<b>GFA at the end of year (Rs Cr)</b>	<b>503.05</b>	<b>82.74</b>	<b>458.34</b>	<b>458.34</b>

## **Depreciation**

Depreciation has been ascertained as per JERC Tariff Regulations - Regulation 26 which states that '*depreciation for the assets shall be calculated annually at the rates specified by CERC from time to time*'. The Commission had raised a query to the Petitioner on the depreciation methodology followed by it, which was responded by the Petitioner vide its email dated April 8' 2013. The Commission as discussed in detail in para 5.9 of this order, has found the submission of the Petitioner to be reasonable. The Commission has not applied the applicable CERC rates on the average assets in place, since some of these assets have already attained the 90% limit. In the absence of the complete break-up of the assets which have attained the 90% depreciation limit, the Commission has considered the submission of the Petitioner as reasonable and approves the same for FY 2010-11.

The table below captures the depreciation approved by the Commission.

**Table 42: Depreciation approved by the Commission for FY 2010-11**

Particulars	FY 2010-11			
	Actual (unaudited accounts)	Approved in TO dated June 12' 2012	Petitioner Submission	Approved (True-up)
Depreciation (Rs Cr)	22.13	3.03	19.23	19.23

**The Commission considers the depreciation of Rs. 19.23 Crores as per the audited accounts as reasonable and approves the same for the true-up of ARR for FY 2010-11.**

## **6.9 Interest and Finance Charges**

### **Petitioner's submission**

The Petitioner has submitted that the Interest and Finance Charges as per the audited accounts for FY 2010-11 is Rs. 1.79 Crores against the Commission approved figure of Rs 1.87 Crores in the ARR of FY 2010-11. The Petitioner has submitted that there has been a slight change in the Interest and Finance Charges in the audited accounts from the figures quoted in the unaudited accounts.

### **Commission's analysis**

The Commission has considered the normative interest on the assets created during the year FY 2009-10 onwards excluding the opening capital base as per the audited accounts for the

year and has accordingly allowed interest on normative loan at Rs 2.89 Crores for FY 2010-11. The treatment is in line with true-up of ARR for FY 2009-10 and as discussed in detail in para 5.9 of this order.

The Commission has considered an addition of Rs. 34.85 Crores in the Gross Fixed Assets for FY 2010-11 which are considered funded through normative debt to the tune of 70%. The Commission has considered the capitalization of assets as per the audited accounts for the year. The Commission for the purpose of funding of the capitalization has considered the normative debt equity ratio of 70:30, whereby it has considered the addition in normative loan at Rs 24.39 Crores for FY 2010-11. The calculation of the interest on the normative loan is given below.

**Table 43: Normative interest on loan approved for true-up of FY 2010-11 (Rs Crores)**

Sr. No.	Particulars	Approved (FY 2010-11)
1	Opening Normative Loan	13.08
2	Add: Normative Loan during the year	24.39
3	Less: Normative Repayment	1.31
4	Closing Normative Loan	36.17
5	Average Normative Loan	<b>24.63</b>
6	Rate of Interest (@SBAR rate)	11.75%
<b>7</b>	<b>Interest on Normative Loan</b>	<b>2.89</b>

The Commission has also analyzed the nature of interest and finance charges as submitted by the Petitioner, and considering the reasonableness of the expenditure incurred by EDP, it allows Rs. 1.79 Crores for FY 2010-11. The Commission has considered the normative interest on the actual capital expenditure incurred during FY 2010-11 and has therefore considered it as an allowable expense as a special case for the purpose of trueing up of ARR for FY 2010-11. **The Commission therefore considers Rs. 4.68 Crores on account of Interest and Finance Charges as reasonable and approves the same for true-up of ARR for FY 2010-11.**

The table below encapsulates the interest & finance charges as approved by the Commission.



**Table 44: Interest and Finance charges approved by the Commission for FY 2010-11**

Particulars	FY 2010-11			
	Actual (unaudited accounts)	Approved in TO dated June 12' 2012	Petitioner Submission	Approved (True-up)
Interest and Finance Charges (Rs Crores)	1.87	1.87	1.79	4.68

## 6.10 Interest on Working Capital

### Petitioner's submission

The Petitioner has submitted interest on working capital as per the JERC Tariff Regulations. The Petitioner has submitted on the basis of the audited accounts for FY 2010-11, the working capital requirement comes to Rs. 66.50 Crores. Further, the Petitioner has submitted that in the ARR for FY 2010-11 filed by the petitioner, the Working Capital calculated on the basis of unaudited accounts for FY 2010-11 and as per Regulation 29 of JERC Tariff Regulations came to Rs 65.72 Crores.

The Interest on Working Capital has been calculated in line with Regulation 29 of the JERC Tariff Regulations. The SBI PLR on 1<sup>st</sup> April 2010 has been considered at 11.75%. The Interest on Working Capital calculated on the basis of the audited accounts of FY 2010-11 using 11.75 % interest rate which is included in the Truing Up petition is Rs. 7.81 Crores.

### Commission's analysis

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

Further, the Commission has considered that the amount against the consumer's security deposit is available with the Petitioner to meet the working capital required for FY 2010-11. It is noted that the Petitioner is not paying any interest on the security deposit to the consumers. In accordance with *Clause 47(4) of the Electricity Act 2003, the distribution licensees are required to pay interest on security deposit collected from the consumers.*

Since the utility has not furnished the quantum of security deposit available with it, the Commission has considered the receivables equivalent to two months billing in line with the Commission's regulations as security deposit available with the Petitioner as a source to meet working capital and has deducted this amount from the working capital requirement

considered for calculation of the interest on working capital. The treatment is in line with the true-up of ARR for FY 2009-10 and as discussed in detail in para 5.10 of this order.

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

**Table 45: Interest on working capital approved by the Commission for FY 2010-11**

Particulars (Rs Cr)	FY 2010-11			
	Actual (unaudited accounts)	Approved in TO dated June 12' 2012	Petitioner Submission	Approved (True-up)
Power Purchase Cost for one month	60.61	59.75	60.68	52.87
Employee Cost for one month	4.16	4.16	4.62	4.43
A&G Expenses for one month	0.29	0.29	0.31	0.31
R&M Expenses for one month	0.66	0.66	0.89	0.90
<b>Total Working Capital for one month</b>	<b>65.72</b>	<b>64.86</b>	<b>66.50</b>	<b>58.51</b>
Closing Security Deposit	-	93.08	-	106.51
<b>Total Working Capital considered for one month</b>	<b>65.72</b>	<b>(28.22)</b>	<b>66.50</b>	<b>(48.00)</b>
<b>SBI PLR Rate</b>	<b>11.75%</b>	<b>11.75%</b>	<b>11.75 %</b>	<b>11.75%</b>
<b>Interest on Working Capital</b>	<b>7.72</b>	<b>NIL</b>	<b>7.81</b>	<b>-</b>

The Commission accordingly approves the interest on working capital as NIL against the Rs. 7.81 Crores claimed by the Petitioner for the true-up of ARR for FY 2010-11.

Since no interest on the security deposit has been paid for, it has not been considered for in the true-up of ARR for FY 2010-11.

## 6.11 Provision for bad and doubtful debts

### Petitioner's submission

The Petitioner has submitted that the Provision for Bad Debt has not been considered in the Truing Up petition as no such provisions have been made in the audited accounts for FY 2010-11.

### 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*

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

JERC tariff regulation allows a provision for bad and doubtful debts up to 1% of receivables in the revenue requirement. It is seen that the licensee has not actually written off any bad and doubtful debts for FY 2010-11 as per the audited accounts submitted alongside. The Commission therefore has not considered any bad and doubtful debts for truing up of FY 2010-11.

**Table 46: Provision for bad and doubtful debts approved by the Commission for FY 2010-11**

Particulars	FY 2010-11			
	Actual (unaudited accounts)	Approved in TO dated June 12' 2012	Petitioner Submission	Approved (True-up)
Provision for bad and doubtful debts	Not Claimed	NIL	Not Claimed	NIL

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

## 6.12 Return on Capital Base

### Petitioner's Submission

The Petitioner has submitted that the Return on Net Fixed Assets approved by the Commission in the ARR for FY 2010-11 was Rs 0.93 Crores. The Return on Net Fixed Assets calculated on the basis of audited accounts for FY 2010-11 is Rs 8.85 Crores.

There is a significant variation in the Return on Net Fixed Assets as claimed by the Petitioner in this Truing Up petition from the figure approved by the Commission in the Order dated June 12' 2012 as the Commission had disallowed the opening GFA.

The Petitioner has submitted that the Department has prepared both Fixed Asset and Depreciation registers and got the accounts audited for FY 2010-11 which include the audited figures of fixed assets. The Net Fixed Assets at the beginning of FY 2010-11 and the Return @ 3 % of the Net Fixed Assets as per the audited accounts of FY 2010-11 are tabulated below:

Particulars (Rs. Crores)	Claimed by Petitioner in the Truing Up petition
Gross block at the beginning of the year	423.49
Opening CWIP	80.35
LESS Accumulated Depreciation	192.19
LESS Accumulated Consumer Contribution	1.87
LESS Opening Debt	14.67
Net Fixed Assets at beginning of year	295.09
<b>Return @ 3 % of NFA</b>	<b>8.85</b>

The Petitioner requests the Commission to allow the Return on Net Fixed Assets at Rs 8.85 Crores for FY 2010-11.

### Commission's Analysis

The Commission in the ARR of FY 2010-11 had disallowed the opening GFA in absence of the audited accounts and Fixed Asset and Depreciation Registers and given a directive to the Petitioner to furnish the same. The relevant extract from the last year's tariff order is reproduced below.

**Quote**

*ED Puducherry is an integrated utility in its present form as defined in Regulation 2(9) of the JERC Tariff Regulations. Accordingly, it is entitled to return on capital base, as per Regulation 23 of the said regulations. The basic requirement for consideration of either return on capital base or return on equity is the audited accounts including the statement of assets and depreciation register besides other data. ED Puducherry has not provided the required data and details to the Commission.*

*The Commission, as also explained in the section on 'GFA and Depreciation', has only allowed additional capitalization for the year and has disallowed opening GFA till such time the asset and depreciation registers are prepared and got audited. Since the Commission has not considered the opening GFA, return @ 3% of Net Fixed Assets at the beginning of the year cannot be allowed and may be considered at the time of true-up subject to the provisions of the regulations.*

**Unquote**

However, this time the Petitioner has furnished the audited accounts and the Fixed Asset and Depreciation Registers for FY 2010-11. The Commission has also taken note of the fact that the Petitioner has prepared the Fixed Asset Register based on physical verification of Fixed Assets carried out by the Department, based on the auditors comment in the audited accounts furnished. In view of the submissions made by the Petitioner, the Commission considers it reasonable to allow the opening GFA from FY 2009-10 and allow return on capital base @3% of the Net Fixed Assets on the opening GFA for FY 2010-11. The calculation of the return on capital base is as below.

**Table 47: Return on Capital calculation by the Commission for true-up of FY 2010-11**

Particulars (Rs. Crores)	Approved
Gross block at the beginning of the year	423.49
Opening CWIP	80.35
LESS Accumulated Depreciation	192.19
LESS Accumulated Consumer Contribution	1.87
LESS Opening Debt	14.67
Net Fixed Assets at beginning of year	295.11
<b>Return @ 3 % of NFA</b>	<b>8.85</b>

**Table 48: Return on capital approved by the Commission for FY 2010-11**

Particulars (Rs Crores)	FY 2010-11			
	Actual (unaudited accounts)	Approved in TO dated June 12' 2012	Petitioner Submission	Approved (True-up)
Return on Capital Base	10.99	0.93	8.85	8.85

The Commission considers the Return on Capital Base of Rs. 8.85 Crores as reasonable and approves the same for the true-up of ARR for FY 2010-11.

### 6.13 Revenue from outside sales /UI sales

#### Petitioner's submission

The Petitioner has submitted that the Revenue from Outside Sales/ UI Sales approved by the Commission in the ARR for FY 2010-11 was Rs 90.11 Crores. The Revenue from Outside Sales/ UI Sales as per audited accounts for FY 2010-11 is Rs 87.05 Crores for sale of 262.4 MU.

The Petitioner has submitted that there has been a reduction of Rs. 3.06 Crores in the Revenue from Outside Sales / UI Sales figures in the audited accounts for FY 2010-11 from the figures approved by the Commission in its Order dated 12<sup>th</sup> June 2012.

Further, the Petitioner has submitted that this income should be treated under the head of 'Non Tariff Income' and should be reduced from the gross ARR to arrive at the net ARR.

#### Commission's analysis

The Commission has considered outside sales to be 262.4 MU and approves the revenue from outside/UI sales at Rs 87.05 Crores as per the audited accounts to be reasonable to be treated as part of the 'Non tariff Income'.

The 'revenue from outside/UI sales' as submitted by the Petitioner and as approved by the Commission, for the true-up for FY 2010-11 is tabulated below.

**Table 49: Revenue from outside sales approved by the Commission for FY 2010-11**

Particulars (Rs Cr)	FY 2010-11			
	Actual (unaudited accounts)	Approved in TO dated June 12' 2012	Petitioner Submission	Approved (True-up)
Revenue outside sales/UI sales	90.11	90.11	87.05	87.05

## 6.14 Non-Tariff Income

### Petitioner's Submission

The non-tariff income comprises of metering, late payment charges, interest on staff loans, reconnection fee, miscellaneous revenue etc.

The Non-Tariff Income as per audited accounts for FY 2010-11, which has been included in the Truing-up petition, is Rs. 6.61 Crores. The Non-Tariff Income approved by the Commission in its Order dated June 12' 2012 was Rs. 6.61 Crores. There is no variation in Non-Tariff Income as per the audited accounts for FY 2010-11 from the figures approved by the Commission in the ARR for FY 2010-11.

The 'Revenue from UI sales' amounting to Rs 87.05 Crores has also been considered under the broad head of non-tariff income and EDP has requested the Commission to approve the total sum of Rs 93.66 Crores as non- tariff income.

### Commission's Analysis

The revenue from outside/UI sales approved by the Commission as explained in para 6.13 is Rs 87.05 Crores and considering the actual non tariff income of Rs 6.61 Crores as reasonable, the total non tariff income approved by the Commission for FY 2010-11 is Rs 93.66 Crores.

The non tariff income as submitted by the Petitioner and as approved by the Commission is tabulated below.

**Table 50: Non tariff income approved by the Commission for FY 2010-11**

Particulars (Rs Cr)	FY 2010-11			
	Actual (unaudited accounts)	Approved in TO dated June 12' 2012	Petitioner Submission	Approved (True-up)
<b>Non Tariff Income (including revenue from outside/UI sales)</b>	96.72	96.72	93.66	93.66

As per the sub-regulation 2 (i) of regulation 8 of JERC tariff regulations 2009, **Commission has considered the final figure of non-tariff income of Rs. 93.66 Crores as per the audited accounts as reasonable and approves the same for true up of ARR for FY 2010-11.**

#### 6.15 Aggregate Revenue Requirement (ARR) for FY 2010-11

Based on the items of expenditure discussed in the preceding sections, the Commission approves the aggregate revenue requirement for FY 2010-11 at Rs 728.27 Crores. The same has been summarized in the table below.

**Table 51: Aggregate Revenue Requirement approved for FY 2010-11 (Rs Crores)**

Particulars	FY 2010-11			
	Actual (unaudited accounts)	Approved in TO dated June 12' 2012	Petitioner Submission	Approved (True-up)
Cost of power purchase	727.30	716.96	728.08	721.50
Employee Costs	49.88	49.88	55.44	53.22
A&G expenses	3.53	3.53	3.71	3.71
R&M Expenses	7.95	7.95	10.74	10.74
Depreciation	22.13	3.03	19.23	19.23
Interest & Finance Charges	1.87	1.87	1.79	4.68
Interest on Working Capital	7.70	NIL	7.81	-
Provision for bad debts	NIL	NIL	NIL	NIL
Return on NFA @ 3% of NFA	10.99	0.93	8.85	8.85
Amortisation of regulatory asset proposed for previous years	-	-	-	-
<b>Total</b>	<b>831.35</b>	<b>784.15</b>	<b>835.64</b>	<b>821.93</b>
Less Non tariff Income	96.72	96.72	93.66	93.66
<b>Aggregate revenue requirement</b>	<b>734.63</b>	<b>687.43</b>	<b>741.97</b>	<b>728.27</b>



## 6.16 Revenue from tariff for FY 2010-11

### Petitioner's submission

The total revenue from sale of power within the state for FY 2010-11 based on the audited accounts is Rs 639.08 Crores. There is an increase of Rs. 8.28 Crores in the Revenue from Tariff as per the audited accounts for FY 2010-11 included in the Truing Up from the figures approved by the Commission in the ARR for FY 2010-11. In the audited accounts for FY 2010-11, the Revenue from Tariff figure has been revised (increased) by Rs. 8.28 Crores on the basis of actual available bill data.

### Commission's analysis

As per the sub-regulation 2 (i) of regulation 8 of JERC tariff regulations 2009, the **Commission has considered the figure of revenue of Rs. 639.08 Crores from the sale of power within the state as per the audited accounts as reasonable and approves the same for true up of ARR for FY 2010-11.**

**Table 52: Revenue from tariff approved by the Commission for FY 2010-11 (Rs Crores)**

Particulars	FY 2010-11			
	Actual (unaudited accounts)	Approved in TO dated June 12' 2012	Petitioner Submission	Approved (True-up)
Revenue from tariff	630.80	630.80	639.08	639.08

## 6.17 Revenue Gap for FY 2010-11

The revenue gap worked out for FY 2010-11 is Rs 89.19 Crores on the basis of the aggregate revenue requirement of Rs 728.27 Crores and the revenue from tariff of Rs. 639.08 Crores (excluding carrying cost).

**Table 53: Revenue Gap approved by the Commission for FY 2010-11 (Rs Crores)**

Particulars	FY 2010-11			
	Actual (unaudited accounts)	Approved in TO dated June 12' 2012	Petitioner Submission	Approved (True-up)
Aggregate Revenue Requirement	734.6	687.43	741.97	728.27
Revenue from tariff	630.80	630.80	639.08	639.08
<b>Revenue Gap for the year</b>	<b>103.83</b>	<b>56.63</b>	<b>102.89</b>	<b>89.19</b>
Gap of the previous years	68.30	21.79	72.95	59.54

Particulars	FY 2010-11			
	Actual (unaudited accounts)	Approved in TO dated June 12' 2012	Petitioner Submission	Approved (True-up)
Carrying Cost	-	-	-	7.00
<b>Cumulative Gap</b>	<b>172.13</b>	<b>78.43</b>	<b>175.84</b>	<b>155.73</b>

The revenue gap of Rs 89.19 Crores not considering the previous year gap has been considered; further; considering the gap of previous years, the revenue gap of Rs 155.73 Crores is considered to be reasonable and approved for the true-up of ARR for FY 2010-11, including the carrying cost.

The Commission has not allowed the carrying cost on the true-up gap of FY 2010-11 as the Petitioner did not file the original petition for FY 2010-11.

The same gap has been carried over to the next year i.e. FY 2011-12.

## **7. Provisional<sup>2</sup> true-up of ARR for FY 2011-12**

### **7.1 Background**

The petition for the determination of ARR & Tariff for FY 2011-12 was filed on 29th September 2011. The petition for the determination of ARR & Tariff for FY 2012-13 contained the revised estimates for FY 2011-12. As the petition for FY 2012-13 was submitted before the issuance of the order on the petition for FY 2011-12, the Commission dealt with the petition for FY 2011-12 in its order dated June 12' 2012 on the basis of the revised estimates for FY 2011-12 submitted in the FY 2012-13 petition.

The Commission had further observed that the approval of the ARR for FY 2011-12 based on the revised estimates, took care of the 'Review' exercise and no further 'Review' would be undertaken. In the petition for FY 2013-14, the Petitioner has asked for the Review of Performance for FY 2011-12 based on the actual unaudited figures. The unaudited accounts for FY 2011-12 have also been submitted. The Commission has made note of the submissions and undertaken a provisional true-up for FY 2011-12 based on the unaudited accounts in this order. Leaving the gap unaddressed for want of audited accounts, would have created further burden on the utility and would have pushed the treatment of the revenue gap to next year. The Commission has taken into consideration the following for the approval of the revenue gap for FY 2011-12:

- i. Trued-up ARR for FY 2009-10 based on the audited accounts
- ii. Trued-up ARR for FY 2010-11 based on the audited accounts
- iii. Actual unaudited figures for FY 2011-12 based on the unaudited accounts, subject to adjustment if any at the time of true-up based on audited accounts

### **7.2 Consumers, Connected Load and Energy Sales**

#### **Petitioner's Submission**

The Petitioner had provided a revised estimate of sales of 2317.5 MU for FY 2011-12. The Commission had approved sales of 2294.2 MU in its order dated June 12' 2012. Based on the unaudited accounts, the petitioner has submitted that the sales for 2011-12 have been 2321 MU.

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<sup>2</sup> By Provisional true-up, the Commission means the true-up based on actual unaudited figures.

EDP had provided a revised estimate of 391,380 consumers in its revised estimates for FY 2011-12 which had been approved by the Commission. Based on the unaudited accounts, EDP has submitted that the actual consumer numbers for FY 2011-12 stands at 385,544. The connected load figures have remained unchanged from the submission based on the revised estimates. The connected load for agriculture is 59538 HP and for HT consumers at 340390 kVA.

**Commission’s Analysis**

**Consumers**

The Commission observes that the no. of consumers have been revised downwards based on the actual unaudited figures. The Commission finds the submission to be reasonable and approves the same.

**Table 54: Number of consumers approved by the Commission for FY 2011-12**

Consumer Category	Estimates submitted in the FY 11-12 petition	Revised Estimates for FY 11-12	Approved in TO dated June 12’ 2012	Petitioner Submission (unaudited accounts)	Approved
Domestic	287899	287899	287899	281903	281903
Commercial	41854	41854	41854	41943	41943
Agriculture	6810	6810	6810	6828	6828
Street Lighting	48280	48280	48280	48384	48384
LT Industrial	6086	6086	6086	6035	6035
Temporary Supply	-	-	-	-	-
HT Industrial	402	403	403	401	401
HT state and Central Govt Establishments	42	41	41	43	43
HT Industrial Extra High Tension	7	7	7	7	7
<b>TOTAL</b>	<b>391380</b>	<b>391380</b>	<b>391380</b>	<b>385544</b>	<b>385544</b>

## Connected Load

The Connected Load for the agriculture category is approved as 59538 HP as per the submission of the Petitioner as per the results of the physical verification exercise carried out by it. The Commission observes that there is no change in the connected load figures for the consumer categories from the approved figures last time. The Commission considers the submission of Petitioner to be reasonable and approves the same.

**Table 55: Connected load approved by the Commission for FY 2011-12**

Consumer Category (Connected Load in HP/kVA)	Estimates submitted in the FY 11-12 petition	Revised Estimates for FY 11-12	Approved in TO dated June 12' 2012	Petitioner Submission (unaudited accounts)	Approved
Domestic	-	-	-	-	-
Commercial	-	-	-	-	-
Agriculture (HP)	59538	59538	59538	59538	59538
Street Lighting	-	-	-	-	-
LT Industrial	-	-	-	-	-
Temporary Supply	-	-	-	-	-
HT Industrial (kVA) (HT 1)	245630	245630	245630	245630	245630
HT state and Central Govt Establishments (kVA) (HT 2)	14265	14265	14265	14265	14265
HT Industrial Extra High Tension (kVA) (HT 3)	80495	80495	80495	80495	80495

## Energy Sales

For the OHOB consumers, the consumption norm of 175.2 units/consumer/year is considered reasonable assuming 2 fluorescent tube lights each of 40 W running 6 hours per day. This taken together with the number of consumers considered for the year of 35,466 results in 6.21 MUs against the claim of 9.8 MUs of the Petitioner. The Commission considers the consumption of 6.21 MU as reasonable and approves the same.

For the agriculture category, the consumption norm of 951.1units/HP/year is considered reasonable as per the TNERC order dated 30<sup>th</sup> March 2012 for reasons explained in para 5.3.

This taken together with the connected load of 59538 HP for the agriculture category results in the sale of 56.63 MU against the claim of 56.6 MU by the Petitioner. The Commission considers the consumption of 56.63 MUs as reasonable and approves the same.

Metered Sales being an uncontrollable factor are approved in entirety.

The total sales approved for the year are 2317.5 MU. The table below shows the submission of Petitioner against the approval of the Commission. OHOB sales have been clubbed in the 'Domestic' category.

**Table 56: Energy Sales approved by the Commission for FY 2011-12**

Consumer Category	Estimates submitted in the FY 11-12 petition	Revised Estimates for FY 11-12	Approved in TO dated June 12' 2012	Petitioner Submission (unaudited accounts)	Approved
Domestic	572.4	572.4	569.3	547.2	543.6
Commercial	172.1	172.1	172.1	167.7	167.7
Agriculture	76.7	76.7	56.6	56.6	56.6
Street Lighting	23.4	23.4	23.4	24.0	24.0
LT Industrial	160.1	160.1	160.1	184.4	184.4
Temporary Supply	15.0	22.6	22.6	13.7	13.7
HT Industrial	1016.3	1016.3	1016.3	974.6	974.6
HT state and Central Govt Establishments	37.3	37.3	37.3	45.0	45.0
HT Industrial Extra High Tension	236.5	236.5	236.5	307.8	307.8
<b>TOTAL</b>	<b>2309.8</b>	<b>2317.5</b>	<b>2294.2</b>	<b>2321.0</b>	<b>2317.5</b>

### 7.3 Energy Losses

#### Petitioner's Submission

The Petitioner had submitted the revised estimate of 13.47% as the energy losses for FY 2011-12. Against this, the Commission had allowed a figure of 13% in its order dated June 12' 2012. Based on the unaudited accounts for FY 2011-12, the EDP has submitted that its losses stand at 13.18%.

**Commission’s analysis**

The Commission observes that the Petitioner has not been able to achieve the T&D loss trajectory set forth by the Commission. In the tariff order dated June 12’ 2012, the Commission had approved T&D loss figure of 13.00% for FY 2011-12.

The regulation 9 of the JERC tariff regulations, 2009 (reproduced below) deals with the overachievement/ underachievement of the targets laid down.

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

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

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

**Therefore, the Commission considers the loss level of 13.00% as approved in the tariff order dated June 12’ 2012 as reasonable and considers the same as approved for provisional true-up of FY 2011-12.**

**Table 57: Energy Losses approved by the Commission for FY 2011-12**

Particulars	Estimates submitted in the FY 11-12 petition	Revised Estimates FY 11-12	Approved in TO dated June 12’ 2012	Petitioner Submission (unaudited accounts)	Approved
Energy Losses	13.47%	13.47%	13%	13.18%	13.00%

**7.4 Energy Balance**

**Petitioner’s submission**

The Petitioner has revised the energy balance figures based on revised sales, T&D losses and availability at the periphery. The Petitioner has submitted that the UI sales have only been 516.5 MU as against the approved figure of 574.38 MU in its order dated June 12' 2012.

**Commission’s analysis**

The Commission has approved the sales of 2317.48 MU and internal loss of 13% resulting in a net energy requirement of 2663.77 MU at the periphery for sale within the territory.

The Commission has allowed the sales outside the state/UI sales at 516.47 MU resulting in the energy requirement at the periphery of 3180.24 MU.

To meet the energy requirement at the periphery of 3180.24 MU, the gross energy purchase approved by the Commission is 3329.15 MU. The external losses have been approved as 148.90 MU, resulting in the net energy availability of 3180.24 MU.

The detailed analysis of the power purchase from the different sources has been discussed in para 7.5. The table below captures the values as submitted by the Petitioner and that considered approved for FY 2011-12.

**Table 58: Energy Balance approved by the Commission for FY 2011-12**

Particulars	Estimates submitted in the FY 11-12 petition	Revised Estimates for FY 11-12	Approved in TO dated June 12' 2012	Petitioner Submission (unaudited accounts)	Approved
<b>ENERGY REQUIREMENT</b>					
Energy sales in the UT	2,309.80	2,317.53	2294.24	2,321.04	2,317.48
Distribution losses (%age)	13.47%	13.47%	13%	13.18%	13.00%
Energy required for the Territory (MU)	2669.36	2,678.30	2637.06	2,673.26	2,663.77
Add: Sales to common pool consumers/ UI	391.2	433.40	574.38	516.47	516.47
<b>Energy Requirement @ periphery</b>	<b>3060.56</b>	<b>3,111.70</b>	<b>3211.44</b>	<b>3,189.74</b>	<b>3,180.24</b>
<b>ENERGY AVAILABILITY</b>					
Gross Power Purchase	3213.2	3256.3	3359.99	<b>3339.08</b>	<b>3329.15</b>
External losses (MU)	142.50	144.6	148.55	149.35	148.90
<b>Net Energy Availability</b>	<b>3070.7</b>	<b>3111.70</b>	<b>3211.44</b>	<b>3189.74</b>	<b>3180.24</b>



## 7.5 Power Purchase Quantum and Cost

### **Petitioner's submission**

The Petitioner has submitted that the cost of power purchase as per the unaudited accounts is Rs. 1110.25 Crores. There is a variation when compared to the Commission approved values of 901.73 Crores. The major factor contributing to this increase is the additional amount of 117.8 Crores to TNEB in lieu of the increase in tariff to Rs. 3.10/kWh for the years 2009-10, 2010-11 and 2011-12 pursuant to the interim order of the Madras High Court. During the year 2012-13, the Hon'ble High Court of Madras (in an interim order) directed the EDP to pay differential cost as per the revised CERC tariff order pertaining to NLC TS-I for the period from April 2009 to August 2012. Based on the payment details, a provision for Rs. 117.82 Crores (relating to Power Purchased during 2009-10, 2010-11 and 2011-12) has been made in the books of accounts and the amount has been included in Power Purchase Cost for the year.

Apart from the above, an additional amount of Rs 89.3 Crores has been included in the Power Purchase amount on account of revision invoices, debit and credit notes received from Power Suppliers (i.e. Power Generating, Transmission & Wheeling companies) in the financial year 2011-12 which include charges / credit pertaining to Power Purchased by the EDP in 2011-12 as well as in prior financial years. These invoices were raised in the year 2011-12 because of the orders passed by the respective regulatory commissions governing the respective Power Suppliers or due to the refunds / liabilities arising to the Power Suppliers on account of tax assessments, etc., which have to be recovered from (or credited to) the EDP.

If these factors not be considered, the net power purchase cost comes to Rs. 906.6 Crores.

### **Commission's Analysis**

The Commission has considered the power purchase corresponding to the energy requirement approved for FY 2011-12 in para 7.4 of this order. The loss on account of lower approval of the power purchase is due to the underachievement of the T&D losses which are to be borne by the petitioner.

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

Fixed charges and other charges from all the generating stations (irrespective of the merit order) have been considered for arriving at the power purchase cost. The other charges as submitted by the Petitioner have been analyzed and found to be reasonable and hence approved. The other charges of Rs 75.4 Crores have been allowed for the year. The Commission has validated the submission of the Petitioner on random verification basis from the bills submitted alongside and found the submission to be in order.

The Commission has allowed the additional amount of 117.8 Crores to TNEB in lieu of the increase in tariff to Rs. 3.10/kWh for the years 2009-10, 2010-11 and 2011-12 pursuant to the interim order of the Madras High Court. Additionally, the Commission has allowed Rs 89.3 Crores on account of revision invoices, debit and credit notes received from Power Suppliers (i.e. Power Generating, Transmission & Wheeling companies) in the financial year 2011-12 which include charges / credit pertaining to power purchased by the EDP in 2011-12 as well as in prior financial years. **It is however seen from the petition that the arrears of Rs 117.8 Crores pertaining to FY 2011-12 were actually paid in FY 2012-13. Hence, the Commission has decided to consider the expense of Rs 117.8 Crores in FY 2012-13 for the purpose of calculation of carrying cost, when the same is considered.**

The Commission has not considered the cost towards the RPO compliance and would consider it based on actual payment made by the licensee in the true-up based on the audited accounts.

The Commission considers the power purchase cost of Rs 1095.08 Crores as reasonable and approves the same for the provisional true-up of FY 2011-12.

**Table 59: Power Purchase approved for FY 2011-12**

Source	Purchase [MU]	VC [Rs/kWh]	Fixed Charge [Rs Crs]	VC [Rs Crs]	Others [Rs Crs]	Total [Rs Crs]
Madras APS	40.2	1.79		7.3	0.8	8.2
Kaiga APS Stage I	198.6	2.80		56.2	4.6	60.7
TNEB (Pondy)	68.5	1.91		12.6	0.0	12.6
TNEB (Karaikal)	331.6	1.91		60.9	0.0	60.9
KSEB	36.4	3.16		11.5	2.5	14.0
Ramagundam STPS Stage I & II	804.3	1.60	38.4	112.2	17.7	168.3
Ramagundam STPS Stage III	191.4	1.71	17.6	30.6	5.8	53.9
TS I Expn	111.6	1.80	16.0	20.3	0.4	36.7
PPCL	235.7	1.91	17.5	44.4	11.8	73.7
TS II Stage I	509.8	1.93	27.2	91.5	2.7	121.5

TS II Stage II	207.6	1.93	11.5	37.3	1.1	49.9
Talcher STPS Stage II	538.3	2.35	40.7	86.8	28.0	155.5
Simhadri*	55.1	2.65	10.6	11.5	0.0	22.1
UI						-
<b>Other Charges</b>						0.6
KPTCL						0.6
SRLDC						0.9
PGCIL						63.8
<b>Total</b>	<b>3,329.1</b>		<b>179.6</b>	<b>583.1</b>	<b>75.4</b>	<b>904.0</b>
Arrears of previous years and FY 11-12						89.3
Additional payment due to TNEB Billing @ Rs. 3.10/kWh for the years 2009-10, 2010-11 and 2011-12						117.8
RPO compliance cost						-
Less: Rebate						16.0
<b>Net PP cost</b>						<b>1,095.08</b>

\* Cost and quantum deducted as per merit order

**Table 60: Power purchase quantum and cost approved by the Commission for FY 2011-12**

Particulars	Estimates submitted in the FY 11-12 petition	Revised Estimates for FY 11-12	Approved in TO dated June 12' 2012	Petitioner Submission (unaudited accounts)	Approved
<b>Power Purchase Quantum (MU)</b>	3213.20	3256.30	3359.99	3339.1	3329.15
<b>Power Purchase Cost (Rs Crores)</b>	975.50	997.30	901.73	1110.25	1,095.08

The total power purchase approved for the year is Rs 1095.08 Crores for the total quantum of purchase of 3329.15 MU.

## 7.6 Operation and Maintenance Expenses

The Operation and Maintenance (O&M) expenses comprising of the employee expenses, A&G expenses, R&M expenses have been discussed in the following sections.

### Employee Cost

#### **Petitioner's submission**

The Petitioner has submitted the employee cost as per the unaudited accounts for FY 2011-12 comes to Rs. 56.59 Crores and this has been included in this review. The Employee Cost approved by the Commission in the Review of ARR for FY 2011-12 was Rs. 52.55 Crores in its order dated June 12' 2012. There is an increase of Rs. 4.04 Crores in Employee Cost in this review from the Commission approved Employee Cost. The petitioner requests the Commission to approve the employee cost.

**Commission’s analysis**

The Commission has observed that the approved figures in the true-up of FY 2009-10 and FY 2010-11 have been Rs. 51.95 Crores and Rs 53.22 Crores respectively in this tariff order. The Commission had approved employee costs of Rs 52.55 Crores for the ARR for FY 2011-12 in its order dated June 12' 2012.

The Petitioner has submitted an increase of Rs 4.04 Crores in the employee cost based on the unaudited accounts of the year. The Commission, considering the reasonableness of the employee costs as submitted by the Petitioner, considers the employee cost at Rs 56.59 Crores for FY 2011-12. However, the Commission has deducted the employee expenses towards the non-core activities for approving the employee expenses for FY 2011-12.

**Table 61: Employee expenses approved by the Commission for FY 2011-12**

Particulars	Estimates submitted in the FY 11-12 petition	Revised Estimates for FY 11-12	Approved in TO dated June 12' 2012	Petitioner Submission (unaudited accounts)	Approved
Employee Expenses (Rs Cr)	52.55	52.55	52.55	56.59	54.15

**The Commission considers the employee expenses of Rs 54.15 Crores as reasonable and approves the same for provisional true-up of ARR for FY 2011-12.**

**Administrative and General Expenses**

**Petitioner’s submission**

The Administrative and General Expenses approved by the Commission in the Review of ARR for FY 2011-12 was Rs. 3.91 Crores. The Administrative and General Expenses as per the unaudited accounts of FY 2011-12 is Rs. 4.44 Crores. The Petitioner has submitted that there is a slight increase in the Administrative and General Expenses as per the unaudited accounts

over the figure approved by the Commission and requests the Commission to approve the same.

**Commission’s analysis**

The Commission observes that the actual A&G expenses in the true-up of FY 2009-10 and FY 2010-11 have been Rs. 3.28 Crores and Rs 3.71 Crores respectively, as approved in this tariff order.

The Petitioner has submitted an increase of Rs 0.53 Crores in the A&G expenses based on the unaudited accounts. The Commission, considering the reasonableness of the expense as submitted by the Petitioner, approves the A&G expenses at Rs 4.44 Crores for FY 2011-12.

**Table 62: A&G expenses approved by the Commission for FY 2011-12**

Particulars	Estimates submitted in the FY 11-12 petition	Revised Estimates for FY 11-12	Approved in TO dated June 12’ 2012	Petitioner Submission (unaudited accounts)	Approved
<b>A&amp;G Expenses (Rs Cr)</b>	3.91	3.91	3.91	4.44	4.44

**The Commission considers the A&G expenses of Rs 4.44 Crores as reasonable and approves the same for the provisional true-up of FY 2011-12.**

**Repair and Maintenance Expenses**

**Petitioner’s submission**

The Petitioner has submitted that R&M as per the unaudited accounts of FY 2011-12, is Rs. 16.17 Crores. The R&M expenses approved by the Commission for FY 2011-12 were Rs. 10.34 Crores. There is an increase of Rs. 4.83 Crores in Repair and Maintenance Expenses as per the unaudited accounts for FY 2011-12 over the figure approved by the Commission in the Review of the revised estimates. The increase has been mainly due to adjustments made for difference in classification of certain expenditure between capital expenditure and O&M expenditure in the unaudited annual accounts.

**Commission’s analysis**

The Commission observes that the actual R&M expenses in the true-up of FY 2009-10 and FY 2010-11 have been Rs. 11.57 Crores and Rs 10.74 Crores respectively, as approved in this tariff order.

The Commission observes that the R&M expenses have been increased by Rs 5.83 Crores based on the unaudited accounts. The Commission approves the R&M expenses as submitted, considering them as reasonable for repair and maintenance expenses of the utility. The R&M expenses are also necessary in the interest of maintaining adequate infrastructure for ensuring proper Standard of Performance of the utility.

**Table 63: R&M expenses approved by the Commission for FY 2011-12**

Particulars	Estimates submitted in the FY 11-12 petition	Revised Estimates for FY 11-12	Approved in TO dated June 12' 2012	Petitioner Submission (unaudited accounts)	Approved
<b>R&amp;M Expenses (Rs Cr)</b>	10.34	10.34	10.34	16.17	16.17

The Commission considers R&M expenses of Rs. 16.17 Crores as reasonable and approves the same for provisional true-up of FY 2011-12.

#### **Summary of O&M Expenses approved for FY 2011-12**

The O&M expenses as submitted and considered approved for FY 2011-12 are as below:

**Table 64: O&M expenses approved by the Commission for FY 2011-12**

Particulars	Estimates submitted in the FY 11-12 petition	Revised Estimates for FY 11-12	Approved in TO dated June 12' 2012	Petitioner Submission (unaudited accounts)	Approved
<b>O&amp;M Expenses (Rs Cr)</b>	66.80	66.80	66.80	77.20	74.76

## **7.7 GFA and Depreciation**

### **Petitioner's submission**

The Petitioner has submitted that the depreciation as per the unaudited accounts of FY 2011-12, which has been included in this review, is Rs. 20.28 Crores. The depreciation approved by the Commission in the Review of revised estimates for FY 2011-12 was Rs 6.00 Crores. The Petitioner has submitted that there is a significant difference in the Depreciation as per the unaudited accounts of FY 2011-12 over the Depreciation approved by the Commission. The difference arises because the Commission had disallowed the GFA at the beginning of FY 2009-10 claimed by the petitioner in Review for FY 2009-10 on the basis that the petitioner needed

to submit audited accounts and the Fixed Asset and Depreciation Registers, which is the basis for calculating the opening GFA for FY 2011-12.

The Petitioner has stated that the Asset and Depreciation registers have now been prepared and duly audited fixed assets' gross amount, accumulated depreciation and depreciation for the year have been shown in the audited accounts for the year 2009-10 and 2010-11.

The Auditor has also noted in his Audit Report as under:

*“Fixed Assets: The Fixed Assets Register has been prepared based on physical verification of Fixed Assets carried out by the Department”.*

The Asset and Depreciation registers have been prepared after following a very comprehensive methodology.

The Petitioner has stated that in view of the Commission's directives regarding the Fixed Asset and Depreciation Registers been complied with and duly audited accounts prepared, it is requested to kindly allow the above Depreciation.

### Commission's analysis

#### GFA and Capitalization

In line with the treatment of the GFA and capitalization done in the earlier chapters, the Commission considering the reasonableness of the expenditure approves the capitalization of Rs. 22.15 Crores for FY 2011-12. The treatment is the same as for the true-up of FY 2009-10 and FY 2010-11. The detailed analysis is as per the para 5.8 of this order.

**Table 65: Gross Fixed Assets approved by the Commission for FY 2011-12**

Particulars	Estimates submitted in the FY 11-12 petition	Revised Estimates for FY 11-12	Approved in TO dated June 12' 2012	Petitioner Submission (unaudited accounts)	Approved
Opening Value of Assets at the beginning of the year (Rs Cr)	503.08	503.05	82.74	458.34	458.34
Additions during the year (Rs Cr)	61.64	61.64	61.64	22.15	22.15
<b>Gross Fixed Assets at the end of year (Rs Cr)</b>	<b>564.72</b>	<b>564.69</b>	<b>144.38</b>	<b>480.48</b>	<b>480.48</b>

## **Depreciation**

Depreciation has been calculated as per the Regulation 26 of JERC Tariff Regulations, 2009 which specifies that depreciation for the assets shall be calculated annually at the rates specified by CERC from time to time. The detailed treatment is as per para 5.8 of this order. The table below captures the depreciation as submitted and considered approved by the Commission.

**Table 66: Depreciation approved by the Commission for FY 2011-12**

Particulars	Estimates submitted in the FY 11-12 petition	Revised Estimates for FY 11-12	Approved in TO dated June 12' 2012	Petitioner Submission (unaudited accounts)	Approved
Depreciation (Rs Cr)	25.07	25.07	6.00	20.28	20.28

**The Commission considers the depreciation of Rs. 20.28 Crores as reasonable and approves the same for the provisional true-up of ARR for FY 2011-12.**

## **7.8 Interest and Finance Charges**

### **Petitioner's submission**

The Petitioner has submitted that the Interest and Finance Charges as per the unaudited accounts for FY 2011-12 are Rs. 2.40 Crores. The Interest and Finance Charges approved by the Commission in the revised estimates for FY 2011-12 was Rs. 1.95 Crores. There has been slight change in the Interest and Finance Charges in the unaudited accounts from the figure claimed in the revised estimate for FY 2011-12.

### **Commission's analysis**

The Commission has considered the normative interest on the assets created during the year FY 2009-10 onwards excluding the opening capital base of FY 2009-10 as per the audited accounts for the year and has accordingly allowed interest on normative loan. The treatment is in line with true-up of ARR for FY 2009-10 & FY 2010-11 and as discussed in detail in para 5.9 of this order.

The Commission has considered an addition of Rs. 22.15 Crores in the Gross Fixed Assets for FY 2011-12 which are considered funded through normative debt to the tune of 70%. The Commission has considered the capitalization of assets as per the unaudited accounts for the year. The Commission for the purpose of funding of the capitalization has considered the



normative debt equity ratio of 70:30, whereby it has considered the addition in normative loan at Rs 15.50 Crores for FY 2011-12. The calculation of the interest on the normative loan is given below.

**Table 67: Normative interest on loan approved for FY 2011-12 (Rs Crores)**

Sr. No.	Particulars	Approved (FY 2011-12)
1	Opening Normative Loan	36.17
2	Add: Normative Loan during the year	15.50
3	Less: Normative Repayment	3.75
4	Closing Normative Loan	47.92
5	Average Normative Loan	<b>42.05</b>
6	Rate of Interest (@SBAR rate)	<b>13.00%</b>
<b>7</b>	<b>Interest on Normative Loan</b>	<b>5.47</b>

The Commission has also analyzed the nature of interest and finance charges as submitted by the Petitioner, and considering the reasonableness of the expenditure incurred by EDP, it allows Rs. 2.40 Crores for FY 2011-12. The Commission has considered the normative interest on the actual capital expenditure incurred during FY 2011-12 and has therefore considered it as an allowable expense as a special case for the purpose of provisional true-up of ARR for FY 2011-12. **The Commission therefore considers Rs. 7.87 Crores on account of Interest and Finance Charges as reasonable and approves the same for provisional true-up of ARR for FY 2011-12.**

The table below encapsulates the interest & finance charges as approved by the Commission.

**Table 68: Interest and Finance Charges approved by the Commission for FY 2011-12**

Particulars	Estimates submitted in the FY 11-12 petition	Revised Estimates for FY 11-12	Approved in TO dated June 12' 2012	Petitioner Submission (unaudited accounts)	Approved
<b>Interest &amp; Finance Charges (Rs Cr)</b>	1.95	1.95	1.95	2.40	7.87

**The Commission considers interest and finance charges of Rs 7.87 Crores as reasonable and approves the same for provisional true-up of ARR for FY 2011-12.**

## 7.9 Interest on Working Capital

### Petitioner's submission

The Petitioner has submitted interest on working capital as per the JERC Tariff Regulations. The rate of interest on working capital has been considered as 13.00%. The Interest on Working Capital approved by the Commission in the Review of revised estimates for FY 2011-12 was Nil. On the basis of the unaudited accounts for FY 2011-12, the working capital comes to Rs. 98.95 Crores. The Interest on Working Capital calculated on the basis of the unaudited accounts of FY 2011-12 using 13.00 % interest rate which has been claimed is Rs. 12.86 Crores. When the Revised Estimates were filed by the petitioner before the Commission, the Working Capital calculated for FY 2011-12 and as per Regulation 29 of JERC Tariff Regulations came to Rs. 88.67 Crores.

### Commission's analysis

The Commission has considered the calculation of the different components of the interest on working capital as per the JERC Tariff Regulations. The Commission has considered that the amount collected from the consumers as security deposit is available with the Petitioner and has treated this as available to meet part of working capital requirement for FY 2011-12.

In line with the treatment of the working capital done in the previous chapters, the Commission has considered the receivables equivalent to two months billing, as security deposit available with the Petitioner, as a source to meet working capital requirements and has deducted this amount from the working capital considered for calculation of the interest on working capital for FY 2011-12.

The Commission clarifies that the SBI PLR rate has now been substituted as SBI Advance Rate. The Commission has considered the SBI advance rate of 13%<sup>3</sup> as on 1<sup>st</sup> April 2011 for the calculation of the interest on working capital.

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<sup>3</sup> SBI advance rate notified on 14.02.2011; Thereafter four revisions in the SBI advance rate was notified in FY 2011-12, and are as under: 25.04.2011- 13.25%; 12.05.2011-14%; 11.07.2011-14.25%; 13.08.2011 – 14.75%.

**Table 69: Interest on working capital approved by the Commission for FY 2011-12**

Particulars (Rs Cr)	Estimates submitted in the FY 11-12 petition	Revised Estimates FY 11-12	Approved in TO dated June 12' 2012	Petitioner Submission (unaudited accounts)	Approved
Power Purchase Cost for one month	81.22	83.11	75.14	92.52	77.28
Employee Cost for one month	4.38	4.38	4.38	4.72	4.51
A&G Expenses for one month	0.29	0.32	0.33	0.37	0.37
R&M Expenses for one month	0.78	0.86	0.86	1.35	1.35
<b>Total Working Capital for one month</b>	<b>86.67</b>	<b>88.67</b>	<b>80.71</b>	<b>98.95</b>	<b>83.51</b>
Closing Security Deposit (amount already with EDP)	-	-	105.13	-	115.08
<b>Total Working Capital considered for one month</b>	<b>86.67</b>	<b>88.67</b>	<b>(24.42)</b>	<b>98.95</b>	<b>(31.58)</b>
SBI PLR Rate	11.75%	11.75%	13.00%	13.00%	13.00%
Interest on Working Capital	10.18	10.40	NIL	12.86	-

The Commission approves the Interest on Working Capital as NIL as part of the provisional true-up of ARR for FY 2011-12.

Since no interest on the security deposit has been paid for, it has not been considered for in the ARR of FY 2011-12.

#### 7.10 Provision for bad and doubtful debts

##### Petitioner's submission

The Petitioner has submitted that Provision for Bad Debt has not been considered in this Review as no such provisions have been made in the unaudited accounts for FY 2011-12. It was also not considered in the revised estimates for ARR of FY 2011-12.

##### Commission's analysis

The Commission agrees with the submission of the Petitioner and would consider the bad and doubtful debts only after availability of audited accounts, which will be taken up at the time of true up of ARR, in line with JERC Tariff Regulations.

**Table 70: Provision for bad debts approved by the Commission for FY 2011-12**

Particulars	Estimates submitted in the FY 11-12 petition	Revised Estimates FY 11-12	Approved in TO dated June 12' 2012	Petitioner Submission (unaudited accounts)	Approved
<b>Provision for bad and doubtful debts</b>	Not claimed	Not claimed	NIL	NIL	NIL

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

## 7.11 Return on Capital Base

### Petitioner's Submission

The Petitioner has submitted that the Return on Net Fixed Assets calculated on the basis of unaudited accounts for FY 2011-12 is Rs. 9.33 Crores. The Return on Net Fixed Assets approved by the Commission in the Review of revised estimates of ARR for FY 2011-12 was 2.37 Crores. For this purpose, a rate of 3 % return on Net Fixed Assets at the beginning of the FY 2011-12 has been considered.

There is a variation in the Return on Net Fixed Assets as claimed by the petitioner in this revised figure based on unaudited accounts from the figure approved by the Commission in the Review of ARR for FY 2011-12. The reason for this variance between the petitioner's and the Commission's value is the lower value of the gross block at the beginning of the year as considered by the Commission.

The Petitioner has submitted that it has prepared both Fixed Asset and Depreciation registers. The same has been audited and submitted to the Commission along with the audited accounts for 2009-10 and 2010-11. The Department has also prepared the accounts for FY 2011-12.

The Net Fixed Assets at the beginning of FY 2011-12 and the Return @ 3 % of the Net Fixed Assets as per the unaudited accounts of FY 2011-12 as claimed are tabulated below:

**Table 71: Return on Capital Base claimed by the Petitioner for FY 2011-12**

Particulars ( Rs. Cr)	Claimed by petitioner as per unaudited accounts
Gross block at the beginning of the year	458.34
Opening CWIP	77.31
LESS Accumulated Depreciation	211.42
LESS Accumulated Consumer Contribution	-
LESS Opening Debt	13.16
<b>Net Fixed Assets at beginning of year</b>	<b>311.07</b>
<b>Return @ 3 % of NFA</b>	<b>9.33</b>

### Commission's Analysis

EDP being an integrated utility is entitled to return on capital base as per Regulation 23 of JERC Tariff Regulations. The treatment is as in the previous chapters, as per para 5.12 of this order. The return on capital base as per the provisions of the regulations is as below.

**Table 72: Return on Capital Base calculation by the Commission for FY 2011-12**

Sr. No.	Particulars	Approved
1	Gross block at beginning of the Year/Opening GFA	458.34
2	Opening CWIP	77.31
3	Less accumulated depreciation	211.42
4	Less accumulated consumer contribution	-
5	Less opening debt	13.16
6	Net fixed assets at beginning of the year	<b>311.07</b>
7	<b>Reasonable return @3% of NFA</b>	<b>9.33</b>

The Return on Capital Base as claimed and approved for the year is tabulated below.

**Table 73: Return on capital base approved by the Commission for FY 2011-12**

Particulars (Rs Cr)	Estimates submitted in the FY 11-12 petition	Revised Estimates FY 11-12	Approved in TO dated June 12' 2012	Petitioner Submission (unaudited accounts)	Approved
<b>Return on Capital Base</b>	12.21	12.27	2.37	9.33	9.33

**The Commission considers the Return on Capital Base of Rs. 9.33 Crores as reasonable and approves the same for provisional true-up of FY 2011-12.**

## 7.12 Revenue and Profit from outside sales /UI sales

### Petitioner’s submission

The Petitioner has submitted that the Revenue from Outside Sales/ UI Sales approved by the Commission in the Review of ARR for FY 2011-12 was Rs. 130.07 Crores. The Revenue from Outside Sales/ UI Sales as per unaudited accounts for FY 2011-12 is Rs. 167.78 Crores. This amounts to a UI revenue realization of Rs. 3.25/kWh as against Rs. 4.5/kWh considered by the Commission.

While approving the UI Sales for 2011-12, the Commission had treated the power procurement pertaining to UI sales differently. The Commission had determined the net profit / loss on account of UI sales and shown the same in “Other Income”. The unaudited accounts for 2011-12 show gross cost of all power purchased as power purchases in the Profit and Loss Account and the Sale proceeds on account of UI Sales in Other income. This is one other reason for the difference in the amounts approved by the Commission and the amounts claimed as per the unaudited accounts.

The Petitioner has submitted that this income should be treated under the head of ‘Non Tariff Income’ and should be reduced from the gross ARR to arrive at the net ARR.

### Commission’s analysis

The Commission has considered outside sales to be 516.5 MU and approves the revenue from outside/UI sales at Rs 167.78 Crores as per the unaudited accounts to be reasonable and treated as part of the ‘Non tariff Income’.

The ‘revenue from outside sales’ as submitted by the Petitioner and as approved by the Commission is tabulated below.

**Table 74: Revenue from outside sales approved by the Commission for FY 2011-12**

Particulars (Rs Cr)	Estimates submitted in the FY 11-12 petition	Revised Estimates FY 11-12	Approved in TO dated June 12’ 2012	Petitioner Submission (unaudited accounts)	Approved
Revenue and profit from outside sales	136.25	138.10	130.07	167.78	167.78

### 7.13 Non-Tariff Income

#### Petitioner's submission

The non-tariff income comprises of metering, late payment charges, interest on staff loans, reconnection fee, miscellaneous revenue etc.

The Non-Tariff Income approved by the Commission in the Review of ARR for FY 2011-12 was Rs. 9 Crores. The Non-Tariff Income as per unaudited accounts for FY 2011-12, is Rs. 3.05 Crores. The Non-Tariff Income under this head is clubbed with Revenue from Outside Sales / UI Sales under the broad head of Non-Tariff Income. The total non-tariff income for FY 2011-12 is Rs 170.83 Crores.

#### Commission's analysis

The 'other income' as submitted by the Petitioner of Rs 3.05 Crores is considered reasonable and hence approved. This taken together with the 'Revenue from outside sales /UI sales' approved above gives total approved sum of Rs 170.83 Crores under the head of 'Non Tariff Income'.

**Table 75: Non tariff income approved by the Commission for FY 2011-12**

Particulars (Rs Cr)	Estimates submitted in the FY 11-12 petition	Revised Estimates for FY 11-12	Approved in TO dated June 12' 2012	Petitioner Submission (unaudited accounts)	Approved
<b>Non Tariff Income (including revenue and profit from UI sales)</b>	143.25	147.10	139.07	170.83	170.83

**The Commission considers the non-tariff income of Rs 170.83 Crores as reasonable and approves the same for provisional true-up of ARR for FY 2011-12.**

### 7.14 Aggregate Revenue Requirement for FY 2011-12

#### Petitioner's submission

The Petitioner has submitted the net revenue requirement for FY 2011-12 as Rs 1061.50 Crores based on the items of expenditure discussed above. This is as per the unaudited accounts against the earlier submitted estimate of Rs 966.69 Crores by the Petitioner.

## Commission's analysis

Based on the items of expenditure discussed in the preceding sections, the Commission approves the aggregate revenue requirement for FY 2011-12 at Rs 1036.49 Crores. The same has been summarized in the table below.

**Table 76: Aggregate Revenue Requirement approved by the Commission for FY 2011-12**

Particulars (Rs Crores)	Estimates submitted in the FY 11-12 petition	Revised Estimates for FY 11-12	Approved in TO dated June 12' 2012	Petitioner Submission (unaudited accounts)	Approved
Cost of power purchase	975.50	997.30	901.73	1,110.25	1,095.08
Employee Costs	52.55	52.55	52.55	56.59	54.15
A&G expenses	3.91	3.91	3.91	4.44	4.44
R&M Expenses	10.34	10.34	10.34	16.17	16.17
Depreciation	25.07	25.07	6.00	20.28	20.28
Interest & Finance Charges	1.95	1.95	1.95	2.40	7.87
Interest on Working Capital	10.18	10.40	NIL	12.86	NIL
Provision for bad debts	NIL	NIL	NIL	NIL	NIL
Return on NFA @ 3% of NFA	12.21	12.27	2.37	9.33	9.33
Amortisation of regulatory asset proposed for previous years	-	-	-	-	-
<b>Total</b>	<b>1,091.71</b>	<b>1,113.79</b>	<b>978.85</b>	<b>1,232.33</b>	<b>1,207.32</b>
Less Non tariff Income	143.25	147.10	139.07	170.83	170.83
<b>Aggregate revenue requirement</b>	<b>948.46</b>	<b>966.69</b>	<b>839.78</b>	<b>1,061.50</b>	<b>1036.49</b>

## 7.15 Revenue from existing tariff

### Petitioner's submission

The Petitioner has submitted the Revenue from Tariff for FY 2011-12 as per unaudited accounts comes to Rs. 690.50 Crores. The Revenue from Tariff for FY 2011-12 approved by the Commission was Rs. 692.51 Crores. There is a minor change in the Revenue from Tariff as per the unaudited accounts for FY 2011-12 and claimed as per the unaudited accounts from the figures approved by the Commission.



## Commission's analysis

As per the sub-regulation 2 (i) of regulation 8 of JERC tariff regulations 2009, the Commission considers the revenue of Rs. 690.5 Crores from the sale of power within the state as per the unaudited accounts as reasonable and approves the same for provisional true-up of FY 2011-12.

**Table 77: Revenue from tariff approved by the Commission for FY 2011-12 (Rs Crores)**

Particulars	Estimates submitted in the FY 11-12 petition	Revised Estimates for FY 11-12	Approved in TO dated June 12' 2012	Petitioner Submission (unaudited accounts)	Approved
Revenue from tariff	692.8	696.6	692.51	690.50	690.50

### 7.16 Revenue Gap for FY 2011-12

The revenue gap approved for the year is Rs 346.01 Crores on the basis of the approved aggregate revenue requirement of Rs 1036.49 Crores and the revenue from tariff of Rs. 690.5 Crores for FY 2011-12.

**Table 78: Revenue Gap approved by the Commission for FY 2011-12 (Rs Crores)**

Particulars (Rs Cr)	Estimates submitted in the FY 11-12 petition	Revised Estimates for FY 11-12	Approved in TO dated June 12' 2012	Petitioner Submission (unaudited accounts)	Approved
Net Revenue Requirement	948.46	966.69	839.78	1061.50	1036.49
Revenue from tariff	692.8	696.60	692.51	690.50	690.50
<b>Revenue Gap for the year</b>	<b>255.66</b>	<b>270.09</b>	<b>147.27</b>	<b>371.00</b>	<b>346.01</b>
Gap of previous years	172.80	172.80	78.43	175.84	155.73
Carrying Cost	-	-	-	-	-
<b>Cumulative Gap</b>	<b>428.46</b>	<b>442.89</b>	<b>225.70</b>	<b>546.85</b>	<b>501.74</b>

The revenue gap of Rs 346.01 Crores not considering the previous year(s) gap has been considered; further, considering the gap of the previous years, the revenue gap of Rs. 501.74 Crores is considered to be reasonable and approved for provisional true-up of ARR for FY 2011-12, subject to further adjustment at the time of true-up based on the audited accounts. The same has been carried over to revenue gap of the next year i.e. FY 2012-13.

## **8. Review of ARR for FY 2012-13**

### **8.1 Background**

The petition for the determination of ARR & Tariff for FY 2013-14 contains the revised estimates for FY 2012-13. The Petitioner has sought the approval of the revenue gap for FY 2012-13 based on the revised estimates. The Petitioner has considered the actual performance for the first six months of FY 2012-13 and revised projections for the year to arrive at the revised revenue gap for the year.

The Commission has taken into consideration the following for the Review of ARR for FY 2012-13:

- i. Trued-up ARR for FY 2009-10 based on the audited accounts
- ii. Trued-up ARR for FY 2010-11 based on the audited accounts
- iii. Actual unaudited figures for FY 2011-12 based on the unaudited accounts, subject to adjustment if any at the time of true-up based on audited accounts
- iv. Actual performance for the first six months of FY 2012-13

### **8.2 Consumers, Connected Load and Energy Sales**

#### **Petitioner's Submission**

The Petitioner has submitted the revised sales at 2382.5 MU against the Commission approved figure of 2387.6 MU in its order dated June 12' 2012.

The Petitioner has submitted that the first few months of the financial year are summer months in Puducherry, and typically witness higher than average consumption. This year has been no exception to this trend resulting in more sale of electricity than normal. As the monsoons arrive, consumption typically moderates. EDP has maintained a close watch of trends of electricity sales over the years and our revised numbers are based on these experiences. The revised numbers in LT are by and large only a few MUs lower than what was projected in the ARR petition for 2012-13 and subsequently approved by JERC. The major additions from these values are with LT Industrial, HT 2 and HT 3 categories. The overall net effect of the revisions is a very marginal 5 MU lower than the approved value of sales.

The total sales estimated for FY 2012-13 are 2382.5 MU and the total consumer base of 394539.

The connected load for the agriculture category is 59660 HP and for the HT categories is estimated at 350803 kVA.

**Commission’s Analysis**

**Consumers**

The Commission has analyzed the past trends of the consumer base. The Commission observes that the Petitioner has submitted a downward revision in the consumer numbers for FY 2012-13 and has also submitted a marginal decrease in the sales figures for FY 2012-13 from the sales approved by the Commission in its tariff order dated June 12’ 2012. Further, the revision in numbers is based on the actual performance in the first half of the year. The Commission for the purpose of this ‘Review’ has retained the consumer numbers at the level approved in the last year’s order as considered reasonable, subject to further adjustment at the time of true-up based on actual performance.

**Table 79: Number of consumers approved by the Commission for FY 2012-13**

Consumer Category	Estimates submitted in the FY 12 -13 petition	Approved in TO dated June 12’ 2012	Petitioner Submission	Approved (Review)
<b>Domestic</b>	300439	300432	289479	300432
<b>Commercial</b>	43156	43144	43195	43144
<b>Agriculture</b>	6810	6810	6842	6810
<b>Street Lighting</b>	49438	49438	48436	49438
<b>LT Industrial</b>	6212	6210	6115	6210
<b>Temporary Supply</b>	-	-	-	0
<b>HT Industrial</b>	412	412	418	412
<b>HT state and Central Govt Establishments</b>	41	41	46	41
<b>HT Industrial Extra High Tension</b>	7	7	8	7
<b>TOTAL</b>	<b>406515</b>	<b>406494</b>	<b>394539</b>	<b>406494</b>

## **Connected Load**

The Commission observes that the connected load for the agriculture category has been revised upward to 59660 HP from 59538 HP. Similarly, there is an upward revision in the load of the HT 1 category. The Commission has analyzed the past trends of the connected load and for the purpose of this 'Review' has retained the connected load at the level approved in the last year's order as considered reasonable, subject to further adjustment at the time of true-up based on actual performance.

**Table 80: Connected Load approved by the Commission for FY 2012-13**

<b>Consumer Category (Connected Load Units in HP/kVA)</b>	<b>Estimates submitted in the FY 12 -13 petition</b>	<b>Approved in TO dated June 12' 2012</b>	<b>Petitioner Submission</b>	<b>Approved (Review)</b>
<b>Domestic</b>	-	-	-	-
<b>Commercial</b>	-	-	-	-
<b>Agriculture (HP)</b>	59538	59538	59660	59538
<b>Street Lighting</b>	-	-	-	-
<b>LT Industrial</b>	-	-	-	-
<b>Temporary Supply</b>	-	-	-	-
<b>HT Industrial (kVA) (HT 1)</b>	250492	250492	256043	250492
<b>HT state and Central Govt Establishments(kVA)(HT 2)</b>	14265	14265	14265	14265
<b>HT Industrial Extra High Tension (kVA) (HT 3)</b>	80495	80495	80495	80495

## Energy Sales

The Commission has noted that the H1 sales for the year are 1225.7 MU. The Commission has analyzed the H1 and H2 split of the sales for FY 2011-12 based on actual and has projected the H2 sales for FY 2012-13 based on the ratio of H1 and H2 sales in FY 2011-12, for the metered categories. For the unmetered categories, the normative approach as discussed in the earlier chapters has been followed.

For the OHOB consumers, the consumption norm of 175.2 units/consumer/year is considered reasonable as explained in para 5.3, assuming 2 fluorescent tube lights each of 40 W running 6 hours per day. This taken together with the number of consumers considered for the year of 35,447 results in 6.21 MUs against the claim of 9.8 MUs of the Petitioner. The Commission considers the consumption of 6.21 MU as reasonable and approves the same. The OHOB sales have been clubbed in the category of 'Domestic' in the below table.

For the agriculture category, the consumption norm of 951.1units/HP/year is considered reasonable as per the TNERC order dated 30<sup>th</sup> March 2012 for reasons explained in para 5.3. Consumption has been projected on the connected load of 59538 HP to arrive at the sales of 56.63 MU. The Commission considers the consumption of 56.63 MUs as reasonable and approves the same for FY 2012-13.

The total sales approved for the year are 2348.49 MU.

The sales approved for the respective consumer categories are as below.

**Table 81: Energy Sales approved by the Commission for FY 2012-13**

Consumer Category	Estimates submitted in the FY 12 -13 petition (MU)	Approved in TO dated June 12' 2012	Petitioner Submission	Approved (Review)
<b>Domestic</b>	629.0	623.2	577.5	519.31
<b>Commercial</b>	185.0	184.0	179.9	170.89
<b>Agriculture</b>	76.7	56.63	56.6	56.63
<b>Street Lighting</b>	26.0	26.0	26.1	24.67
<b>LT Industrial</b>	169.0	169.1	191.8	197.47
<b>Temporary Supply</b>	25.0	25.0	20.0	10.89
<b>HT Industrial</b>	1027.0	1027.3	969.9	977.75
<b>HT state and Central Govt Establishments</b>	40.0	39.9	45.0	53.49

<b>HT Industrial Extra High Tension</b>	236.0	236.5	315.7	337.38
<b>TOTAL</b>	<b>2414.53</b>	<b>2387.6</b>	<b>2382.5</b>	<b>2348.49</b>

### 8.3 Energy Losses

#### Petitioner’s Submission

The Petitioner has proposed to achieve a T&D loss percentage of 13.35% for FY 2012-13, based on the projected sales of 2,414.5 MU and energy input of 2786.5 MU. The Commission had approved a loss level of 12.5%, based on approved sales of 2387.5 MU. The actual sales for the first 6 months of FY13 are 1291.4 MU, with a net energy input of 1630 MU, showing a T&D loss of 13.10%.

The Petitioner has submitted that as it operates a relatively smaller system, reduction in losses becomes progressively more difficult due to technical parameters. This value can be conclusively determined only after all DTRs are metered under the approved R-APDRP scheme and a full load flow study is conducted.

Losses in the LT distribution system are higher, given the lower voltage and older assets. Considering that the HT:LT system ratio is 1:3.4, and much higher technical losses in the lower voltage system, significant improvement needs to be made in the LT distribution system to progressively reduce the losses. Given the paucity of funds required to make the requisite improvement in the LT system, the Petitioner has revised the loss figure for FY 2012-13 and has proposed the T&D loss figure at 13.00% for FY 2012-13.

#### Commission’s analysis

The Commission observes that the Petitioner has revised the loss level to 13.00% for FY 2012-13 and has submitted actual H1 FY 2012-13 losses at 13.18%. The Commission appreciates the efforts made by the Petitioner in the reduction of T&D losses and desires the licensee to be more efficient in the achievement of T&D losses.

The Commission has analyzed the past trends of the T&D loss levels and retains the T&D loss as approved in last year’s tariff order dated June 12’ 2012 as reasonable. The Commission has considered a reduction of 0.5% per year in the T&D loss reduction trajectory since FY 2009-10.

**Table 82: Energy losses approved by the Commission for FY 2012-13**

Particulars	Estimates submitted in the FY 12 -13 petition	Approved in TO dated June 12' 2012	Petitioner Submission	Approved (Review)
Energy Losses	13.35%	12.50%	13.00%	12.50%

**The Commission considers the loss level of 12.50% as approved in the tariff order dated June 12' 2012 as reasonable and considers the same as approved for the 'Review' of FY 2012-13.**

## 8.4 Energy Balance

### Petitioner's submission

The Petitioner has submitted that the actual sales for the first 6 months of FY13 are 1291.4 MU, with a net energy input of 1630 MU, showing a T&D loss of 13.10%. The Petitioner has submitted that due to the current power supply position of the UT together with the allocations, EDP would be in a comfortable position to serve load fully with only a very marginal increase in power purchase and expects that any excess power available will be sold through UI.

The UI sales in the first 6 months have already reached 145.87 MU. The revised estimate for metered import and UI sales is 2,975.3 MU & 470.9 MU respectively.

The Petitioner has submitted that based on trends in power purchase from previous years and marginally higher allocations, the power purchase for 2HFY13 and the total for FY13 have been estimated. The revised estimate for power purchase is 3,358.4 MU. The power availability at periphery is revised to 3209.4 MU with estimated UI sales of 470.9 MU.

Basis the above, the energy balance for FY 2012-13 has been revised.

### Commission's analysis

Based on the approved sales of 2348.49 MU and internal losses of 12.50%, the energy requirement for sale within the territory is approved at 2683.99 MU.

The Commission has allowed the sales outside the state/UI sales at 145.87 MU (as per the actual H1 of FY 2012-13) resulting in the net energy requirement at the periphery of 2829.86 MU. The sales outside the state have been allowed corresponding to the first half actual in FY

2012-13. Merit order principles have been adopted for estimating the energy requirement for H2 of FY 2012-13 and accordingly only that much power purchase has been estimated as required to meet the requirement within the territory. Therefore, no surplus sale of power has been considered for H2 of FY 2012-13.

The Commission has considered the gross power purchase of 2944.74 MU as per the projections of the Commission. The detailed analysis of the power purchase from the different sources has been discussed in para 8.5. The external losses have been approved at 114.88 MU, resulting in the net energy availability of 2829.86 MU. The actual power purchase for H1 has been considered and merit order principles have been adopted for estimating the energy requirement for H2 of FY 2012-13.

The table below captures the values as submitted by the Petitioner and that approved for FY 2012-13.

**Table 83: Energy balance approved by the Commission for FY 2012-13**

Consumer Category	Estimates submitted in the FY 12 -13 petition	Approved in TO dated June 12' 2012	Petitioner Submission	Approved (Review)
<b>ENERGY REQUIREMENT</b>				
Energy sales in the UT	2,414.53	2387.56	2382.52	2,348.49
Distribution losses (%age)	13.35%	12.50%	13.00%	12.50%
Energy required for the Territory (MU)	2,786.53	2728.64	2738.53	2,683.99
Add: Sales to common pool consumers/ UI	398.90	466.55	470.89	145.87
<b>Energy Requirement @ periphery</b>	<b>3,185.43</b>	<b>3195.19</b>	<b>3209.42</b>	<b>2,829.86</b>
<b>ENERGY AVAILABILITY</b>				
Gross Energy Purchase	3334.5	3345.09	3358.36	2,944.74
External losses (MU)	148.9	149.90	148.94	114.88
<b>Net Energy Availability</b>	<b>3185.60</b>	<b>3195.19</b>	<b>3209.42</b>	<b>2,829.86</b>



## 8.5 Power Purchase Quantum and Cost

### Petitioner's submission

The Petitioner has submitted that the actual power purchase for the first half of FY 2012-13 has been 1691.7 MU and Rs. 486.6 Crores. Based on trends in power purchase from previous years and marginally higher allocations, the power purchase for 2HFY13 and the total for FY13 have been estimated. The revised estimate for power purchase is 3,358.4 MU. The power availability at periphery is revised to 3209.4 MU with estimated UI sales of 470.9 MU.

The variation in power purchase cost in FY 2012-13 is on account of increased allocation, revised tariffs, FPPCA and arrears that have become due in this fiscal. The Petitioner has claimed power purchase cost of Rs 1027.4 Crores for FY 2012-13.

### Commission's Analysis

The Commission has considered the submission of the Petitioner for actual H1 FY 2012-13. The Commission has considered the purchase of 1691.7 MU and cost of Rs 486.6 Crores for H1 of FY 2012-13. This includes the UI over-drawal of 8.0 MU at a cost of Rs 2.9 Crores for H1 of FY 2012-13.

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

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

- **Share Allocation:** The Commission has considered the firm allocation and allocation from the unallocated quota from the above stations as per the notification of the Southern Region Power Committee vide SRPC Order No: SRPC/SE-I/54/UA/2012 dated 26-11-2012, effective from 00:00 Hrs of 29-11-2012 and SRPC Order No: SRPC/SE-I/54/UA/2012 dated 20-11-2012. The Rev-5 as available on the SRLDC site has been used for the allocation to the beneficiaries effective 29.11.2012. NTECL Vallur STPS unit#1 has attained COD effective 29.11.2012 and its allocation has accordingly been considered at 0.48% as per the SRPC letter dated 29.11.2012.

- **Gross Energy Availability:** The Commission has estimated the gross energy availability from the existing stations based on the installed capacity and the average Plant Load Factor for the past years (FY 2010-11, FY 2011-12 and FY 2012-13, as available till date). The Net energy sent out has been considered after considering the applicable auxiliary consumption as per the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009. For PPCL, the PLF as assumed by the Petitioner has been considered to be reasonable and accordingly considered.
- **Fixed Charges:** The fixed charges are considered based on the formula specified for the stations in the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009-14. The Annual Fixed Charges for each station have been taken as per the latest tariff orders for the respective stations. For plants having been in operation for less than 10 years i.e. NLC TS II Stage II, Ramagundam STPS Stage III, Talcher STPS Stage II and Simhadri the formula for determination of monthly fixed charges has been suitably modified
- **Variable Charges:** The Commission has considered the average variable cost for the period April 2012 to September 2012 (as per actual) for consideration of the per unit variable charges for H2 of FY 2012-13 for plants whose variable charges were not available as per the tariff orders. For nuclear plants, Madras APS and Kaiga the unit rate of Rs 1.79/unit and Rs 2.80/unit has been considered.
- For TNEB, the revised rate of Rs 3.10/unit has been considered. For KSEB, the bulk supply tariff rate as approved by KSERC for KSEB has been used at Rs 3.16/unit. For PPCL, the average variable cost of the H1 period has been considered at Rs 2.53/unit. For NTECL Vallur, the average rate as considered by the Petitioner has been considered to be reasonable and considered at Rs 2.64/unit.
- The Commission has considered the nuclear plants as must run and has not subjected them to merit order dispatch. TNEB (Pondy), TNEB (Karaikal), KSEB and PPCL have been considered as must run and not subject to merit order principles.
- For determining the power purchase cost for H2, merit order dispatch principles have been applied. The must-run stations have been assumed at the top of the merit order and variable cost incurred for meeting the energy requirement within the state has been calculated from the plants at the top of the merit order.

- Fixed Charges and Other Charges from all the generating stations (irrespective of the merit order) have been considered for arriving at the power purchase cost.
- As per the merit order principles adopted by the Commission for estimating the energy requirement for H2 of FY 2012-13, no surplus sale of power has been considered for H2 of FY 2012-13 and power purchase corresponding to meet the requirement within the territory has been estimated. The UI over-drawal has not been considered for H2 of FY 2012-13.
- **PGCIL losses:** Losses have been assumed at 5% as submitted by Petitioner to be reasonable and at 4% for TNEB. For PPCL and KSEB, being within the periphery of the utility area external loss has been considered as nil.

### **Transmission Charges**

The Commission has considered the PoC rates as specified by the Central Electricity Regulatory Commission vide its order no L-1/44/2010 CERC dated 31.11.2012 applicable from October 2012 to March 2013 for approving the Transmission charges for H2 of FY 2012-13. Accordingly, the transmission charges for usage of the PGCIL network are approved at Rs. 27.72 Crores for H2 FY 2012-13.

The Commission has considered the KPTCL and SRLDC charges of Rs 0.01 Crores and Rs 0.44 Crores as estimated by the Petitioner to be reasonable and approved for H2 of FY 2012-13.

Further, the Commission has considered the 'other charges' at Rs 8.70 Crores for H2 at the same level as submitted by the Petitioner for actual H1 of FY 12-13 to be reasonable and allowed.

### **Renewable Purchase Obligations**

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

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

The petitioner had to purchase 3% of total power purchase from renewable sources for FY 2012-13 consisting 0.40% from Solar and 2.60% from Non-Solar sources. The Commission has observed that as per the actual power purchase cost and quantum furnished by the

Petitioner for the first half actual FY 2012-13, it has not procured power from renewable sources of energy and hence not meeting its RPO obligations.

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

The Commission has assumed that the utility would meet its RPO targets during H2 of FY 2012-13 through the purchase of REC certificates. The Solar REC trading price of Rs 9500/REC and non-solar trading price of Rs 1500/REC has been assumed as submitted by Petitioner to be reasonable and allowed.

The RPO compliance cost for H2 works out at Rs 8.65 Crores and has accordingly been considered by the Commission.

Accordingly, the Commission has approved power purchase quantum of 1253.04 MU and cost of Rs 406.63 Crores for H2 of FY 2012-13, including the transmission charges of Rs 27.72 Crores.

**The Commission, therefore, allows the total power purchase quantum and cost at 2944.74 MU and Rs 893.23 Crores for FY 2012-13.**

**Table 84: Power Purchase Quantum approved by the Commission for H2 of FY 2012-13**

Source	Capacity (MW)	PLF (in %)	Gross Generation (MU)	Auxiliary Consumption (%)	Net Generation (MU)	Firm allocation to EDP (%)	Purchase (MU)
<b>NPCIL</b>							
Madras APS	440	69.31	1,335.74	10%	1,202.17	1.88%	22.58
Kaiga APS stage 1	880	69.22	2,668.02	10%	2,401.21	4.29%	102.89
<b>TNEB (Pondy)</b>							55.54
<b>TNEB (Karaikal)</b>							186.33
<b>KSEB</b>							18.18
<b>PPCL</b>							118.81
Talcher STPS Stage II	2,000	83.30	7,296.79	6.50%	6,822.50	3.81%	259.94
Ramagundam STPS Stage I & II	2,100	91.11	8,380.60	6.50%	7,835.87	4.96%	388.66

Source	Capacity (MW)	PLF (in %)	Gross Generation (MU)	Auxiliary Consumption (%)	Net Generation (MU)	Firm allocation to EDP (%)	Purchase (MU)
NLC TS I Expn	420	83.99	1,545.02	9.50%	1,398.24	4.04%	56.49
Ramagundam STPS Stage III*	500	91.11	1,995.38	7.20%	1,851.71	5.24%	43.62
Simhadri Stage II*	500	90.40	1,979.83	6.00%	1,861.04	1.75%	-
<b>NLC</b>							
TS II Stage I*	630	74.40	2,053.09	10.00%	1,847.78	12.20%	-
TS II Stage II*	840	84.91	3,123.89	10.00%	2,811.50	3.64%	-
<b>NTECL unit 1, Vallur*</b>	500	28.33	620.43	6.50%	580.10	0.48%	-
<b>UI</b>			-		-		-
<b>TOTAL PPC for H2 FY 12-13</b>			<b>31,124.51</b>		<b>28,730.93</b>		<b>1253.04</b>

\* The purchase from these plants has been considered as per merit order

**Table 85: Power Purchase Cost Charges approved by the Commission for H2 of FY 2012-13**

Source	Purchase (MU)	Fixed Charges (Rs Cr)	VC (Rs/kWh)	VC (Rs Cr)	Total (Rs Cr)
<b>NPCIL</b>					
Madras APS	22.58	-	1.79	4.04	4.04
Kaiga APS stage 1	102.89	-	2.80	28.81	28.81
<b>TNEB (Pondy)</b>	55.54	-	3.10	17.22	17.22
<b>TNEB (Karaikal)</b>	186.33	-	3.10	57.76	57.76
<b>KSEB</b>	18.18	-	3.16	5.75	5.75
<b>PPCL</b>	118.81	13.36	2.53	30.06	43.41
Talcher STPS Stage II	259.94	11.08	1.50	38.91	49.99
Ramagundam STPS Stage I & II	388.66	23.13	1.51	58.65	81.79
NLC TS I Expn	56.49	8.12	1.73	9.77	17.89

Ramagundam STPS Stage III*	43.62	9.14	1.81	7.91	17.05
Simhadri Stage II*	-	14.87	1.86	-	14.87
<b>NLC</b>					
TS II Stage I*	-	15.92	1.92	-	15.92
TS II Stage II*	-	5.99	1.92	-	5.99
<b>NTECL unit 1, Vallur*</b>	-	0.63	2.64	-	0.63
<b>UI</b>	-	-		-	-
<b>Other Charges</b>					
KPTCL					0.01
SRLDC					0.44
PGCIL					<b>27.72</b>
<b>RPO compliance cost</b>					<b>8.65</b>
<b>OTHER CHARGES</b>					<b>8.70</b>
<b>TOTAL PPC for H2 FY 12-13</b>	<b>1253.04</b>	<b>102.23</b>		<b>258.89</b>	<b>406.63</b>

\* The purchase from these plants has been considered as per merit order

**Table 86: Summary of power purchase quantum and cost approved for FY 2012-13**

Sr. No.	Particulars	Units Purchased (MU)	Total Cost (Rs Crores)
1	Power Purchase for H1 FY 2012-13	1691.70	486.60
2	Power Purchase for H2 FY 2012-13	1253.04	406.63
<b>3</b>	<b>Total Power Purchase for FY 2012-13</b>	<b>2944.74</b>	<b>893.23</b>

**Table 87: Power purchase quantum and cost approved by the Commission for FY 2012-13**

Particulars	Estimates submitted in the FY 12 -13 petition	Approved in TO dated June 12' 2012	Petitioner Submission	Approved (Review)
<b>Power Purchase Quantum (MU)</b>	3334.50	3345.09	3358.4	2944.74
<b>Power Purchase Cost (Rs Crores)</b>	997.80	868.02	1027.4	893.23

## 8.6 Operation and Maintenance Expenses

The Operation and Maintenance (O&M) expenses comprising of the employee expenses, A&G expenses, and R&M expenses have been discussed in the following sections.

### Employee Cost

#### **Petitioner's submission**

The Petitioner has submitted that in the petition for FY 2012-13, the total employee cost estimated was Rs 54.80 Crores, net of capitalization of 21.09 Crores. In the accounts prepared for 1HFY13, the employee cost works out to Rs 26.54 Crores, and there was a capitalization of 9.72 Crores.

Further, the Petitioner has submitted that historically, the rate of implementation of capital schemes, and associated capitalization affect the applicable employee costs (which will also be capitalized). The Petitioner expects that a conservative estimate of the capital expenditure and implementation for the rest of the year would not be as much as that of 2011-12. This is in light of the fact that the EDP is experiencing a paucity of funds for the same. Thus, the revised estimate of the component of employee cost to is projected at a slightly higher rate.

Therefore, EDP has revised the original estimation for employee costs upwards to Rs 60.97 Crores.

#### **Commission's Analysis**

The Commission has considered the employee expenses in line with the JERC Tariff Regulations, limited to the expenses as submitted by the Petitioner.

The employee expenses of FY 2011-12 (without excluding the employee expenses towards non-core activities) have been escalated by the WPI factor of 8.94%<sup>4</sup> to arrive at the expenses for FY 2012-13. The WPI index till March 2012 has been used as available on the website of Economic Advisor, Ministry of Commerce and Industry for estimation of the increase in the employee expenses from FY 2011-12 to FY 2012-13. The capitalization of the employee expenses has been taken in the same proportion of the gross employee expenses as in the actual of 2010-11. This results in the employee expenses of Rs 61.14 Crores. However, the

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<sup>4</sup> Latest WPI index upto March 2012 has been used as available on the website of Economic Advisor, Ministry of Commerce and Industry

Commission has limited the approval of the employee expenses to Rs 60.97 Crores, net of the capitalization of Rs 11.55 Crores as submitted by the Petitioner as reasonable and further deducted the employee expenses towards the non-core activities from this. The Commission will consider the actual employee expenses at the time of true-up once the audited accounts are furnished, subject to prudence check.

**Table 88: Employee expenses approved by the Commission for FY 2012-13**

Particulars (Rs Cr)	Estimates submitted in the FY 12 -13 petition	Approved in TO dated June 12' 2012	Petitioner Submission	Approved (Review)
<b>Employee Expenses</b>	54.79	54.79	60.97	58.40

**The Commission considers the employee expenses of Rs. 58.40 Crores as reasonable and approves the same for review of FY 2012-13, subject to the true-up of FY 2012-13.**

### **Administrative and General Expenses**

#### **Petitioner's submission**

The Petitioner has submitted that in the petition for FY 2012-13, the total A&G expenditure estimated was Rs 3.91 Crores which was approved by the Commission.

In 1HFY13, the A&G expenditure works out to 2.47 Crores and for the full year the Petitioner has estimated double this value which works out to Rs. 4.93 Crores, which is approximately 0.66% of value of revenue from normal tariff for the year.

#### **Commission's analysis**

The approved expenses of FY 2011-12 have been escalated by the WPI factor of 8.94% to arrive at the expenses for FY 2012-13 limited to the submission of the Petitioner, as considered reasonable and hence approved. The approved A&G expenses of Rs 4.44 Crores for FY 2011-12 have been escalated by 8.94%, to arrive at the A&G expenses of Rs 4.84 Crores for FY 2012-13.



**Table 89: A&G expenses approved by the Commission for FY 2012-13**

Particulars (Rs Cr)	Estimates submitted in the FY 12 -13 petition	Approved in TO dated June 12' 2012	Petitioner Submission	Approved (Review)
<b>A&amp;G Expenses</b>	3.91	3.91	4.93	4.84

**The Commission considers the A&G expenses of Rs 4.84 Crores as reasonable and approves the same for review of FY 2012-13.**

### **Repair and Maintenance Expenses**

#### **Petitioner's submission**

The Petitioner has submitted that in the petition for FY 2012-13, the total R&M expenditure estimated was 10.77 Crores which was approved by the Commission.

In 1HFY13, the R&M expenditure works out to 8.53 Crores, and for the full year, the Petitioner has estimated double this value which works out to Rs. 17.06 Crores, which is approximately 3.4% of value of assets in service during the year.

#### **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 utility.

The Commission has applied the escalation factor of 8.94% per annum for estimation of the increase in the R&M expenses from the approved figures of FY 2011-12 of Rs 16.17 Crores, to estimate the R&M expenses for FY 2012-13. The WPI index till March 2012 has been used as available on the website of Economic Advisor, Ministry of Commerce and Industry for estimation of the increase in the R&M expenses from FY 2011-12 to FY 2012-13. This results in the R&M expense of Rs 17.62 Crores. However, the Commission has limited the approval of the R&M expenses to Rs 17.06 Crores as submitted by the Petitioner as reasonable and hence approved.

**Table 90: R&M expenses approved by the Commission for FY 2012-13**

Particulars (Rs Cr)	Estimates submitted in the FY 12 -13 petition	Approved in TO dated June 12' 2012	Petitioner Submission	Approved (Review)
<b>R&amp;M Expenses</b>	10.77	10.77	17.06	17.06

The Commission considers the R&M expenses of Rs. 17.06 Crores as reasonable and approves the same for review of FY 2012-13. The petitioner is directed to submit complete details and proper justification of actual R&M expenses at the time of true-up to enable the Commission to take a view in this regard.

**Summary of O&M Expenses approved for FY 2012-13**

The O&M expenses as submitted and approved for the year 2012-13 are as below:

**Table 91: O&M expenses approved by the Commission for FY 2012-13**

Particulars (Rs Cr)	Estimates submitted in the FY 12 -13 petition	Approved in TO dated June 12' 2012	Petitioner Submission	Approved (Review)
O&M Expenses	69.47	69.47	82.96	80.30

**8.7 GFA and Depreciation**

**Petitioner’s submission**

The Petitioner has submitted that in the petition for FY 2012-13, it had projected depreciation of 33.04 Crores for the full year against which the Commission had approved 9.38 Crores. The Petitioner has now revised the original estimate of depreciation to 23.4 Crores for FY 2012-13.

The Petitioner has submitted that the major difference between the Commissions’ approved amount and the revised estimate is on account of 2 factors. The Commission had not allowed depreciation on the opening GFA as on 1<sup>st</sup> April 2012 fully because the fixed asset registers were not ready at that time. These have now been prepared and submitted along with the True Up petition for 2009-10 and 2010-11. These have also been audited along with the accounts for the above years. Secondly, the original estimate was based on an increased amount of GFA at the beginning of the year and the planned capitalization during the year. The opening GFA has been reduced upon conduct of the audit and true up exercise to some extent and also the EDP has not incurred capital expenditure as planned for 2012-13 due to paucity of funds.

## Commission's analysis

### GFA and Capitalization

In line with the treatment of the GFA and capitalization done in the earlier chapters, the Commission considering the reasonableness of the expenditure approves the capitalization of Rs. 65.36 Crores for FY 2012-13.

**Table 92: Gross Fixed Assets approved by the Commission for FY 2012-13**

Particulars (Rs Cr)	Estimates submitted in the FY 12 -13 petition	Approved in TO dated June 12' 2012	Petitioner Submission	Approved (Review)
Opening Value of Assets at the beginning of the year	564.69	144.38	480.48	480.48
Additions during the year	66.36	66.36	65.36	65.36
<b>Gross Fixed Assets at the end of year</b>	<b>631.05</b>	<b>210.74</b>	<b>545.84</b>	<b>545.84</b>

### Depreciation

Depreciation has been calculated as per the Regulation 26 of JERC Tariff Regulations which specifies that depreciation for the assets shall be calculated annually at the rates specified by CERC from time to time. The Commission had raised a query to the Petitioner on the depreciation methodology followed by it, which was responded by the Petitioner vide its email dated April 8' 2013. The Commission as discussed in detail in para 5.9 of this order, has found the submission of the Petitioner to be reasonable. The Commission has not applied the applicable CERC rates on the average assets in place, since some of these assets have already attained the 90% limit. In the absence of the complete break-up of the assets which have attained the 90% depreciation limit, the Commission has considered the submission of the Petitioner as reasonable and approves the same for FY 2012-13.

The table below captures the depreciation as submitted and considered approved by the Commission.

**Table 93: Depreciation approved by the Commission for FY 2012-13**

Particulars (Rs Cr)	Estimates submitted in the FY 12 -13 petition	Approved in TO dated June 12' 2012	Petitioner Submission	Approved (Review)
<b>Depreciation</b>	33.04	9.38	23.39	23.39

Commission considers the depreciation of Rs. 23.39 Crores as reasonable and approves the same for FY 2012-13.

**The Commission considers the depreciation of Rs 23.39 Crores as reasonable and approves the same for Review of ARR for FY 2012-13.**

## 8.8 Interest and Finance Charges

### Petitioner's submission

The Petitioner has submitted that in its petition for FY 2012-13, it had estimated expenditure under this head of 1.88 Crores which was approved by the Commission.

In the accounts prepared for 1HFY13, the total expenditure under this head is 0.48 Crores to date, mainly on account of reduced finance charges. The Petitioner has submitted that in light of expectations for higher repayments in the second half of the year it has revised the original estimation for total expenditure under this head to Rs. 2.27 Crores.

### Commission's analysis

The Commission has considered the normative interest on the assets created during the year FY 2009-10 onwards excluding the opening capital base of FY 2009-10 as per the audited accounts for the year and has accordingly allowed interest on normative loan. The treatment is in line with true-up of ARR for FY 2009-10 & FY 2010-11 and as discussed in detail in para 5.9 of this order.

The Commission has considered an addition of Rs. 65.36 Crores in the Gross Fixed Assets for FY 2012-13 which are considered funded through normative debt to the tune of 70%. The Commission for the purpose of funding of the capitalization has considered the normative debt equity ratio of 70:30, whereby it has considered the addition in normative loan at Rs 45.75 Crores for FY 2012-13. The calculation of the interest on the normative loan is given below.

**Table 94: Normative interest on loan approved for FY 2012-13 (Rs Crores)**

Sr. No.	Particulars	Approved (FY 2012-13)
1	Opening Normative Loan	47.92
2	Add: Normative Loan during the year	45.75
3	Less: Normative Repayment	5.30
4	Closing Normative Loan	88.37
5	Average Normative Loan	68.15
6	Rate of Interest (@SBAR rate)	14.75%
<b>7</b>	<b>Interest on Normative Loan</b>	<b>10.05</b>

The Commission has also analyzed the nature of interest and finance charges as submitted by the Petitioner, and considering the reasonableness of the expenditure estimated by EDP, it allows Rs. 2.27 Crores for FY 2012-13. The Commission has considered the normative interest on the estimated capital expenditure for FY 2012-13 and has therefore considered it as an allowable expense as a special case for the purpose of Review of ARR for FY 2012-13.

The table below encapsulates the interest & finance charges as approved by the Commission.

**Table 95: Interest and Finance Charges approved by the Commission for FY 2012-13**

Particulars (Rs Cr)	Estimates submitted in the FY 12 -13 petition	Approved in TO dated June 12' 2012	Petitioner Submission	Approved (Review)
<b>Interest &amp; Finance Charges</b>	1.88	1.88	2.27	11.37

**The Commission considers interest and finance charges of Rs 11.37 Crores as reasonable and approves the same for Review of ARR for FY 2012-13.**

## 8.9 Interest on Working Capital and Interest on Consumer Security Deposit

### Petitioner's submission

The Petitioner has submitted interest on working capital as per the JERC Tariff Regulations. The rate of interest on working capital has been considered as 14.75%.

The Petitioner has submitted that in the original petition for FY 2012-13, it had projected expenditure under this head of 10.50 Crores which was totally disallowed by the Commission.

The normative interest on working capital for 1HFY 2012-13 is 6.44 Crores, and for the full year, the revised estimate of expenditure is Rs 13.65 Crores.

### Commission's analysis

The Commission has considered the calculation of the different components of the interest on working capital as per the JERC Tariff Regulations. The Commission has considered that the amount collected from the consumers as security deposit is available with the Petitioner and has treated this as available to meet part of working capital requirement for FY 2012-13.

In line with the treatment of the working capital done in the previous chapters, the Commission has considered the receivables equivalent to two months billing, as security deposit available with the Petitioner, as a source to meet working capital requirements and has deducted this amount from the working capital considered for calculation of the interest on working capital for FY 2012-13.

The Commission clarifies that the SBI PLR rate has now been substituted as SBI Advance Rate.

The Commission has considered the SBI advance rate of 14.75%<sup>5</sup> as on 1<sup>st</sup> April 2012 for Review of ARR for FY 2012-13.

**Table 96: Interest on working capital approved by the Commission for FY 2012-13**

Particulars (Rs Cr)	Estimates submitted in the FY 12 -13 petition	Approved in TO dated June 12' 2012	Petitioner Submission	Approved (Review)
Power Purchase Cost for one month	83.15	72.34	85.62	70.28
Employee Cost for one month	4.57	4.57	5.08	4.87
A&G Expenses for one month	0.33	0.33	0.41	0.40
R&M Expenses for one month	0.90	0.90	1.42	1.42
<b>Total Working Capital for one month</b>	<b>88.95</b>	<b>78.12</b>	<b>92.53</b>	<b>76.97</b>
Closing Security Deposit (amount already with EDP)	-	107.68	-	133.32
<b>Total Working Capital considered for one month</b>	88.95	(29.56)	92.53	(56.35)
<b>SBI PLR Rate</b>	<b>11.75%</b>	<b>14.75%</b>	<b>14.75%</b>	<b>14.75%</b>
<b>Interest on Working Capital</b>	<b>10.50</b>	<b>NIL</b>	<b>13.65</b>	<b>NIL</b>

<sup>5</sup> SBI advance rate notified on 14.02.2011; Thereafter four revisions in the SBI advance rate was notified in FY 2011-12, and are as under: 25.04.2011- 13.25%; 12.05.2011-14%; 11.07.2011-14.25%; 13.08.2011 – 14.75%; 27.09.2012 – 14.50%

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

The Commission also allows the interest of Rs 12.67 Crores, on the assessed security deposit of Rs 133.32 Crores at the bank rate of 9.50%, to be recovered as part of the ARR and to be paid to the consumers effective 1<sup>st</sup> April 2012. This should be paid to the eligible consumers and actual expenditure be shown at the time of true-up.

### 8.10 Provision for bad and doubtful debts

#### Petitioner’s submission

The Petitioner has submitted that it has already commenced on steps to analyze its sundry debtors and arrears, and obtain an age-wise breakup of the same from the revenue billing system. It also is in the process of reconciling the list of arrears with the sundry debtor balances as per the financial statements. This process is likely to take a significant amount of time and effort.

Further, the Petitioner has stated that since it has not been able to provide the analysis required, they are not claiming any provision for bad & doubtful debts for pass through in tariff to consumers.

#### Commission’s analysis

The Commission agrees with the submission of the Petitioner and would consider the bad and doubtful debts only after availability of audited accounts, which will be taken up at the time of true up of ARR, in line with the JERC Tariff Regulations.

**Table 97: Provision for bad debts approved by the Commission for FY 2012-13**

Particulars	Estimates submitted in the FY 12 -13 petition	Approved in TO dated June 12’ 2012	Petitioner Submission	Approved (Review)
Provision for bad and doubtful debts	Not claimed	NIL	Not claimed	NIL

The Commission, therefore, has not considered any expenses on account of bad & doubtful debt for Review of ARR for FY 2012-13.

## 8.11 Return on capital base

### Petitioner's Submission

The Petitioner has submitted a return on capital base @3 % on the net capital base at the beginning of the year of Rs. 334.38 Crores, at Rs 10.03 Crores and requests the Commission to approve the same. In the order dated June 12' 2012, the Commission had allowed only Rs 4.04 Crores, against the claim of Rs 14.11 Crores. The reason for the difference between the amounts approved by the Commission and the revised estimate is the disallowance of the Gross block at the beginning of 2009-10 by the Commission for the above NFA calculation because of the non-availability of the Fixed Assets registers. The Petitioner has submitted that these have now been prepared and submitted along with the True Up petition for 2009-10 and 2010-11. These have also been audited along with the Accounts for the above years.

In view of the above submissions, the Petitioner requests the Commission to approve the revised estimate of Rs 10.03 Crores for the return on capital base.

The petitioner's claim is summarized as below.

**Table 98: Return on Capital Base claimed by the Petitioner for FY 2012-13**

Particulars ( Rs. Cr)	Claimed by petitioner as per revised estimates
Gross block at the beginning of the year	480.48
Opening CWIP	94.69
LESS Accumulated Depreciation	229.29
LESS Accumulated Consumer Contribution	-
LESS Opening Debt	11.51
<b>Net Fixed Assets at beginning of year</b>	<b>334.38</b>
<b>Return @ 3 % of NFA</b>	<b>10.03</b>

### Commission's Analysis

EDP being an integrated utility is entitled to return on capital base as per Regulation 23 of JERC Tariff Regulations. The treatment is as in the previous chapters, as per para 5.12 of this order. The return on capital base as per the provisions of the regulations is as below.



**Table 99: Return on Capital Base calculation by the Commission for FY 2012-13**

Sr. No.	Particulars	Approved
1	Gross block at beginning of the Year/Opening GFA	480.48
2	Opening CWIP	94.69
3	Less accumulated depreciation	231.70
4	Less accumulated consumer contribution	-
5	Less opening debt	11.51
6	Net fixed assets at beginning of the year	<b>331.97</b>
7	<b>Reasonable return @3% of NFA</b>	<b>9.96</b>

The Return on Capital Base as claimed and approved for the year is tabulated below.

**Table 100: Return on capital base approved by the Commission for FY 2012-13**

Particulars (Rs Cr)	Estimates submitted in the FY 12 -13 petition	Approved in TO dated June 12' 2012	Petitioner Submission	Approved (Review)
<b>Return on Capital Base</b>	14.11	4.04	10.03	9.96

**The Commission considers the Return on Capital Base of Rs. 9.96 Crores as reasonable and approves the same for Review of ARR for FY 2012-13.**

## 8.12 Revenue from outside sales/UI sales

### Petitioner's submission

The Petitioner has submitted that in the petition for FY 2012-13, EDP had estimated UI sales of 379.45 MU and revenue from UI sales of Rs 132.05 Crores at an average realization of Rs. 3.48/kWh against which the Commission has approved Rs 86.94 Crores at an average realization rate of Rs.4.50/kWh. The UI sales for the 6 months of FY 2012-13 has been 145.87 MU and revenue from UI sales has been 49.88 Crores at an average of Rs. 3.42/kWh.

The revised estimate for total UI sales is 470.9 MU; the total revenue from UI sales for the year has been estimated at 161.02 Crores. This is based on an expected sales realization of 3.42/kWh for the second half of the year.

The Petitioner has requested the Commission to approve the UI sales at 470.9 MU, and revenue from UI sales at 161.02 Crores for FY 2012-13.

### Commission’s analysis

The Petitioner has submitted UI under-drawal of 145.87 MU and revenue of Rs 49.88 Crores as per actual for the first six months of FY 2012-13.

The Commission has applied merit order principles to project the energy requirement for H2 of FY 2012-13 and has allowed only that much power purchase as required to meet the requirement for the territory. The Commission, therefore, has assumed no surplus power for outside sales to be available for H2 of FY 2012-13.

**Thus, the Commission considers the under-drawal for FY 2012-13 at Rs. 49.88 Crores for sale of 145.87 million units as reasonable and approves the same for Review of ARR for FY 2012-13; subject to final adjustment at the time of true-up based on audited accounts.**

**Table 101: Revenue/profit from outside sales approved by the Commission for FY 2012-13**

Particulars (Rs Cr)	Estimates submitted in the FY 12 -13 petition	Approved in TO dated June 12' 2012	Petitioner Submission	Approved (Review)
Revenue/profit from outside sales	132.05	86.94	161.02	49.88

## 8.13 Non-Tariff Income

### Petitioner’s submission

The non-tariff income comprises of metering, late payment charges, interest on staff loans, reconnection fee, miscellaneous revenue etc. The other income under this head as per the revised estimates is Rs 2 Crores, and adding the ‘revenue from UI sales’ under this head gives the total non tariff income of Rs. 163.02 Crores. The actual non-tariff income for FY 2012-13 H1 is 50.07 Crores, consisting of the ‘other income’ of Rs 0.19 Crores and revenue from UI sales of 49.88 Crores.

### Commission's analysis

The Commission has found the submission of the Petitioner under the head of 'other income' as reasonable and approves the same at Rs 2 Crores. This together with the 'Revenue earned from outside sales' approved above gives total approved sum of Rs. 51.88 Crores under the head of 'Non Tariff Income'.

**Table 102: Non tariff income approved by the Commission for FY 2012-13**

Particulars (Rs Cr)	Estimates submitted in the FY 12 -13 petition	Approved in TO dated June 12' 2012	Petitioner Submission	Approved (Review)
<b>Non Tariff Income (including revenue/profit earned from outside sales)</b>	141.05	95.94	163.02	51.88

The Commission considers the non-tariff income of Rs 51.88 Crores as reasonable and approves the same for Review of ARR for FY 2012-13.

### 8.14 Review of Aggregate Revenue Requirement for FY 2012-13

#### Petitioner's submission

The Petitioner has submitted the net revenue requirement for FY 2012-13 at Rs 996.7 Crores based on the items of expenditure discussed above.

#### Commission's analysis

Based on the items of expenditure discussed in the preceding sections, the Commission approves the aggregate revenue requirement for FY 2012-13 at Rs 979.04 Crores. The same has been summarized in the table below.

**Table 103: Aggregate Revenue Requirement approved by the Commission for FY 2012-13**

Particulars (Rs Cr)	Ref Para	Estimates submitted in the FY 12 -13 petition	Approved in TO dated June 12' 2012	Petitioner Submission	Approved (Review)
Cost of power purchase	8.5	997.80	868.02	1,027.40	893.23
Employee Costs	8.6	54.79	54.79	60.97	58.40
A&G expenses	8.6	3.91	3.91	4.93	4.84

R&M Expenses	8.6	10.77	10.77	17.06	17.06
Depreciation	8.7	33.04	9.38	23.39	23.39
Interest & Finance Charges	8.8	1.88	1.88	2.27	11.37
Interest on Working Capital + Int on CSD	8.9	10.50	10.23	13.65	12.67
Provision for bad debts	8.10	-	-	NIL	NIL
Return on NFA @ 3% of NFA	8.11	14.11	4.04	10.03	9.96
Amortisation of regulatory asset proposed for previous years	-	57.8	-	-	-
<b>Total</b>	<b>8.14</b>	<b>1,184.60</b>	<b>963.02</b>	<b>1,159.70</b>	<b>1,030.92</b>
Less Non tariff Income	8.13	141.05	95.94	163.02	51.88
<b>Aggregate revenue requirement</b>		<b>1,043.55</b>	<b>867.08</b>	<b>996.68</b>	<b>979.04</b>

## 8.15 Revenue at existing tariff

### Petitioner's submission

The Petitioner has submitted that the revised estimate for revenue from tariff is 772.3 Crores based on the old tariff for 2 months and the new tariff for balance 10 months as approved by the Commission in its Order dated 12<sup>th</sup> June 2012. A separate head of 20.3 Crores has been considered as revenue from FPPCA charges that are to be included in the consumer bills of November 2012, December 2012 and January 2012. This is as per the EDP notification Number 4815/ED/B&E/2012-13/2510 dated 1<sup>st</sup> November 2012 for recovery of FPPCA claim for the second quarter of 2012-13.

### Commission's analysis

The Commission has considered the actual revenue submitted by the Petitioner for first six months of FY 2012-13 on the basis of actual energy sales during the period. The Petitioner has submitted the actual revenue for H1 of FY 2012-13 at Rs 399 Crores.

For the remaining six months of FY 2012-13, Commission has considered the estimated sales of H2 FY 2012-13 for estimation of the revenue for the second half of the year. This results in the revenue of Rs. 400.94 Crores for the second half of FY 2012-13.

This together with the actual first half of FY 2012-13, results in the revenue of Rs 799.94 Crores from existing tariff for whole year.

Accordingly, the Commission considers the revenue of Rs 799.94 Crores as revenue from existing tariff for the purpose of this review of FY 2012-13.

**Table 104: Revenue from existing tariff approved by the Commission for FY 2012-13**

Particulars (Rs Cr)	Estimates submitted in the FY 12 -13 petition	Approved in TO dated June 12' 2012	Petitioner Submission	Approved (Review)
<b>Revenue from tariff</b>	675.90	665.27	792.6	799.94

### 8.16 Revenue Gap at existing tariff for FY 2012-13

The revenue gap approved for the year is Rs 179.10 Crores on the basis of the approved aggregate revenue requirement of Rs 979.04 Crores and the revenue from existing tariff of Rs. 799.94 Crores for FY 2012-13.

**Table 105: Revenue Gap at existing tariff approved by the Commission for FY 2012-13**

Particulars (Rs Cr)	Estimates submitted in the FY 12 -13 petition	Approved in TO dated June 12' 2012	Petitioner Submission	Approved (Review)
Net Revenue Requirement	1,043.55	867.08	996.7	979.04
Revenue from tariff	675.90	665.27	792.6	799.94
<b>Revenue Gap</b>	<b>367.65</b>	<b>201.81</b>	<b>204.0</b>	<b>179.10</b>
Gap of previous years	385.09	225.70	546.85	501.74
Carrying Cost	-	-	-	-
<b>Cumulative Gap</b>	<b>752.74</b>	<b>427.51</b>	<b>750.89</b>	<b>680.84</b>

The revenue gap of Rs 179.10 Crores not considering the previous year(s) gap has been considered; further, considering the gap of the previous years, the revenue gap of Rs. 680.84 Crores is considered to be reasonable and approved for Review of ARR for FY 2012-13; subject to further adjustment at the time of true-up based on the audited accounts. The same has been carried over to the revenue gap of the next year i.e. FY 2013-14.

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

### 9.1 Background

The petition for the determination of ARR & Tariff for FY 2013-14 contains the actual unaudited figures of FY 2011-12, revised estimates for FY 2012-13 and the estimates for FY 2013-14.

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

- i. Trued-up ARR for FY 2009-10 based on the audited accounts
- ii. Trued-up ARR for FY 2010-11 based on the audited accounts
- iii. Actual unaudited figures for FY 2011-12 based on the unaudited accounts, subject to adjustment if any at the time of true-up based on audited accounts
- iv. Actual performance for the first six months of FY 2012-13
- v. Revised estimates of FY 2012-13 submitted alongwith the petition for FY 2013-14 and as analyzed and approved by the Commission in the 'Review' of FY 2012-13 in this tariff order

### 9.2 Analysis of Aggregate Revenue Requirement of FY 2013-14

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

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

- ii. Operation and Maintenance Expenses;
  - Employee Expenses
  - Administration & General expenses
  - Repairs & Maintenance Expenses
- iii. Capital Expenditure and Asset Capitalization
- iv. Gross Fixed Assets;
- v. Depreciation;
- vi. Interest on Long Term Loans;
- vii. Interest on Working Capital & Security Deposits;
- viii. Return on Capital Base/ Net Fixed Assets;
- ix. Provision for Bad and Doubtful Debts
- x. Other expenses.
- xi. Non-Tariff Income

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

*1) The Aggregate Revenue Requirement of the generating company or the licensee shall comprise of the following:*

- i. Fuel Cost for own generation, if applicable.*
- ii. Cost of Power Purchase, if any*
- iii. Operation and Maintenance Expenses,*
- iv. Depreciation, including Advance Against Depreciation,*
- v. Interest and Cost of Finance,*
- vi. Return on Equity,*
- vii. Income Tax*
- viii. Provision for Bad & Doubtful Debts*

ix. *Other Expenses.*

2) *The data should be provided for three years*

- i. *Audited figures for the previous year; Information for the previous year shall be based on the audited accounts; in the absence thereof, the audited accounts for the immediately preceding year shall be filed along with the un-audited accounts for the previous year.*
- ii. *Estimated figures for the current financial year should be based on actual figures for the first six months and the estimated figures for the second six-months of the year. The estimated figures for the second half year of the current financial year should be based on the actual audited figures for the second half of the previous year with adjustments that reflect known and measurable changes expected to occur between them. These adjustments must be specifically documented and justified.*
- iii. *Forecasted figures for the ensuing year should be based on the current year figures with adjustments that reflect known and measurable changes expected to occur between them. These adjustments must be specifically documented and justified.”*

“

4) *The Aggregate Revenue Requirement of the generating company or the licensee shall be worked out by adjusting the following in the revenue requirement computed under Clause (1) above:*

- i. *Necessary adjustments under Regulation 9 ‘Review and Truing Up’.*
- ii. *Income from surcharge and additional surcharge from Open Access Consumers, if any ;*
- iii. *Transmission and/or Wheeling Charges recovered from the Open Access Customers, if any;*
- iv. *Authorized portion of Income/revenue from Other Business engaged in by the licensee for optimum utilization of assets, if any, in accordance.”*

### **9.3 Consumers, Connected Load and Energy Sales**

#### **Petitioner’s Submission**

The Petitioner has submitted that it has adopted the historical trend method for projecting growth in consumers and sales for FY 2013-14, and applied a 6 year CAGR to the consumer and revised sales numbers of FY 2012-13. In cases where the 6 year CAGR was negative, a



zero growth has been assumed for the consumer class. The LT categories to which this approach was not applied are agricultural consumers and temporary supply connections.

The Petitioner has submitted that it has observed that the net addition to the agricultural category is low over the last few years. Hence, the standard CAGR methodology has not been applied to the agricultural consumers. In addition, EDP is currently in the process of verifying the number of consumers and connected load in this category. The preliminary details of this verification exercise were presented to the Commission in the Petitioner’s tariff proposal submitted in September 2011.

It is further submitted that the physical verification exercise of agricultural consumers, results of which have been presented to the Commission, is ongoing. Whilst no connection is given without a meter, there have been issues with malfunctioning meters etc., which need to be replaced before a truly representative study can be conducted. The replacement of meters is going on, in parallel with the R-APDRP program.

In the case of temporary supply connections, by and large the trends of previous year have been followed to forecast the likely quantum of sale to this category as 20 MU.

Further, the number of consumers and sales for the HT categories has been taken mostly based on the actual data for 6 months of FY13. Growth rates for HT consumers are minimal, and these have been applied to the revised sales numbers for FY 13 to arrive at the sales for FY14.

The Petitioner has submitted the following details in the petition:

**Quote**

“ The number of LT consumers served by the PED, 6 year CAGR and the projected number of consumers is summarized in the table below.

**LT - Projected Consumer data for FY 2013-14**

Consumers [No]	FY07	FY08	FY09	FY10	FY11	FY12	FY13	6 Year CAGR	Estimated no. of consumers in FY14
<b>Domestic</b>	234,734	245,822	256,245	269,755	275,847	281,903	289,479	4%	299,772
<b>Commercial</b>	36,205	37,407	38,427	40,539	40,531	41,943	43,195	3%	44,485
<b>Agriculture</b>	8,834	8,897	8,960	6,810	6,810	6,828	6,842	0%	6,842
<b>Street lighting</b>	43,421	44,859	45,617	47,686	48,167	48,384	48,436	2%	49,326
<b>Industrial</b>	5,516	5,643	5,769	5,885	5,955	6,035	6,115	2%	6,221
<b>LT total</b>	328,710	342,628	355,018	370,675	377,310	385,093	394,067		406,646

The number of domestic consumers projected is including OHOB consumers. Growth in other categories is expected to be largely in line with the trend seen over the years.

The estimated sales for LT consumers have also been based on the 6 year CAGR and are shown in the table below.

**LT - Projected Sales Data – FY 2013-14**

Sales [MU]	FY07	FY08	FY09	FY10	FY11	FY12	FY13	6 Year CAGR	Estimated sales in FY14
<b>Domestic</b>	357	393	426	513	519	547	578	8%	626
<b>Commercial</b>	130	132	138	150	156	168	180	6%	190
<b>Agriculture</b>	101	82	54	77	77	57	57	0%	57
<b>Street lighting</b>	16	16	17	17	22	24	26	9%	28
<b>Industrial</b>	126	133	135	147	150	184	192	7%	206
<b>Temporary Supply</b>									20
<b>LT total</b>	729	756	770	904	923	980	1,032		1,126

Sales to agricultural category of consumers has been maintained as constant for reasons explained earlier.

Sales to all other categories have been estimated based on the trend seen over the years. Temporary supply from LT has been estimated at 20 MU.

The number of consumers in the HT categories and the average billing demand has been based on the actual values extracted from the HT billing database for FY12 and first 6 months of FY13. The total number of consumers projected for the year 2013-14 in the HT category is 469.

The sales growth has been estimated on similar lines, and considering the marginal increase in HT consumers, the growth rates considered for the HT category are marginal. Though there is a reduction in the number of HT consumers, the estimated increase in sales to HT category is about 21 MU, with the bulk of additional sales expected from HT-1 & HT-2 category of consumers.

**HT - Projected Sales data – FY 2013-14**

Sales [MU]	FY07	FY08	FY09	FY10	FY11	FY12	FY13	6 Year CAGR	Estimated Sales in FY14
<b>HT I</b>	998	1,020	954	958	1,006	975	970	0%	970
<b>HT II</b>	26	26	26	34	35	45	45	12%	50
<b>HT III</b>	271	270	249	262	239	308	316	3%	324
<b>HT total</b>	1,296	1,316	1,229	1,255	1,278	1,327	1,323		1,344

The total estimated sale in FY 2013-14 is 2,470.3 MU, with and LT: HT sales mix of 45%:55%. While the ratio is positively leaning towards HT, it must be kept in mind that the LT numbers are fast catching up; and a reversal of the ratio is possible in the years to come. This reflects the reality of increasing number of LT consumers and their consumption, whereas the consumption in HT categories is largely stagnant.

We request the Hon’ble Commission to approve the sales for FY2013-14 at 2,470.3 MU.”

**Unquote**

**Commission’s Analysis**

**Consumers**

The Commission has analyzed the past trends of the consumer numbers and that approved by the Commission in its last tariff order. The submission of the Petitioner is considered reasonable and approved for FY 2013-14.

**Table 106: Number of consumers approved by the Commission for FY 2013-14**

<b>Consumer Category</b>	<b>Petitioner Submission</b>	<b>Approved</b>
<b>Domestic</b>	299772	299772
<b>Commercial</b>	44485	44485
<b>Agriculture</b>	6842	6842
<b>Street Lighting</b>	49326	49326
<b>LT Industrial</b>	6221	6221
<b>Temporary Supply</b>	-	0
<b>HT Industrial</b>	411	411
<b>HT state and Central Govt Establishments</b>	49	49
<b>HT Industrial Extra High Tension</b>	9	9
<b>TOTAL</b>	<b>407115</b>	<b>407115</b>

## **Connected Load**

The Commission has analyzed the past trends of the connected load figures and that approved by the Commission in its last tariff order. The submission of the Petitioner is considered reasonable and approved for FY 2013-14.

**Table 107: Connected Load approved by the Commission for FY 2013-14**

<b>Consumer Category (Connected Load Units in HP/kVA)</b>	<b>Petitioner Submission</b>	<b>Approved</b>
<b>Domestic</b>	-	-
<b>Commercial</b>	-	-
<b>Agriculture (HP)</b>	59660	59660
<b>Street Lighting</b>	-	-
<b>LT Industrial</b>	-	-
<b>Temporary Supply</b>	-	-
<b>HT Industrial (kVA) (HT 1)</b>	251,969	251,969
<b>HT state and Central Govt Establishments(kVA)(HT 2)</b>	14265	14265
<b>HT Industrial Extra High Tension (kVA) (HT 3)</b>	80495	80495

## **Energy Sales**

The Commission has analysed the past trends of the sales from the year 2006-07 to 2011-12. The 5 year CAGR (from 2006-07 to 2011-12) has been applied on the approved sales for the year 2012-13 to arrive at the approved sales for the year 2013-14; with the exception of the unmetered category, temporary supply and HT 1 category. The modified 5 year CAGR has been considered i.e. in case the CAGR is negative, then zero growth is assumed for the consumer class.

For the OHOB consumers, the consumption norm of 175.2 units/consumer/year is considered reasonable as explained in para 5.3, assuming 2 fluorescent tube lights each of 40 W running 6 hours per day. This taken together with the number of consumers considered for the year of 35,474 results in 6.22 MUs against the claim of 9.8 MUs of the Petitioner. The Commission considers the consumption of 6.22 MU as reasonable and approves the same. The OHOB sales have been clubbed in the category of 'Domestic' in the below table.

For the agriculture category, the consumption norm of 951.1units/HP/year is considered reasonable as per the TNERC order dated 30<sup>th</sup> March 2012 for reasons explained in para 5.3. Sales have been projected on the connected load of 59660 HP to arrive at the sales of 56.74 MU. The Commission considers the consumption of 56.74 MUs as reasonable and approves the same for FY 2013-14.

For the temporary supply, the Commission has considered the past growth rate in the category from 3 MU in 2009-10 to 13.7 MU in 2011-12 and has found the submission of the Petitioner as reasonable and hence approves the same at 20.00 MU for FY 2013-14. Further, the Commission has analyzed the past trends of the growth of the HT 1 category and found the submission of the Petitioner to be reasonable and hence approved for the year.

The total sales approved for the year are 2434.79 MU. The growth rates assumed for the different consumer categories are as below:

**Table 108: Growth rates for energy sales as considered by the Commission for FY 2013-14**

Consumer Category	Growth Rates FY 13-14 Petitioner	Growth Rates FY 13-14 Commission
Domestic *	8%	8.77%
Commercial	6%	5.22%
Street Lighting	9%	8.45%
LT Industrial	7%	7.91%
HT Industrial (HT 1)	0%	0.00%
HT state and Central Govt Establishments (HT 2)	12%	As submitted
HT Industrial Extra High Tension (HT 3)	3%	2.58%

\*Growth rates for Domestic category are excluding the OHOB category

The sales approved for the respective consumer categories are as below.

**Table 109: Energy Sales approved by the Commission for FY 2013-14**

Consumer Category	Petitioner Submission	Approved
Domestic	625.71	564.33
Commercial	190.08	179.81
Agriculture	56.56	56.74
Street Lighting	28.39	26.76
LT Industrial	205.62	213.10

<b>Temporary Supply</b>	20.00	20.00
<b>HT Industrial (HT 1)</b>	969.94	977.75
<b>HT state and Central Govt Establishments (HT 2)</b>	50.21	50.21
<b>HT Industrial Extra High Tension (HT 3)</b>	323.79	346.08
<b>TOTAL</b>	<b>2470.30</b>	<b>2434.79</b>

## 9.4 Energy Losses

### Petitioner's Submission

The Petitioner has submitted that the T&D allowed by the Commission for FY 2012-13 is 12.50%. As EDP operates a relatively smaller system, reduction in losses becomes progressively more difficult due to technical parameters. Further, with the skewed growth of LT consumers vis-à-vis the HT consumers, it is expected that the network loading would not be absolutely balanced, thereby leading to increased losses.

Given this reality, EDP has proposed to achieve a loss of 13.00% for FY 2013-14 and has requested the Commission to approve the T&D loss for FY 2013-14 at 13.00%.

### Commission's analysis

The Commission has analyzed the past trends of the T&D loss levels and allows the T&D loss at 12.50% for the year against the 13.00% as submitted by the Petitioner. The Commission has observed that the Petitioner has not been able to achieve the T&D loss reduction trajectory set forth by the Commission for the previous years. **The Commission has retained the T&D loss target at 12.50% as set by the Commission in its last tariff order dated June 12' 2012 for FY 2013-14 as a reasonable target and hence approved for FY 2013-14.**

**Table 110: Energy losses approved by the Commission for FY 2013-14**

Particulars	Petitioner Submission	Approved
<b>Energy Losses</b>	13.00%	12.50%

## 9.5 Energy Balance

### Petitioner's submission

The Petitioner has submitted that considering the proposed sales of 2,470.3 MU and the proposed T&D loss for FY 2013-14, the energy requirement at periphery works out to 2,839.4 MU. The sales through UI have been estimated at 426.8 MU.

The total energy purchase expected is based on expected availability from various sources of power purchase available to EDP. The Petitioner proposes to procure 3419.2 MU and external losses of 152.97 MU resulting in energy availability of 3266.2 MU.

### Commission's analysis

Based on the approved sales of 2434.79 MU and intra-state losses of 12.50%, the energy requirement for sale within the territory is approved at 2782.61 MU.

The Commission has considered the gross power purchase of 2909.94 MU as per the projections of the Commission. The detailed analysis of the power purchase from the different sources has been discussed in para 9.6. The external losses have been approved as 127.33 MU, resulting in the net energy availability of 2782.61 MU. The Commission has applied merit order principles for estimating the energy requirement for FY 2013-14 and accordingly only that much power purchase has been approved as required to meet the requirement within the territory. Therefore, no surplus power has been considered as available for sale outside the territory for FY 2013-14.

The table below captures the values as submitted by the Petitioner and that approved for FY 2013-14.

**Table 111: Energy balance approved by the Commission for FY 2013-14**

Particulars	Petitioner Submission	Approved
<b>ENERGY REQUIREMENT</b>		
Energy sales in the UT	2470.30	2,434.79
Distribution losses (%age)	13.00%	12.50%
Energy required for the Territory (MU)	2839.42	2,782.61
Add: Sales to common pool consumers/ UI	426.80	-
<b>Energy Requirement @ periphery</b>	<b>3266.23</b>	<b>2,782.61</b>
<b>ENERGY AVAILABILITY</b>		
Gross Energy Purchase	3419.20	<b>2,909.94</b>
External losses (MU)	152.97	127.33
<b>Net Energy Availability</b>	<b>3266.23</b>	<b>2,782.61</b>

## 9.6 Power Purchase Quantum and Cost

### Petitioner's submission

The Petitioner has submitted that the power purchase costs of the Electricity Department Puducherry are mainly due to purchase of power from the following sources:

- Central Generating Stations
- TNEB & KSEB
- PPCL

### NTPC and NLC stations

Electricity Department of Puducherry currently has firm allocation from the NTPC Thermal station of Ramagundam STPS Stages 1, 2 & 3 and NTPC Talcher Stage 2. Allocations from NTPC Simhadri have commenced from the month of September 2011. Similarly, allocations from NTECL Vallur, a joint venture between NTPC and Tamilnadu Electricity Board (TNEB) has commenced from the month of November 2012. EDP also purchases power from the NLC stations - NLC TS I expansion, TS II Stages 1 & 2. Following assumptions have been used for projecting the power purchase quantum and cost from these stations:

- i. Licensee share for FY 14 is assumed to be the same as the actuals of FY 12. To calculate the expected allocation from each of the NLC stations for the review of FY 13, Petitioner has considered the actual energy received from each of the stations during the first 6 months of previous year as against the total generation during that period, to arrive at the effective allocation that PED has received for FY13.
- ii. PLF of the generating stations has been referred from the CEA reports issued for the considered operating month and has been used as the reference for projections. PLF for NTECL Vallur is prorated from CERC Normative PLF for 2012-13 and is assumed at normative PLF for 2013-14
- iii. External loss of 5% has been assumed for all stations
- iv. In order to arrive at an approximate figure for FY14 power purchase cost projection, the petitioner has assumed the energy charge & annual fixed cost as per the latest tariff orders and taking into account the first 6 months actual for FY12-13.
- v. Other costs have been assumed same as the previous year i.e. FY13



- vi. CERC, in its Orders dated 31/08/ 2010, 23/03/2011 and 27/06/2011 based on Petition numbers 230/2009 and 231/2009 has approved the annual fixed costs as well as the energy charges per unit for TS I expansion and TS II Stages 1 & 2 respectively for the year 2009- 14. Based on the Firm allocation to EDP from each of these stations, the fixed costs have been appropriately apportioned.

### NPCIL stations

EDP currently receives power from NPCIL's nuclear plant, Madras Atomic Power Station (MAPS) and Kaiga Atomic Power Stations (KAPS) Stages 1-4. The following assumptions have been taken to arrive at the cost of power purchase from the atomic stations of NPCIL:

- i. Licensee share for FY 14 is assumed to be the same as the actual of FY 12. To calculate the expected allocation from each of the NPCIL stations, the Petitioner has considered the actual energy received from each of the stations during the full year of 2011-12 as against the total generation during that period, to arrive at the effective allocation that PED has received for FY12.
- ii. PLF of the generating station has been taken as per the actual values reported in the CEA report for FY 2011-12.
- iii. External loss of 5% has been assumed for all stations
- iv. NPCIL has provided the single part tariff applicable to MAPS and KAIGA stages 1-4. The same rates have been applied to estimate the power purchase costs from these nuclear stations
- v. Other costs have been assumed same as the previous year i.e. FY13

### Other Stations

#### **Quote**

"PED purchases power from TNEB at a mutually agreed rate. To arrive at the projected quantum of power purchase from TNEB for the FY2013- 14, the Petitioner has examined the power purchase units consumed for the past 2 periods, i.e. FY12 and FY13 to arrive at average monthly units procured. It is brought to the Commission's notice that there has been a revision in the tariff payable to TNEB from Rs. 1.90 /kWh to Rs. 3.10/kWh. The same figure has then been used to project the estimated power purchase for the entire year. External loss has been assumed to be 4%.

PED also purchases power from KSEB at the bulk supply tariff rate as approved by KSERC for KSEB. To arrive at the projected quantum of power purchase from KSEB for the FY2013- 14, the Petitioner has examined the power purchase units consumed for the past 2 periods, i.e. FY11 and FY12 to arrive at average monthly units procured. The same figure has then been used to project the estimated power purchase for the entire year.

PED also purchases power from PPCL at the rates approved by JERC vide its Order dated 06/ 08/ 2011 in response to Petition no. 18/210. The PLF assumed for this generating station is 88.32%, which is the PLF reported by CEA in its report for 2011-12.

PGCIL costs have been projected based on per unit cost of transmission incurred by PED in FY13.” **Unquote**

#### RPO Compliance

##### **Quote**

“ In addition, the Petitioner is also committed to fulfilling its renewable purchase obligations (RPO) set by the Hon’ble Commission in the JERC Procurement of Renewal Energy Regulations 2010 dated 15/12/ 2010. In order to meet the RPO obligations for the period of 2013-14, PED will have to purchase power at the defined 4% of the total of all sales in the UT for the FY 14. PED currently does not purchase power from renewable energy sources and hence proposes to meet this obligation through the purchase of Renewable Energy Certificates.

The petitioner has segregated the RPO into Solar and Non-Solar RECs for determination of RPO Compliance Cost. The petitioner has considered Solar REC to be trading at Rs. 9500 per REC and Non – Solar REC to be trading at Rs. 1500 per REC. As per the revised estimate of sales for FY13 and projections for FY14, PED stands to purchase 9530 Solar RECs along with 61945 Non – Solar REC for FY13 and 9881 Solar RECs along with 64228 Non – Solar REC for FY14. The RPO Compliance Cost for FY13 and FY14 works out to Rs. 18.35 Crores and Rs. 19.02 Crores respectively.

The petitioner wishes to apprise the Commission that towards satisfying the RPO for 2010-11 and partly for 2011-12, Rs. 7.2 Crores has been used to purchase 48,000 Non Solar RECs at Rs. 1500 per REC.” **Unquote**

Rebate for prompt payment

The Petitioner has estimated approximately 5.6 Crores of rebates for prompt payment for power in FY 2013-14. The rebate assumed is at the same value as that for 2012-13 based on half year projections.

Total quantum and cost submitted by Petitioner

The total power purchase quantum and cost therefore, submitted for FY 2013-14 is 3419.2 MU and cost of 1049.6 Crores. The summary of the power purchase as submitted is as below.

**Table 112: Power Purchase Quantum and cost submitted by the Petitioner for FY 2013-14**

Source	Purchase [MU]	External Losses [%]	Energy received [MU]	VC [Rs/kWh]	Fixed Charge [Rs Crs]	VC [Rs Crs]	Others [Rs Crs]	Total [Rs Crs]
<b>NLC</b>								
TS II Stage I	515.6	5.00%	489.78	2.01	28.1	103.6	2.7	134.4
TS II Stage II	212.6	5.00%	201.96	2.01	11.3	42.7	1.1	55.2
TS I Expn	112.9	5.00%	107.23	1.81	14.7	20.5	0.4	35.6
<b>Sub-Total (NLC)</b>	<b>841.0</b>		<b>798.96</b>		<b>54.1</b>	<b>166.8</b>	<b>4.2</b>	<b>225.2</b>
<b>NTPC</b>					<b>5.5</b>			
Ramagundam STPS Stage I & II	800.2	5.00%	760.20	1.49	42.6	119.4	17.7	179.7
Ramagundam STPS Stage III	181.6	5.00%	172.52	1.80	17.4	32.8	5.8	55.9
Talcher STPS Stage II	491.5	5.00%	466.95	1.47	41.8	72.2	28.0	142.0
Simhadri	77.5	5.00%	73.64	2.16	42.9	16.7	0.1	59.7
<b>Sub-Total (NTPC)</b>	<b>1,550.9</b>		<b>1473.31</b>		<b>144.6</b>	<b>241.1</b>	<b>51.6</b>	<b>437.3</b>
<b>NTECL</b>								
Vallur	17.9	5.00%	16.98	2.64	3.9	4.7	-	8.6
<b>Sub-Total (NTECL)</b>	<b>17.9</b>		<b>16.98</b>		<b>3.9</b>	<b>4.7</b>	<b>-</b>	<b>8.6</b>
<b>NPC</b>								
Madras APS	49.3	5.00%	46.86	1.79	-	8.8	0.2	9.0
Kaiga APS Stage I	243.1	5.00%	230.93	2.80	-	67.9	0.5	68.4
<b>Sub-Total (NPC)</b>	<b>292.4</b>		<b>277.79</b>		<b>-</b>	<b>76.8</b>	<b>0.7</b>	<b>77.5</b>
<b>Other Sources</b>								
Others								
TNEB (Pondy)	102.6	4.00%	98.46	3.10	-	31.8	0.5	32.3
TNEB (Karaikal)	344.0	4.00%	330.24	3.10	-	106.6	1.2	107.8
PPCL	234.1	0.00%	234.10	2.46	26.7	57.6	0.2	84.4
KSEB	36.4	0.00%	36.38	3.16	1.2	11.5	1.9	14.6
UI		0.00%	-	3.10	-	-		-

Sub-Total (Other Sources)	717.0		699.2		27.9	207.5	3.8	239.1
Other Charges								0.6
KPTCL								2.5
SRLDC								1.7
PGCIL								43.7
<b>Total</b>	<b>3,419.2</b>		<b>3,266.2</b>		<b>230.5</b>	<b>696.9</b>	<b>60.2</b>	<b>1,036.2</b>
Additional payment due to True-up								
RPO compliance cost								19.0
Rebate								5.6
<b>Net PP cost</b>								<b>1,049.64</b>

### Commission's Analysis

For estimating the power purchase cost for FY 2013-14, merit order principles have been considered. While full fixed (capacity) charges have been considered and the variable charges corresponding to the cheaper sources of power have been considered, whereas no variable charges have been considered in respect of energy not considered for purchase (according to the merit order dispatch principles).

Following assumptions have been considered for projecting the requirement and cost for FY 2013-14.

- **Share Allocation:** The Commission has considered the firm allocation and allocation from the unallocated quota from the above stations as per the notification of the Southern Region Power Committee vide SRPC Order No: SRPC/SE-I/54/UA/2012 dated 26-11-2012, effective from 00:00 Hrs of 29-11-2012 and SRPC Order No: SRPC/SE-I/54/UA/2012 dated 20-11-2012. The Rev-5 as available on the SRLDC site has been used for the allocation to the beneficiaries effective 29.11.2012.
- **New Station:** NTECL Vallur STPS unit#1 has attained COD effective 29.11.2012 and its allocation has accordingly been considered at 0.48% as per the SRPC letter dated 29.11.2012. The Commission has considered the PLF at 85% equivalent to the Normative Availability specified in the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009.
- **Gross Energy Availability:** The Commission has estimated the gross energy availability from the existing stations based on the installed capacity and the average Plant Load Factor for the past years (FY 2010-11, FY 2011-12 and FY 2012-13, as available till

date). The Net energy sent out has been considered after considering the applicable auxiliary consumption as per the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009. For PPCL, the PLF as assumed by the Petitioner has been considered to be reasonable and accordingly considered.

- **Fixed Charges:** The fixed charges are considered based on the formula specified for the stations in the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009-14. The Annual Fixed Charges for each station have been taken as per the latest tariff orders for the respective stations. For plants having been in operation for less than 10 years i.e. NLC TS II Stage II, Ramagundam STPS Stage III, Talcher STPS Stage II and Simhadri the formula for determination of monthly fixed charges has been suitably modified
- **Variable Charges:** The Commission has considered the average variable cost for the period April 2012 to September 2012 (as per actual) for consideration of the per unit variable charges for plants whose variable charges were not available as per the tariff orders. For nuclear plants, Madras APS and Kaiga the unit rate of Rs 1.79/unit and Rs 2.80/unit as per the applicable single part tariff has been considered.
- For TNEB, the revised rate of Rs 3.10/unit has been considered. For KSEB, the bulk supply tariff rate as approved by KSERC for KSEB has been used at Rs 3.16/unit. For PPCL, the average variable cost of the H1 period has been considered at Rs 2.53/unit. For NTECL Vallur, the average rate as considered by the Petitioner has been considered to be reasonable and considered at Rs 2.64/unit.
- The Commission has considered the nuclear plants as must run and has not subjected them to merit order dispatch. TNEB (Pondy), TNEB (Karaikal, KSEB and PPCL have been considered as must run and not subject to merit order principles.
- For determining the power purchase cost, merit order dispatch principles have been applied. The must-run stations have been assumed at the top of the merit order and variable cost incurred for meeting the energy requirement within the state has been calculated from the plants at the top of the merit order.
- Fixed Charges and Other Charges from all the generating stations (irrespective of the merit order) have been considered for arriving at the power purchase cost.
- As per the merit order principles adopted by the Commission for estimating the energy requirement for FY 2013-14, no surplus sale of power has been considered for

FY 2013-14 and power purchase corresponding to meet the requirement within the territory has been estimated. The UI over-drawal has not been considered for the year.

- **PGCIL losses:** Losses have been assumed at 5% as submitted by Petitioner to be reasonable and at 4% for TNEB. For PPCL and KSEB, being within the periphery of the utility area external loss has been considered as nil.

### **Transmission Charges**

The Commission has considered the PoC rates as specified by the Central Electricity Regulatory Commission vide its order no L-1/44/2010 CERC dated 31.11.2012 applicable from October 2012 to March 2013 for approving the Transmission charges for FY 2013-14. Accordingly, the transmission charges for usage of the PGCIL network are approved at Rs. 55.44 Crores for FY 2013-14.

The Commission has considered the KPTCL and SRLDC charges of Rs 2.52 Crores and Rs 1.66 Crores as estimated by the Petitioner to be reasonable and approved for FY 2013-14.

### **Other Charges**

The Commission has considered the 'other charges' at Rs 60.23 Crores for FY 2013-14 same as submitted by the Petitioner to be considered reasonable and allowed.

### **Renewable Purchase Obligations**

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

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

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

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

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

The petitioner had to purchase 3% of total power purchase from renewable sources for FY 2013-14 consisting 0.40% from Solar and 2.60% from Non-Solar sources. The Commission has observed that as per the actual power purchase cost and quantum furnished by the Petitioner for the first half actual FY 2012-13, it has not procured power from renewable sources of energy and hence not meeting its RPO obligations.

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

The Commission has assumed that the utility would meet its RPO targets during FY 2013-14 through the purchase of REC certificates. The Solar REC trading price of Rs 9500/REC and non-solar trading price of Rs 1500/REC as submitted by Petitioner has been considered to be reasonable and allowed.

The RPO compliance cost works out at Rs 18.75 Crores and has accordingly been considered by the Commission.

#### Total Power Purchase Cost

**Accordingly, the Commission has approved power purchase quantum of 2909.94 MU and cost of Rs 924.91 Crores for FY 2013-14, including the PGCIL transmission charges of Rs 55.44 Crores.**

**Table 113: Power Purchase Quantum approved by the Commission for FY 2013-14**

Source	Capacity (MW)	PLF (in %)	Gross Generation (MU)	Auxiliary Consumption (%)	Net Generation (MU)	Firm allocation to EDP (%)	Purchase (MU)
<b>NPCIL</b>							
Madras APS	440	69.31	2,671.48	10%	2,404.34	1.88%	45.16
Kaiga APS stage 1	880	69.22	5,336.03	10%	4,802.43	4.29%	205.78
<b>TNEB (Pondy)</b>							102.56

Source	Capacity (MW)	PLF (in %)	Gross Generation (MU)	Auxiliary Consumption (%)	Net Generation (MU)	Firm allocation to EDP (%)	Purchase (MU)
<b>TNEB (Karaikal)</b>							344.00
<b>KSEB</b>							36.38
<b>PPCL</b>	32.5	88.32	251.45	5.50%	237.62	100%	237.62
Talcher STPS Stage II	2,000	83.30	14,593.58	6.50%	13,644.99	3.81%	519.87
Ramagundam STPS Stage I & II	2,100	91.11	16,761.21	6.50%	15,671.73	4.96%	777.32
NLC TS I Expn	420	83.99	3,090.04	9.50%	2,796.48	4.04%	112.98
Ramagundam STPS Stage III	500	91.11	3,990.76	7.20%	3,703.43	5.24%	194.06
Simhadri Stage II	500	90.40	3,959.67	6.00%	3,722.09	1.75%	65.14
<b>NLC</b>							
TS II Stage I*	630	74.40	4,106.17	10.00%	3,695.55	12.20%	269.07
TS II Stage II*	840	84.91	6,247.77	10.00%	5,622.99	3.64%	-
<b>NTECL unit 1, Vallur*</b>	500	85.00	3,723.00	6.50%	3,481.01	0.48%	-
<b>UI</b>							
<b>TOTAL PPC for FY 13-14</b>			<b>64,731.16</b>		<b>59,782.66</b>		<b>2,909.94</b>

\* The purchase from these plants has been considered as per merit order

**Table 114: Power Purchase Cost Charges approved by the Commission for FY 2013-14**

Source	Purchase (MU)	PGCIL Loss (%)	Energy available at periphery	Fixed Charges (Rs Cr)	VC (Rs/kWh)	VC (Rs Cr)	Total (Rs Cr)
<b>NPCIL</b>							
Madras APS	45.16	5.00%	42.90	-	1.79	8.08	8.08
Kaiga APS stage 1	205.78	5.00%	195.49	-	2.80	57.62	57.62
<b>TNEB (Pondy)</b>	102.56	4.00%	98.46	-	3.10	31.79	31.79
<b>TNEB (Karaikal)</b>	344.00	4.00%	330.24	-	3.10	106.64	106.64
<b>KSEB</b>	36.38	0.00%	36.38	-	3.16	11.50	11.50
<b>PPCL</b>	237.62	0.00%	237.62	22.26	2.53	60.12	82.38



Talcher STPS Stage II	519.87	5.00%	493.88	22.62	1.50	77.83	100.45
Ramagundam STPS Stage I & II	777.32	5.00%	738.45	47.49	1.51	117.31	164.79
NLC TS I Expn	112.98	5.00%	107.33	15.79	1.79	20.19	35.97
Ramagundam STPS Stage III	194.06	5.00%	184.36	18.20	1.81	35.19	53.39
Simhadri Stage II	65.14	5.00%	61.88	20.53	1.86	12.10	32.63
<b>NLC</b>							
TS II Stage I*	269.07	5.00%	255.62	32.02	1.96	52.87	84.89
TS II Stage II*	-	5.00%	-	12.32	1.96	-	12.32
<b>NTECL unit 1, Vallur*</b>	-	5.00%	-	3.85	2.64	-	3.85
<b>UI</b>	-		-	-		-	-
<b>Other Charges</b>							
KPTCL							2.52
SRLDC							1.66
PGCIL							<b>55.44</b>
<b>RPO compliance cost</b>							<b>18.75</b>
<b>OTHER CHARGES</b>							<b>60.23</b>
<b>TOTAL PPC for FY 13-14</b>	<b>2,909.94</b>	127.33	<b>2,782.61</b>	<b>195.08</b>		<b>591.23</b>	<b>924.91</b>

\* The purchase from these plants has been considered as per merit order

**Table 115: Power purchase quantum and cost approved by the Commission for FY 2013-14**

Particulars	Petitioner Submission	Approved
<b>Power Purchase Quantum (MU)</b>	3419.20	2909.94
<b>Power Purchase Cost (Rs Cr)</b>	1049.64	924.91

Further, any variation on account of Fuel and Power Purchase cost shall be calculated as per the formula specified by the Commission separately and any impact shall be passed directly to the consumers.

The licensee shall compute fuel and power procurement cost variations on quarterly basis and adjustment shall be made in consumer bills starting after a month following the end of the quarter based on the Fuel & Power Purchase Cost Adjustment (FPPCA) formula notified separately by the Commission as per the Regulation. **For the purpose of calculation using FPPCA formula notified by the Commission, the approved per unit cost of power purchase (RApproved) for use in the FPPCA formula is 355 paisa per unit for FY 2013-14.** The approved per unit cost of power purchase for FY 2013-14 to be considered in the FPPCA formula excludes transmission charges of PGCIL, SLDC charges, RLDC charges and charges for reactive energy.

## 9.7 Operation and Maintenance Expenses

The Operation and Maintenance (O&M) expenses comprising of the employee expenses, A&G expenses, and R&M expenses have been discussed in the following sections.

### Employee Cost

#### **Petitioner's submission**

The Petitioner has submitted that the employee cost expenses stated comprise all the costs related to employees like basic salary, dearness allowance, medical reimbursement charges, leave and travel allowance, honorarium etc.

The petitioner has not considered the pension and terminal benefits of the ex-employees as it does not maintain accounts related to pension benefits of ex-employees. Hence the same has not been included while calculating the employee costs.

The projections for salaries and allowances for FY 2013- 14 have been made on the basis of the salary costs incurred. The figures arrived at have also taken into account the increase in employee costs on account of promotions and the Modified Assured Career Progression (MACP) scheme of the EDP. The total increase in salary cost for FY 2013-14 is estimated at about 10.9%.

Estimated employee costs in relation to the execution of capital works is expected to amount to 10.41 Crores for FY 2013-14 (a 14% capitalization of the capital expenditure). The net

employee costs after deduction of the above mentioned capitalized amount would amount to 67.60 Crores.

The Petitioner has requested the Commission to approve the employee cost for FY 2013-14 at Rs 67.60 Crores.

### Commission's analysis

The Commission has considered the employee expenses in line with the JERC Tariff Regulations, limited to the expenses as submitted by the Petitioner.

The approved expenses of FY 2012-13 i.e. Rs 60.97 Crores (without excluding the non-core employee expenses) have been escalated by the WPI factor of 8.94%<sup>6</sup> to arrive at the expenses for FY 2013-14. The WPI index till March 2012 has been used as available on the website of Economic Advisor, Ministry of Commerce and Industry for estimation of the increase in the employee expenses from FY 2012-13 to FY 2013-14. The capitalization of the employee expenses has been taken in the same proportion of the gross employee expenses as in the actual of FY 2010-11. This results in the employee expenses of Rs 65.44 Crores, net of the capitalization of Rs 13.56 Crores as estimated by the Commission. The non-core employee expenses as submitted by the Petitioner have been reduced from this figure to arrive at the approved employee expenses of Rs 62.75 Crores.

**Table 116: Employee expenses approved by the Commission for FY 2013-14**

Particulars (Rs Cr)	Petitioner Submission	Approved
Employee Expenses	67.60	62.75

**The Commission considers the employee expenses of Rs. 62.75 Crores as reasonable and approves the same for ARR of FY 2013-14.**

<sup>6</sup> The WPI index upto March 2012 has been used as available on the website of Economic Advisor, Ministry of Commerce and Industry

## **Administrative and General Expenses**

### **Petitioner’s submission**

The Petitioner has submitted that A&G expenses include rent rates and taxes, expenses on computerization, telephone expenses, taxes, legal charges etc. The Petitioner has requested the Commission to approve the A&G expenses at Rs 5.35 Crores.

### **Commission’s analysis**

The approved expenses of FY 2012-13 have been escalated by the WPI factor of 8.94%<sup>7</sup> to arrive at the expenses for FY 2013-14 limited to the submission of the Petitioner, as considered reasonable and hence approved.

The approved A&G expenses of Rs 4.84 Crores for FY 2012-13 have been escalated by 8.94%, to arrive at the A&G expenses of Rs 5.27 Crores for FY 2013-14.

**Table 117: A&G expenses approved by the Commission for FY 2013-14**

Particulars (Rs Cr)	Petitioner Submission	Approved
A&G Expenses	5.35	5.27

**The Commission considers the A&G expenses of Rs 5.27 Crores as reasonable and approves the same for ARR of FY 2013-14.**

## **Repair and Maintenance Expenses**

### **Petitioner’s submission**

The Petitioner has submitted that R&M expenses include expenses on repairs and maintenance of electrical equipment, distribution network vehicles, furniture and fixtures, office equipment, buildings etc. The petitioner has submitted that the reason for the increase in R&M over FY 12-13 is mainly due to the increases in maintenance necessitated in some of the EHV substations of the EDP, periodic maintenances of EDP owned buildings, increase in the maintenance costs of streetlights etc.

The Petitioner has requested the Commission to approve the R&M expenses for FY 2013-14 at 17.64 Crores.

<sup>7</sup> The WPI index upto March 2012 has been used as available on the website of Economic Advisor, Ministry of Commerce and Industry

## 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 utility.

The Commission has applied the escalation factor of 8.94%<sup>8</sup> per annum for estimation of the increase in the R&M expenses from the approved figures of FY 2012-13 of Rs 17.06 Crores, to estimate the R&M expenses for FY 2013-14. The WPI index till March 2012 has been used as available on the website of Economic Advisor, Ministry of Commerce and Industry for estimation of the increase in the R&M expenses from FY 2012-13 to FY 2013-14. This results in the R&M expense of Rs 18.59 Crores. However, the Commission has limited the approval of the R&M expenses to Rs 17.64 Crores as submitted by the Petitioner as reasonable and hence approved.

**Table 118: R&M expenses approved by the Commission for FY 2013-14**

Particulars (Rs Cr)	Petitioner Submission	Approved
R&M Expenses	17.64	17.64

The Commission considers the R&M expenses of Rs. 17.64 Crores as reasonable and approves the same for ARR of FY 2013-14. The petitioner is directed to submit complete details and proper justification of actual R&M expenses at the time of true-up to enable the Commission to take a view in this regard.

## 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 119: O&M expenses approved by the Commission for FY 2013-14**

Particulars (Rs Cr)	Petitioner Submission	Approved
O&M Expenses	90.58	85.65

<sup>8</sup> The WPI index upto March 2012 has been used as available on the website of Economic Advisor, Ministry of Commerce and Industry

## 9.8 GFA and Depreciation

### Petitioner's submission

The Petitioner has submitted that the depreciation has been computed on the basis of straight-line method using the Gross Fixed Assets at the beginning of the year and addition in assets during the financial year. The depreciation is based on the original cost of the Gross Fixed Assets.

Regulation 26 of the 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 used for computation of depreciation has been taken vide Appendix III (Depreciation schedule of CERC (Terms and Conditions of Tariff) Regulations, 2009. Following assumptions have been considered for computing the depreciation for FY 2013-14:

1. Depreciation for 2013-14 has been projected based on the opening balance of assets for the year, without considering the assets that have reached 90% of their value during the year.
2. Additions of assets for the year 2013-14 have been considered based on the capital expenditure proposed to be capitalized for the year

The Petitioner has submitted depreciation of Rs 25.03 Crores, on opening GFA of Rs 545.84 Crores and addition in assets of Rs 34.63 Crores for FY 2013-14.

### Commission's analysis

#### GFA and Capitalization

In line with the treatment of the GFA and capitalization done in the earlier chapters, the Commission considering the reasonableness of the expenditure approves the capitalization of Rs. 34.63 Crores for FY 2013-14.

**Table 120: Gross Fixed Assets approved by the Commission for FY 2013-14**

Particulars (Rs Crores)	Petitioner Submission	Approved
Opening Assets at the beginning of the year	545.84	545.84
Additions during the year	34.63	34.63
<b>Gross Fixed Assets at the end of year</b>	<b>580.47</b>	<b>580.47</b>

## **Depreciation**

Depreciation has been calculated as per the Regulation 26 of JERC Tariff Regulations which specifies that depreciation for the assets shall be calculated annually at the rates specified by the CERC from time to time.

The Commission had raised a query to the Petitioner on the depreciation methodology followed by it, which was responded by the Petitioner vide its email dated April 8' 2013. The Commission as discussed in detail in para 5.9 of this order, has found the submission of the Petitioner to be reasonable. The Commission has not applied the applicable CERC rates on the average assets in place, since some of these assets have already attained the 90% limit. In the absence of the complete break-up of the assets which have attained the 90% depreciation limit, the Commission has considered the submission of the Petitioner as reasonable and approves the same for FY 2013-14.

The table below captures the depreciation as submitted and considered approved by the Commission.

**Table 121: Depreciation approved by the Commission for FY 2013-14**

Particulars (Rs Cr)	Petitioner Submission	Approved
Depreciation	25.03	25.03

**The Commission considers the depreciation of Rs 25.03 Crores as reasonable and approves the same for ARR of FY 2013-14.**

## **9.9 Interest and Finance Charges**

### **Petitioner's submission**

The Petitioner has submitted that it being a government department submits that the entire capital employed till date has been funded through equity infusion by the GoP through budgetary support.

The Interest & Finance Charges relate to financial leases taken by EDP and bank charges towards LCs for payment for power purchased. For the purpose of computation of the finance lease charges, the rate of interest applied is as per actual at 8.22% p.a.

The Petitioner has requested the Commission to approve 2.13 Crores towards expenditure under this head.

### Commission's analysis

The Commission has considered the normative interest on the assets created during the year FY 2009-10 onwards excluding the opening capital base of FY 2009-10 as per the audited accounts for the year and has accordingly allowed interest on normative loan. The treatment is in line with true-up of ARR for FY 2009-10 & FY 2010-11 and as discussed in detail in para 5.9 of this order.

The Commission has considered an addition of Rs. 34.63 Crores in the Gross Fixed Assets for FY 2013-14 which are considered funded through normative debt to the tune of 70%. The Commission for the purpose of funding of the capitalization has considered the normative debt equity ratio of 70:30, whereby it has considered the addition in normative loan at Rs 24.24 Crores for FY 2013-14. The calculation of the interest on the normative loan is given below.

**Table 122: Normative interest on loan approved for FY 2013-14 (Rs Crores)**

Sr. No.	Particulars	Approved
1	Opening Normative Loan	88.37
2	Add: Normative Loan during the year	24.24
3	Less: Normative Repayment	9.87
4	Closing Normative Loan	102.74
5	Average Normative Loan	95.56
6	Rate of Interest (@SBAR rate)	14.45%
<b>7</b>	<b>Interest on Normative Loan</b>	<b>13.81</b>

The Commission has also analyzed the nature of interest and finance charges as submitted by the Petitioner, and **considering the reasonableness of the expenditure estimated by EDP, it allows Rs. 2.13 Crores for FY 2013-14.** The Commission has considered the normative interest on the estimated capital expenditure for FY 2013-14, as an allowable expense as a special case for the determination of ARR for FY 2013-14.

The table below encapsulates the interest & finance charges as approved by the Commission.



**Table 123: Interest and Finance Charges approved by the Commission for FY 2013-14**

Particulars (Rs Cr)	Petitioner Submission	Approved
Interest & Finance Charges	2.13	15.13

**The Commission considers interest and finance charges of Rs 15.13 Crores as reasonable and approves the same for ARR of FY 2013-14.**

### 9.10 Interest on Working Capital and Interest on Consumer Security Deposit

#### Petitioner's submission

The Petitioner has submitted interest on working capital as per the JERC Tariff Regulations. The rate of interest on working capital has been considered as 14.50%.

The normative interest on working capital for FY 2013-14 is 13.78 Crores on normative working capital amount of Rs 95.02 Crores, as claimed by the Petitioner. The Petitioner has not claimed interest on security deposit for the year.

#### Commission's analysis

The Commission has considered the calculation of the different components of the interest on working capital as per the JERC Tariff Regulations. The Commission has considered that the amount collected from the consumers as security deposit is available with the Petitioner and has treated this as available to meet part of working capital requirement for FY 2013-14.

In line with the treatment of the working capital done in the previous chapters, the Commission has considered the receivables equivalent to two months billing, as security deposit available with the Petitioner, as a source to meet working capital requirements and has deducted this amount from the working capital considered for calculation of the interest on working capital for FY 2013-14.

Further, the Commission clarifies that the SBI PLR rate has now been substituted as SBI Advance Rate. The Commission has considered the SBI advance rate of 14.45%<sup>9</sup> for ARR of FY 2013-14. The detailed calculation of the interest on working capital is as mentioned below.

<sup>9</sup> SBI advance rate notified on 14.02.2011; Thereafter four revisions in the SBI advance rate was notified in FY 2011-12 and are as under: 25.04.2011- 13.25%; 12.05.2011-14% ; 11.07.2011-14.25%; 13.08.2011 – 14.75%; 27.09.2012- 14.50%; 04.02.2013 -14.45%

**Table 124: Interest on working capital approved by the Commission for FY 2013-14**

Particulars (Rs Crores)	Petitioner Submission	Approved
Power Purchase Cost for one month	87.47	77.08
Employee Cost for one month	5.63	5.23
A&G Expenses for one month	0.45	0.44
R&M Expenses for one month	1.47	1.47
<b>Total Working Capital for one month</b>	<b>95.02</b>	<b>84.21</b>
Closing Security Deposit (amount already with EDP)	-	141.87
<b>Total Working Capital considered for one month</b>	<b>95.02</b>	<b>(57.66)</b>
<b>SBI PLR Rate</b>	<b>14.50%</b>	<b>14.45%</b>
<b>Interest on Working Capital</b>	<b>13.78</b>	<b>NIL</b>

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

The Commission allows the interest of Rs 12.41 Crores, on the assessed security deposit of Rs 141.87 Crores at the bank rate of 8.75%<sup>10</sup>, to be recovered as part of the ARR and to be paid to the consumers effective 1<sup>st</sup> April 2013. The Commission has considered the bank rate as on January 29' 2013 for the determination of the interest on security deposit for FY 2013-14. This expense should be paid to the eligible consumers and actual expenditure shown at the time of true-up. Any non-compliance in this regard shall be viewed seriously by the Commission.

#### 9.11 Provision for bad and doubtful debts

##### Petitioner's submission

The Petitioner has submitted that it has already commenced on steps to analyze its sundry debtors and arrears, and obtain an age-wise breakup of the same from the revenue billing system. It also is in the process of reconciling the list of arrears with the sundry debtor balances as per the financial statements. This process is likely to take a significant amount of

<sup>10</sup> As per RBI Circular: RBI/2012-13/402 Ref: DBOD.No.Ret.BC. 77/12.01.001/2012-13 dated January 29' 2013, the bank rate stands revised to 8.75% from 9.00% with effect from January 29' 2013

time and effort.

Further, the Petitioner has submitted that as EDP is in the process of reconciling the list of arrears with the sundry debtor balances as per the financial statements, we are not claiming any provision for bad & doubtful debts in the ARR of FY 2013-14, for pass through in tariff to consumers.

### Commission's analysis

The Commission agrees with the submission of the Petitioner and would consider the bad and doubtful debts only after availability of audited accounts, which will be taken up at the time of true up of ARR, in line with the JERC Tariff Regulations.

**Table 125: Provision for bad debts approved by the Commission for FY 2013-14**

Particulars	Petitioner Submission	Approved
Provision for bad and doubtful debts	NIL	NIL

**The Commission, therefore, has not considered any expenses on account of bad & doubtful debts for ARR of FY 2013-14.**

## 9.12 Return on capital base

### Petitioner's Submission

The Petitioner has submitted a return on capital base @3 % on the net capital base at the beginning of the year of Rs. 365.02 Crores, at Rs 10.95 Crores and requests the Commission to approve the same.

The Petitioner has submitted that the Fixed Asset and Depreciation Registers have been prepared and submitted along with the True Up petition for 2009-10 and 2010-11. These have also been audited along with the Accounts for the above years. This is as per the Commission's directive in last tariff order(s).

In view of the above submissions, the Petitioner requests the Commission to approve the estimate of Rs 10.95 Crores for the return on capital base. The Petitioner's claim is summarized below.

**Table 126: Return on Capital Base claimed by the Petitioner for FY 2013-14**

Particulars ( Rs. Cr)	Claimed by petitioner as per revised estimates
Gross block at the beginning of the year	545.84
Opening CWIP	81.72
LESS Accumulated Depreciation	252.68
LESS Accumulated Consumer Contribution	-
LESS Opening Debt	9.86
<b>Net Fixed Assets at beginning of year</b>	<b>365.02</b>
<b>Return @ 3 % of NFA</b>	<b>10.95</b>

### Commission's Analysis

EDP being an integrated utility is entitled to return on capital base as per Regulation 23 of JERC Tariff Regulations. The treatment is as in the previous chapters, as per para 5.12 of this order. The return on capital base as per the provisions of the regulations is as below.

**Table 127: Return on Capital Base calculation by the Commission for FY 2013-14**

Sr. No.	Particulars	Approved
1	Gross block at beginning of the Year/Opening GFA	545.84
2	Opening CWIP	81.72
3	Less accumulated depreciation	255.09
4	Less accumulated consumer contribution	0
5	Less opening debt	9.86
6	Net fixed assets at beginning of the year	<b>362.61</b>
7	<b>Reasonable return @3% of NFA</b>	<b>10.88</b>

The Return on Capital Base as claimed and approved for the year is tabulated below.

**Table 128: Return on capital base approved by the Commission for FY 2013-14**

Particulars (Rs Crores)	Petitioner Submission	Approved
Return on Capital Base	10.95	10.88

The Commission considers the Return on Capital Base of Rs. 10.88 Crores as reasonable and approves the same for ARR of FY 2013-14.

### 9.13 Revenue from outside sales/UI sales

#### Petitioner's submission

The Petitioner has submitted that the proposed rate of sale of power through UI is Rs 3.33/kWh against the average cost of power purchase of Rs 3.03/kWh.

The Petitioner has requested the Commission to approve the UI sales at 426.8 MU, and revenue from UI sales at 142.3 Crores for FY 2013-14.

#### Commission's analysis

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

**Table 129: Revenue from outside sales approved by the Commission for FY 2013-14**

Particulars (Rs Cr)	Petitioner Submission	Approved
Revenue from outside sales	142.30	NIL

## 9.14 Non-Tariff Income

### Petitioner's submission

The non-tariff income comprises of metering, late payment charges, interest on staff loans, reconnection fee, miscellaneous revenue etc. The other income under this head as per the estimates is Rs 2 Crores, and adding the 'revenue from UI sales' under this head gives the total non tariff income of Rs. 144.30 Crores.

The Petitioner requests the Commission to approve the non-tariff income at Rs 144.30 Crores for FY 2013-14.

### Commission's analysis

The Commission has found the submission of the Petitioner under the head of 'other income' as reasonable and approves the same at Rs 2.00 Crores. This together with the 'Revenue from outside sales' approved above gives total approved sum of Rs. 2.00 Crores under the head of 'Non Tariff Income'.

**Table 130: Non tariff income approved by the Commission for FY 2013-14**

Particulars (Rs Cr)	Petitioner Submission	Approved
Non Tariff Income (including revenue from outside sales)	144.30	2.00

The Commission considers the non-tariff income of Rs 2.00 Crores as reasonable and approves the same for ARR of FY 2013-14.

## 9.15 Aggregate Revenue Requirement (ARR) for FY 2013-14

### Petitioner's submission

The Petitioner has submitted the net revenue requirement for FY 2013-14 at Rs 1140.4 Crores based on the items of expenditure discussed above. In addition to the expenses discussed above, the Petitioner has proposed the amortization of the regulatory asset of the previous year's gap to the tune of Rs 92.6 Crores in the net revenue requirement of Rs 1140.4 Crores.

### Commission's analysis

Based on the items of expenditure discussed in the preceding sections, the Commission approves the aggregate revenue requirement for FY 2013-14 at Rs 1072.02 Crores. The same has been summarized in the table below.

**Table 131: Aggregate Revenue Requirement approved by the Commission for FY 2013-14**

Particulars (Rs Crores)	Ref Para	Petitioner Submission	Approved
Cost of power purchase	9.6	1,049.64	924.91
Employee Costs	9.7	67.60	62.75
A&G expenses	9.7	5.35	5.27
R&M Expenses	9.7	17.64	17.64
Depreciation	9.8	25.03	25.03
Interest & Finance Charges	9.9	2.13	15.13
Interest on Working Capital + Int on CSD	9.10	13.78	12.41
Provision for bad debts	9.11	-	NIL
Return on NFA @ 3% of NFA	9.12	10.95	10.88
Amortisation of regulatory asset proposed for previous years	-	92.6	
Less Non tariff Income	9.14	144.30	2.00
<b>Aggregate revenue requirement</b>		<b>1140.43</b>	<b>1072.02</b>

### 9.16 Revenue at existing tariff

#### Petitioner's submission

The Petitioner has submitted that the expected revenue from charges is based on sales projections & approved tariff rates that are currently applicable for different consumer categories and slabs. The expected revenue from tariff for FY 2013-14 is 833.8 Crores; considering the net ARR of 1,140.4 Crores, the gap for FY 2013-14 will be 306.6 Crores.

#### Commission's analysis

Based on the estimates of sales, consumers and connected load approved by the Commission, the Commission has arrived at the revenue from existing tariff of Rs. 851.25 Crores. The slab wise consumers, sales and the connected load have been pro-rated as per the actual unaudited figures of FY 2011-12, for the purpose of estimation of the slab-wise details.

**Table 132: Revenue at existing tariff approved by the Commission for FY 2013-14**

S. No.	Category/Consumption Slab	FY 2013-14
		Revenue at existing tariff
<b>1</b>	<b>Domestic</b>	
	0 - 100	9.87
	101 - 200	9.56
	201 - 300	14.12
	>300	58.75
	OHOB	0.85
	<b>Total</b>	<b>93.16</b>
<b>2</b>	<b>Commercial</b>	
	0 - 100	7.27
	101 - 250	8.24
	> 250	57.06
	<b>Total</b>	<b>72.56</b>
<b>3</b>	<b>Agriculture</b>	
	Small farmers	0.03
	Other farmers	1.08
	<b>Total</b>	<b>1.11</b>
<b>4</b>	<b>Public lighting</b>	
	<b>Total</b>	<b>9.36</b>
<b>5</b>	<b>LT Industrial</b>	
	0 - 1000	7.24
	> 1000	48.80
	Water tank	22.31
	<b>Total</b>	<b>78.36</b>
<b>6</b>	<b>Temporary supply - LT</b>	
	Total	<b>12.00</b>
<b>7</b>	<b>HT 1 Industrial</b>	
	(A) - CD < 2000	
	0 - 100000	81.09
	>100000	74.45
	(B) - 2000 < CD < 5000	
	>0	245.64
	<b>Commercial</b>	
	CD upto 5000 kVA	18.96
	<b>Total</b>	<b>420.15</b>
<b>8</b>	<b>HT 2 - Government &amp; water tank</b>	
	<b>Total</b>	<b>20.84</b>
<b>9</b>	<b>HT 3 - EHT</b>	
	<b>Total</b>	<b>143.71</b>
	<b>Total</b>	<b>851.25</b>



## 9.17 Revenue Gap at existing tariff for FY 2013-14

### Petitioner's submission

The expected revenue from tariff for FY 2013-14 is 833.8 Crores; considering the net ARR of 1,140.4 Crores, the gap for FY 2013-14 will be 306.6 Crores.

The aggregate gap of previous years comprises the gap of 72.9 Crores for FY 2009-10, 102.9 Crores for FY 2010-11, 371.0 Crores for FY 2011-12 and 204.0 Crores for FY 2012-13. Thus, the total aggregate gap submitted is Rs 750.9 Crores for the period from 2009-10 to 2012-13. Of these, the EDP has proposed to recover part of the proposed regulatory asset in the FY 2013-14 net ARR to the tune of 92.6 Crores. Thus, the gap pending recovery from 2009-10 to 2012-13 will be Rs 658.3 Crores.

### Commission's analysis

The revenue gap approved for the year is Rs 220.77 Crores on the basis of the approved aggregate revenue requirement of Rs 1078.52 Crores and the revenue from existing tariff of Rs. 851.25 Crores for FY 2013-14.

**Table 133: Revenue Gap at existing tariff approved by the Commission for FY 2013-14**

Particulars (Rs Crores)	Petitioner Submission	Approved
<b>Aggregate Revenue Requirement</b>	<b>1140.43</b>	<b>1,072.02</b>
Revenue from existing tariff	833.80	851.25
<b>Revenue Gap for the year</b>	<b>306.63</b>	<b>220.77</b>
Gap of previous years	658.28 <sup>11</sup>	680.84
<b>Cumulative Gap</b>	<b>964.92</b>	<b>901.61</b>

The revenue gap of Rs 220.77 Crores not considering the previous year(s) gap has been considered; further, considering the gap of the previous years, the revenue gap of Rs. 901.61 Crores is considered to be reasonable and approved for ARR of FY 2013-14.

<sup>11</sup> Net of the proposed amortization of the regulatory asset of Rs 92.60 Crores

## **10. Tariff Philosophy and category-wise tariffs for FY 2013-14**

### **10.1 Preamble**

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

It is a known fact that like in many other states, consumer tariffs have not kept pace with the rising cost of supply over the years with the result that gap between ARR and revenue billed has widened over the years and a large quantum remains unbridged.

While the Commission has endeavored to generally bring the tariff within the +/- 20% of the average CoS as per the tariff policy, there are certain categories which are outside the range, primarily due to the reason that their existing tariff are way outside the range. The Commission has worked towards avoidance of the tariff shock. Further, some categories of consumers such as OHOB and agriculture who were paying abysmally low tariffs continue to remain at less than 50% of the ACOS despite the tariff increase.

The Commission has taken a considerate view in this regard to determine the tariff so that it progressively reflects the cost of supply of electricity and also reduce cross subsidies within a reasonable period thereby balancing the interest of the utility and the consumer, thus compensating the department with additional revenue and provides the reasonable hike in consumer's tariff.

The Commission has designed the tariff for different categories of consumers as brought out subsequently.

### **10.2 Tariff Determination**

#### **Petitioner's submission**

The Petitioner's proposal for category wise existing and proposed tariff is given below:

**Table 134: Existing and proposed tariff by the Petitioner for FY 2013-14**

	Fixed charges (Rs. Per month per connection/kW/KVA/HP)			Energy charges (Rs./kWh)		
	Existing	Proposed (2013-14)	Change	Existing	Proposed (2013-14)	Change
<b>Domestic</b>						
0 - 100	10.00	20.00	10.00	0.60	1.50	0.90
101-200	10.00	50.00	40.00	0.95	2.50	1.55
201-300	15.00	75.00	60.00	1.80	3.50	1.70
>300	15.00	100.00	85.00	2.35	4.50	2.15
OHOB	20.00	50.00	30.00	-	-	-
<b>Commercial</b>						
0 - 100	30.00	50.00	20.00	2.50	4.50	2.00
101 - 250	30.00	100.00	70.00	3.70	5.25	1.55
250-500	30.00	200.00	170.00	4.30	5.50	1.20
<b>Agriculture*</b>						
Small farmers	50	100	50.00	-	-	-
Other farmers	200	300	100.00	-	-	-
<b>Public lighting</b>	-	-	-	3.50	4.75	1.25
<b>LT Industrial</b>						
0 - 1000	30.00	200.00	170.00	3.40	4.25	0.85

	Fixed charges (Rs. Per month per connection/kW/KVA/HP)			Energy charges (Rs./kWh)		
> 1000	30.00	200.00	170.00	3.65	4.50	0.85
<b>Water tank</b>	30.00	200.00	170.00	3.80	4.60	0.80
<b>Temporary supply - LT</b>	-	-	-	6.00	10.00	4.00
<b>HT 1 Industrial</b>						
(A) - CD < 2000						
0 - 100000	180.00	200.00	20.00	3.50	4.50	1.00
>100000	180.00	200.00	20.00	3.65	4.60	0.95
(B) - 2000 < CD < 5000						
>0	190.00	220.00	30.00	3.80	4.70	0.90
(C)						
>0	190.00	220.00	30.00	4.00	4.70	0.70
<b>HT 2 - Government &amp; water tank</b>	220.00	220.00	-	3.40	4.60	1.20
<b>HT 3 - EHT</b>	180.00	220.00	40.00	3.65	4.50	0.85

\* Units of FC for agriculture category is Rs/HP/annum

### Commission's analysis

Commission has determined the retail tariff for FY 2013-14 keeping in view of the guiding principles as stated in the Electricity Act, 2003 and Tariff Policy and keeping in view the suggestions/objections of the stakeholders in this regard. Based on the approved Aggregate Revenue Requirement for FY 2013-14 and expected revenue from existing tariff, cumulative revenue gap of Rs 901.61 Crores has been estimated. The Commission is of the view that leaving this gap unbridged would deteriorate the financial health of licensee.

Keeping in view the existing tariff and the tariff hike proposed by the Petitioner, Commission has determined tariff for FY 2013-14 to be charged from the consumers. While doing so, the

Commission has appropriately fixed tariff to ensure that the increase in tariff of low consuming consumers does not cause a tariff shock to them.

**Table 135: Tariff approved by the Commission for FY 2013-14**

S.No.	Category/Consumption Slab/month	Approved Tariff for FY 2013-14 (in Rs.)				
		Fixed Charges (Rs per month per connection/kVA/HP)	Energy/Variable Charges (Rs/kWh)	Average tariff (Rs./Unit)**	K Factor <sup>12</sup> for FPPCA formula for FY 2013-14	
<b>1</b>	<b>Domestic</b>					
	OHOB	25.00	-	1.71	NIL	
	0 – 100	20.00	1.00	1.15	0.26	
	101 – 200	20.00	1.50	1.65	0.37	
	201 – 300	30.00	2.80	2.96	0.67	
	>300	30.00	3.50	3.62	0.82	
<b>2</b>	<b>Commercial</b>					
	0 – 100	60.00	3.50	3.68	0.83	
	101 – 250	60.00	4.50	4.68	1.06	
	> 250	60.00	5.00	5.18	1.17	
<b>3</b>	<b>Agriculture Services</b>					
	<b>Agriculture</b>					
	Small farmers	8.00	-	0.10	NIL	
	Other farmers	25.00	-	0.31	NIL	
	<b>Cottage Industries/Poultry/Horticulture/Pisciculture</b>					
	0 – 100	20.00	1.00	}	NIL	
	101 – 200	20.00	1.50		*	NIL
	201 – 300	30.00	2.80			NIL
	>300	30.00	3.50			NIL
<b>4</b>	<b>Public lighting</b>	50.00	4.20	5.31	1.20	
<b>5</b>	<b>LT Industrial</b>					
	0 – 1000	60.00	4.30	4.42	1.00	
	> 1000	60.00	4.50	4.51	1.02	
	Water tank	60.00	4.60	4.60	1.04	
<b>6</b>	<b>Temporary supply – LT</b>	-	9.00	9.00	NIL	
<b>7</b>	<b>HT 1 Industrial and Commercial</b>					
	<b>Industrial</b>					
<b>(a)</b>	Contracted maximum demand upto 2000 kVA					

<sup>12</sup> FPPCA is not applicable (N/A) for the consumer categories including BPL, agriculture and temporary supply. Therefore, the K factor against these categories is shown as NIL.

S.No.	Category/Consumption Slab/month	Approved Tariff for FY 2013-14 (in Rs.)			
		Fixed Charges (Rs per month per connection/kVA/HP)	Energy/Variable Charges (Rs/kWh)	Average tariff (Rs./Unit)**	K Factor <sup>12</sup> for FPPCA formula for FY 2013-14
	0 – 100000	200.00	4.35	5.21	1.18
	>100000	200.00	4.50	5.61	1.27
(b)	Contracted maximum demand greater than 2000 kVA and upto 5000 kVA	220.00	4.70	5.20	1.18
	<b>Commercial</b>				
c)	Contracted maximum demand upto 5000 kVA	220.00	4.70	4.70	1.06
8	<b>HT 2 - Government &amp; water tank</b>	220.00	4.60	5.35	1.21
9	<b>HT 3 - EHT</b>	200.00	4.50	5.06	1.14

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

\* Supporting data not available

### 10.3 Average Cost of Supply

The Commission observes that the approved Average Cost of Supply (ACoS) has gone up from Rs 3.63/kWh in FY 2012-13 as approved in order dated June 12' 2012 to Rs 4.40/kWh in FY 2013-14 as determined in this tariff order, which is an increase of 21.2%.

The Commission is of the view that the approved increase in tariff of 26.48% for FY 2013-14 is reasonable and justifiable. Had the revisions in tariff been sought by the Petitioner for FY 2010-11 and FY 2011-12 in time, the accumulated revenue gap would have been much less than what it is today.

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.

The average tariff as a percentage of average cost of supply approved in this tariff order for FY 2013-14 is as shown in the table below.

**Table 136: Approved tariff as a percentage of ACOS by the Commission for FY 2013-14**

Category	REVISED TARIFF		EXISTING TARIFF		As approved in order dated June 12' 2012	
	Average Revenue Realization	%age of ACOS	Average Revenue Realization	%age of ACOS	Average Revenue Realization	%age of ACOS
Domestic	2.55	58%	1.65	37%	1.23	34%
Commercial	4.88	111%	4.04	92%	3.90	107%
Agriculture	0.30	7%	0.20	4%	0.20	5%
Public lighting	5.31	121%	3.50	79%	3.50	96%
LT Industrial	4.53	103%	3.68	84%	3.65	100%
Temporary supply - LT	9.00	204%	6.00	136%	6.00	165%
HT 1 Industrial and Commercial	5.24	119%	4.30	98%	4.26	117%
HT 2 - Government & water tank	5.35	122%	4.15	94%	4.34	120%
HT 3 - EHT	5.06	115%	4.15	94%	4.39	121%

#### 10.4 Applicability of revised tariffs

The revised tariffs shall be applicable from 1st April 2013.

In cases, where there is a billing cycle difference for a consumer with respect to the date of applicability of the revised tariffs, then the revised tariff should be made applicable on a pro-rata basis for the consumption. The bills for the respective periods as per existing tariff and revised tariffs shall be calculated based on the pro-rata consumption (units consumed during respective period arrived at on the basis of average unit consumption per day multiplied by number of days in the respective period falling under the billing cycle).

#### 10.5 Revenue Deficit at revised tariff for FY 2013-14

The revised tariff shall be effective from 1<sup>st</sup> April 2013 and shall remain valid till revised through a separate order. The revenue at revised tariff for FY 2013-14 works out as under:

**Table 137: Revenue at revised tariff approved by the Commission for FY 2013-14**

Category	TOTAL (Rs Crores)
Domestic	143.74
Commercial	87.81
Agriculture	1.68
Public lighting	14.20
LT Industrial	96.50
Temporary supply - LT	18.00
HT 1 Industrial and Commercial	512.81
HT 2 - Government & water tank	26.86
HT 3 - EHT	175.06
<b>Total</b>	<b>1076.67</b>

**Table 138: Revenue deficit approved by the Commission for FY 2013-14**

Sr. No.	Particulars	Approved by the Commission (FY 2013-14) (Rs Crores)
<b>1</b>	<b>Aggregate Revenue Requirement for FY 2013-14</b>	<b>1072.02</b>
<b>2</b>	<b>Revenue at existing tariff</b>	<b>851.25</b>
<b>3</b>	<b>Total Gap (3-4) at existing tariff</b>	<b>220.77</b>
<b>4</b>	Gap for FY 2009-10	59.54
	Gap for FY 2010-11	96.19
	Gap for FY 2011-12	346.01
	Gap for FY 2012-13	179.10
	<b>Gap of the previous years</b>	<b>680.84</b>
<b>5</b>	<b>Revenue expected at revised tariff</b>	<b>1076.67</b>
<b>6</b>	<b>Net Gap/(Surplus) after considering the impact of revised tariff (1+4-5)<sup>13</sup></b>	<b>676.19</b>

## 10.6 Treatment of Regulatory Asset

In the tariff order for FY 2012-13 dated June 12'2012, the Commission had considered a regulatory asset of Rs 320.56 Crores. The Commission had decided to amortise the above regulatory asset in the next three years commencing FY 2013-14. The break-up of the regulatory asset of Rs 320.56 Crores is as below as determined in the last tariff order dated June 12' 2012.

<sup>13</sup> Without considering the impact of additional surcharge as discussed in para 10.6 below.



	<b>Revenue Gap (Rs Crores)</b>
FY 2009-10	21.83
FY 2010-11	56.63
FY 2011-12	147.27
FY 2012-13	94.83
<b>Total Gap</b>	<b>320.56</b>

Based on the data submitted by the Petitioner, its analysis by the Commission and followed by the Commission's decision, gap/surplus between the aggregates revenue requirement and revenue billed / recognized has been determined by the Commission for FY 2009-10, FY 2010-11, FY 2011-12 and FY 2012-13. Based on the above, the revised position of the revenue gap stands as under.

	<b>Revised Gap (Rs Crores)</b>	<b>Carrying Cost (Rs Crores)</b>	<b>Total gap for the year (Rs Crores)</b>
FY 2009-10	56.11	3.44	59.54
FY 2010-11	89.19	7.00	96.19
FY 2011-12	346.01	-	346.01
FY 2012-13	179.10	-	179.10
<b>Total Gap</b>			<b>680.84</b>

As may be seen, the revenue gap for all the earlier years has substantially increased with respect to the gap approved in the tariff order for FY 2012-13 dated June 12' 2012.

The increase is largely due to two major factors:

1. Recognizing the opening GFA in FY 2009-10 and allowing the consequential cost of servicing the said GFA
2. Payment to TNEB arising due to the interim order of the Madras High Court as well payment of arrears to the other generators/suppliers.

The Commission has approved the average increase in tariff of 26.48 % during FY 2013-14. The tariff hike has been approved to bridge the revenue gap for the FY 2013-14 entirely which would make the Petitioner revenue neutral for FY 2013-14 standalone. Any further increase in tariff would have caused undue hardship to the consumers. The option to liquidate the whole revenue gap would result in huge tariff increases for each of the consumer categories, which may not be in the best interest of the consumers and the licensee.

**As regards to the recovery of the past gap the Commission hereby approves an additional surcharge of 10% to be levied to all consumers above tariff rates on the fixed and energy charges (excluding taxes etc.) towards the recovery of the past accumulated deficit.**

The levy of the above surcharge would lead to an additional recovery of Rs 107.39 Crores which would take care of about one third of the regulatory asset created in the tariff order for FY 2012-13 dated June 12'2012 of Rs 320.56 Crores.

However, the agriculture and the OHOB category would be exempted from this additional surcharge.

As explained in the preceding paragraphs, the accumulated gap for the previous years as assessed under the truing up process in this order has increased to Rs 680.84 Crores up to FY 2012-13. This has resulted in an increase of Rs 360.28 Crores over the assessed cumulative gap in the Tariff order for FY 2012-13. The Commission feels that the Tariff increase allowed along with the additional surcharge of 10% is substantial and any increase further would lead to a tariff shock for the consumers.

**Therefore the Commission suggests the Petitioner to approach the appropriate government to avail a one-time support equivalent to Rs. 360.28 Crores which has emanated due to the past accumulated gap. Such a support would ensure that the tariff can be retained at the approved levels without any further major increases.**

## 11. Determination of Open Access Charges

### Petitioner's Submission

The petitioner has considered the segregation of assets into different voltage levels for FY 2010-11 which had been achieved at the time of submitting this petition. The segregation is shown in the table below.

Voltage Category	Asset Value (Rs. Crore)	Asset Category
<b>EHV Transmission (230 KV and 110 kV)</b>	219.14	Transmission/wheeling
<b>HT - 33/22/11 kV</b>	41.87	Transmission/wheeling
<b>Retail business</b>	187.72	Distribution

This leads to an asset split percentage of 58.17% for transmission business and that for the distribution business of 41.83%. Where applicable, this split is used as the basis for determining the wheeling charges.

The Petitioner for segregation of the ARR into wheeling business has considered the following bifurcation.

Parameter	%	Basis	Actual value (Rs. Crore)
<b>Depreciation</b>	58.17 %	actuals	5.46
<b>Return on NFA</b>	58.17 %	actuals	2.35
<b>O&amp;M</b>	30%	statistical best of 3 average	20.84
<b>Interest and Finance Charges</b>	100%	Only on account of loan obtained from PGCIL	1.88
<b>Interest on working capital + interest on CSD</b>	0	order allows no Interest on WC; all money allowed is for CSD - fully retail	0.00
<b>Non-tariff income</b>	5%	statistical best of 3 average	-4.32

Parameter	%	Basis	Actual value (Rs. Crore)
<b>Total distribution network charge (A)</b>			25.73

The loss levels for different voltage levels are currently being assessed through technical studies by the EDP. However, for the purposes of this order, the benchmark values specified by TNERC in its Order no. 2 dated 15.05.2006 for *Determination of Transmission Charges, Wheeling Charges, Cross Subsidy surcharge and Additional Surcharge* have been considered. These values are given below -

Voltage level	Loss
230 kV	1.00%
110 kV	1.50%
33 kV	1.50%
22/11 kV	5.50%
LT	8.00%

Values derived for EDP

Voltage level	Loss
EHV	1.00%
HT - 33/22/11	5.00%
LT	6.5%
<b>Total</b>	<b>12.5%</b>

Based on this, the following charges are determined -

Parameter	Value
<b>Wheeling business ARR (A)</b>	INR 25.73 crores
<b>Revenue Requirement for EHV wheeling (B)</b>	INR 21.60 crores
<b>Revenue requirement for ONLY HV wheeling (C)</b>	INR 4.12 crores
<b>Sale of Energy</b>	2387.6 MU
<b>LT losses</b>	6.50%
<b>HT losses</b>	5.00%
<b>Energy at HT periphery (D)</b>	2687.98 MU
<b>EHT losses</b>	1%
<b>Energy required at EHT</b>	2715.13 MU
<b>Sales to common pool/UI</b>	466.55 MU
<b>Total energy available at union territory periphery (E)</b>	3195.18 MU
<b>Wheeling charges for customer connected at EHV (B/E)</b>	6.76 paise per unit
<b>Wheeling charges for customer connected at HT (A/D)</b>	9.52 paise per unit

The Petitioner vide its Petition and the errata to the petition has submitted the following cross subsidy surcharge

Consumer Category	T	C (Rs./unit)	L (%)	D (paise/unit)	CSS (Rs/unit)	CSS final
<b>Domestic</b>	1.23	3.52	12.5	58.97	-3.32	0.00
<b>Commercial</b>	3.90	3.52	12.5	58.97	-0.65	0.00
<b>Agriculture</b>	0.20	3.52	12.5	58.97	-4.35	0.00
<b>Public lighting</b>	3.50	3.52	12.5	58.97	-1.05	0.00
<b>LT Industrial</b>	3.65	3.52	12.5	58.97	-0.90	0.00
<b>Temporary supply - LT</b>	6.00	3.52	12.5	58.97	1.45	1.45
<b>HT 1 Industrial and Commercial</b>	4.26	3.52	6.00	9.52	0.44	0.44
<b>HT 2 - Government &amp; water tank</b>	4.34	3.52	6.00	9.52	0.52	0.52
<b>HT 3 - EHT</b>	4.39	3.52	1.00	6.76	0.77	0.77

### Commission's Analysis

The Commission with an objective to generate debate and seek suggestions/comments of the stakeholders on this issue, had also highlighted the steps required & sample calculation of open charges as per the open access regulations to be notified by the Commission shortly to enable open access in the state of Goa and the UTs and had also floated a staff paper titled 'STAFF PAPER ON OPERATIONALISATION OF OPEN ACCESS (OA) IN THE STATE OF GOA AND THE UTs' in September 2012. The complete draft consultation paper is available on the Commission's website [www.jercuts.gov.in](http://www.jercuts.gov.in)

The petitioner has submitted the open access charges for FY 2012-13. The Commission feels that the year FY 2012-13 has already been over and presently there are no open access consumers in the Petitioner's licensed area, whereby the need of such charges for FY 2012-13 does not arise. The Commission has therefore in order to facilitate the open access has approved the Open Access related charges for FY 2013-14.

It is also seen from the Petitioner's submission that the Transmission and Distribution business has not been segregated and the EDP 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 2012-13 and FY 2013-14 as per the approved ARR in this order is provided in the table below:

**Table 139: Allocation of ARR between Wheeling and Retail Supply**

Wheeling and Retail Supply ARR (Rs. Crores) - EDP									
S.No.	Particulars	Allocation (%)		Allocation FY 2012-13			Allocation FY 2013-14		
		Wheeling	Supply	Wheeling	Supply	Total	Wheeling	Supply	Total
1	Cost of Fuel	0%	100%	-	-	-	-	-	-
2	Power Purchase Expenses (incl transmission charges)	0%	100%	-	893.23	893.23	-	924.91	924.91
3	Employee cost	70%	30%	40.88	17.52	58.40	43.92	18.82	62.75
4	Repair & Maintenance expenses	90%	10%	15.35	1.71	17.06	15.87	1.76	17.64
5	Administration & General expenses	50%	50%	2.42	2.42	4.84	2.64	2.64	5.27
6	Depreciation	90%	10%	21.05	2.34	23.39	22.53	2.50	25.03
7	Interest & Finance Charges	90%	10%	10.24	1.14	11.37	13.62	1.51	15.13
8	Interest on working capital	22%	78%	-	-	-	-	-	-
9	Interest on Security Deposit	0%	100%	-	12.67	12.67	-	12.41	12.41
10	Return on Net Fixed Assets /Equity	90%	10%	8.96	1.00	9.96	9.79	1.09	10.88
11	Provision for Bad & Doubtful Debt	0%	100%	-	-	-	-	-	-
12	Other expenses	90%	10%	-	-	-	-	-	-
13	<b>Total Revenue Requirement</b>			<b>98.90</b>	<b>932.01</b>	<b>1,030.92</b>	<b>108.37</b>	<b>965.65</b>	<b>1,074.02</b>
14	Less: Non Tariff Income	0%	100%	-	2.00	2.00	-	2.00	2.00
15	Less: Revenue from Sale through UI	0%	100%	-	49.88	49.88	-	-	-
16	Less: Revenue from Sale of Power (Exchanges)	0%	100%	-	-	-	-	-	-
17	<b>Net Revenue Requirement (13-14-15-16)</b>			<b>98.90</b>	<b>880.13</b>	<b>979.04</b>	<b>108.37</b>	<b>963.65</b>	<b>1,072.02</b>

### Voltage wise Wheeling Charges

The Petitioner has submitted voltage wise bifurcation of assets, whereas the voltage wise expenses are not available. 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 of expenses the Commission has considered the bifurcation of wheeling cost based on the asset bifurcation at different levels provided by the Petitioner. The ratio of assets as approved by the Commission is shown in the table below.

**Table 140: Determination of input energy for network usage percentage**

Particulars	UoM	Amount	%
EHT (230 kV and 110 kV)	Rs Cr	219.14	49%
HT (33/22/11 kV)	Rs Cr	41.87	9%
LT	Rs Cr	187.72	42%

The Petitioner has benchmarked the losses with the TNERC approved losses at different voltage levels. The Commission has accepted the bifurcation of EHT and HT losses as proposed by the Petitioner. Accordingly the Commission has considered the losses at HT and EHT at 5% and 1% respectively. The loss for FY 2013-14 has been approved by the Commission at 12.5% in this order. Accordingly, the balancing loss has been considered at the LT level, as shown in the table below.

Voltage level	Loss
<b>EHV</b>	1.00%
<b>HT - 33/22/11</b>	5.00%
<b>LT</b>	6.5%
<b>Total</b>	12.5%

Accordingly, the wheeling cost has been considered in the ratio of 49:9:42 between EHT, HT and Lt respectively. The wheeling charge so arrived has been shown in the table below

**Table 141: Wheeling charges approved for FY 2013-14**

Particulars	UoM	S. No	FY 2013-14
Wheeling Cost	Rs Crores	A	108.37
Wheeling Cost at EHT	Rs Crores	B=A*49%	52.92
Wheeling Cost at HT	Rs Crores	C=A*9%	10.11
Wheeling Cost at LT	Rs Crores	D=A*42%	45.33
Energy Input at Discom Periphery	MU	E	2,782.61
<b>Wheeling Charge at EHT level</b>	Rs per Unit	<b>F=B/E*10</b>	<b>0.19</b>
EHT Losses	%	G	1%
EHT Losses	MU	H	27.83
Sales at EHT Level	MU	I	346.08
Energy Input at HT	MU	J=E-H-I	2,408.70
<b>Wheeling Charge at HT level</b>	Rs per Unit	<b>K=C/J*10</b>	<b>0.04</b>
HT Losses	%	L	5%
HT Losses	MU	M	120.44
Sales at HT Level	MU	N	1,027.96
Energy Input at LT	MU	O=J-M-N	1,260.30
<b>Wheeling Charge at LT level</b>		<b>P=D/O*10</b>	<b>0.36</b>
Sales at LT level	MU	Q	1,060.74
LT Losses	MU	R=O-Q	199.57
	MU	S=R+M+H	347.83
Total Losses	%		12.50%

**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 142: Calculation of “T”**

Particular	Sales	Revenue from approved tariff	Average Tariff
HT 1 Industrial	978	513	5.24
HT 2 - Government & water tank	50	26.86	5.35
HT 3 - EHT	346	175	5.06

**Table 143: Calculation of “C”**

Station	Energy Procured	Average Rate	Total Power Purchase cost
TS II Stage I	255.62	3.75	95.87

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

**Table 144: Approved Cross subsidy surcharge for FY 2013-14**

Particular	Sales	Revenue from approved tariff	Average Tariff	Cross Subsidy Surcharge
HT 1 Industrial	978	513	5.24	1.23
HT 2 - Government & water tank	50	26.86	5.35	1.33
HT 3 - EHT	346	175	5.06	1.04

The surcharge has been calculated for HT and EHT category only as presently the open access is allowed to 1 MW and above consumers only which fall under this category.

### **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.

## 12. Directives

While examining the compliance note submitted by the Petitioner, it has been observed that the directives issued in the tariff order dated June 12' 2012 for FY 2012-13 have not been fully complied with by the Petitioner.

### Pending compliance of directives as per the tariff order for FY 2009-10 on which the Commission had given further directions in the tariff order for FY 2012-13 dated June 12' 2012

#### 1. Annual Statement of Accounts

##### **Commission's Comments**

*"The Commission has noted the action taken so far, but it is still not as per the direction given in the Tariff Order FY 2009-10. It is directed that the accounts of the licensee need to be prepared on commercial principles for regulated business of electricity as per regulatory requirement by 30<sup>th</sup> September, 2012."*

##### **Compliance/Action Taken**

##### **Petitioner's Submission**

The Accounts of the department for FY 2009-10 & 2010-11 have been audited by an independent Auditing company (M/s Basha Narasimhan, Chennai) and the auditor's report was furnished on 14.12.2012.

The same was submitted to the Hon'ble Commission along with the true-up petition of the respective years.

##### **Commission's Comments**

The Commission appreciates the efforts made by the Petitioner. Compliance is noted.

#### 2. Preparation of Asset and Depreciation Register

##### **Commission's Comments**

*“ Petitioner is directed to submit quarterly progress report and the final completion date of the preparation of the asset and depreciation registers function wise after getting them audited.”*

**Compliance/Action Taken**

**Petitioner’s Submission**

The Asset & Depreciation Registers for the year 2009-10 & 2010-11 has been prepared and audited by the third Party Auditor. The abstract has been submitted along with the respective true –up petitions for the years.

**Commission’s Comments**

The Commission appreciates the efforts made by the Petitioner. Compliance is noted.

**3. Accounting of security deposits etc. under appropriate head of accounts**

**Commission’s Comments**

*“ The action taken is noted. The Commission, however, would like to make it clear that the Petitioner has no choice as far as the payment of interest on consumer security deposit is concerned. The EA Act 2003 itself mandates such payment. The Petitioner is ,therefore, directed to pay interest on the consumer security deposits with effect from 1<sup>st</sup> April 2012 to the consumers at the bank rate (presently @9.5% p.a.)”*

**Compliance/Action Taken**

**Petitioner’s Submission**

Under R-APDRP scheme, the base line data of each consumer is being updated and programmed to be completed by 31.03.2013. The PED would comply the directives and necessary arrangement will be made to give interest credit to the respective consumers from 1st April 2012 after modifying the billing program under R-APDRP scheme. The H.T consumers would be advised to convert their existing fixed deposits into cash deposits before March 2013 and thereon interest would be paid to each H.T consumers.

**Commission’s Comments**

The process of upgrading the billing software and updating the security deposit records should be completed so that consumers can receive the interest on the security deposits as per the Regulations. The Petitioner has submitted that it does maintain the security deposit from the consumers, so the Petitioner is duty-bound to pay the interest on the collected security deposit. The same should be ensured by the licensee so that payment to all consumers due is made with effect from April 1'2012 for FY 2012-13 at the applicable bank rate and also for FY 2013-14.

#### **4. Energy Audit and T&D Losses**

##### **Commission's Comments**

*" Action taken so far is noted. 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.*

*As regards transmission and distribution losses, the Commission had allowed 14% losses for FY 2009-10 in the Tariff Order for FY 2009-10. Taking FY 2009-10 as the base year with 14% T&D losses, the Commission has followed a progressive reduction of 0.5% every year i.e. 13.5% for FY 2010-11, 13% for FY 2011-12 and 12.5% for FY 2012-13.*

*The Commission would like further reduction in losses. The pace of reduction could be expedited as the Petitioner is implementing R-APDRP Scheme which would help bring down losses at a faster rate. 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. Loss reduction trajectory for subsequent years shall be approved by the Commission on receipt and acceptance of the loss reduction road map.*

*In order to understand the actual functioning of any organisation, proper accounting and periodic audit is much needed. This is more relevant in the electricity sector where the commodity is in form of electrons and invisible to eye. Unfortunately, this is one aspect – which is most neglected in the sector. For any improvement to take place, it is essential that first we assess the factual position as it stands today. This can only be done by proper accounting of energy input-and output at each voltage level, accounting at feeder level and at the DTR level. For such an accounting to happen, it is necessary to install correct meters at all pre-identified locations and extracting data periodically. Analysis of such data would give actual level of losses, technical as well as commercial such as not taking meter reading, not raising bills, pilferage / un-authorized use of electricity, etc.*

*The action plan should be submitted to the Commission by 31st October 2012."*

## **Compliance/Action Taken**

### **Petitioner's Submission**

In order to conduct Energy Audit and also for proper accounting of Energy, it is necessary to install meters at pre-determined levels including at DTR. At present, meters are available at the voltage levels of 230 KV, 110KV, 22 KV and 11 KV in all the EHT sub stations. Under R-APDRP programme, the provisions of meters in DTRs of entire Mahe and Yanam regions have been covered. As far as Puducherry and Karaikal regions are concerned, around 40% and 25% of the DTRs respectively have been covered in the R-APDRP programme. All the above works are programmed to be completed by March 2013. In respect of non- R-APDRP area, the department is in the process of providing of meters in the DTRs feeding the agriculture loads only and 50 nos. of DTRs are expected to be completed before end of the year. In respect of provision of meters in remaining DTRs of around 1000 nos. in Puducherry region and around 240 nos. in Karaikal region, the department has proposed to execute 50% each during the years 2013-14 and 2014-15 in view of huge capital cost involved over and above the other development works programmed. The approval of the Hon'ble Commission for the capital expenditure will be requested in the capex plan of the respective years.

In respect of road map for reduction of T&D losses to 10%, the department has proposed to implement the measures proposed under Part-B of R-APDRP scheme for the project areas. It is proposed to implement the HVDS, strengthening of Distribution system by provision of new sub-stations, DT's, provision of Wedge connector in the DT's, LT cut points, provision of Automatic Power Factor Correction units in DT's and provision of capacitor banks in various 110 KV sub-stations. The DPR for Puducherry town has already been submitted to Power Finance Corporation(PFC) and is under scrutiny by PFC. It is estimated that the T&D loss reduction would be achieved by 0.5% in the first year of execution of Part-B / approval of DPR, 1% in the second year and another 1% in the third year.

### **Commission's Comments**

The Commission appreciates the efforts made by the licensee towards compliance of the Commission's directive. Quarterly progress report on the above compliance should be submitted to the Commission and the implementation of the above mentioned programs should be completed as stated by the licensee.

## 5. Estimation of the consumption by agriculture pump-sets

### Commission's Comments

*"While the Petitioner has submitted the number of consumers and estimation of the connected load but the basis for arriving at the normative consumption is unacceptable as the same is not based on actual field data. The Petitioner is directed to install meters at DTRs (atleast 10% in FY 2012-13) and provide data of actual energy consumption per HP of consumers fed from such representative DTRs."*

### Compliance/Action Taken

#### Petitioner's Submission

As directed by the Hon'ble Commission, the PED has taken initiatives to provide the meters at the distribution transformers feeding power supply predominantly to the Agriculture consumers and assess the actual energy consumption per HP of agriculture consumers. The PED submits that as per the directions given by the Hon'ble Commission to provide meters to an extent of 10% of the Distribution transformers exclusively feeding agriculture consumers. The PED has already initiated action to complete metering of 20% of these Distribution Transformers during the year 2012-13 and has programmed to complete metering of 40 % of these Distribution Transformers during each of the years 2013-14 and 2014-15.

### Commission's Comments

The Commission notes that the Petitioner has taken steps in this direction; however the Petitioner has not supported its submission with actual data on the implementation of the above directive. The Petitioner is again directed to submit the data of actual energy consumption per HP of consumers fed from such representative DTRs and support its submission with the number of DTRs that have been metered in FY 2012-13 and planned to be metered in the coming years. The progress/status report on the same be submitted to the Commission by September 2013.

## 6. Management Information System

### Commission's Comments

*"Petitioner is directed to submit quarterly progress report and the final completion date of the implementation plan of the MIS."*

## **Compliance/Action Taken**

### **Petitioner's Submission**

Under the R-APDRP Scheme, Letter of Award (LoA) has already been placed to the ITIA for implementation of the Power Sector Reforms in the UT of Puducherry. This includes an MBC (Metering, Billing and Collection) System by which the revenue information will be built into a versatile database. After this data base is developed / brought into operation, the MIS reports, as required for filing ARR & Tariff Petition as per the regulatory requirements of the Hon'ble Commission could be generated. The ITIA has already commenced the works related to development of the MBC system and the work is expected to be completed by March 2013.

### **Commission's Comments**

The Commission appreciates the efforts made by the licensee towards compliance of the Commission's directive. Quarterly progress report on the above compliance should be submitted to the Commission and the implementation of the above mentioned programs should be completed as stated by the licensee. Status report be submitted by June' 2013.

## **7. Metering of consumer installations / replacement of non-functional or defective Meters**

### **Commission's Comments**

*"Even after 2 years, the petitioner has not given the status of the defective meters installed in this category of consumers. Procurement process to install meters should be expedited and action plan to install these meters be given by 30<sup>th</sup> September 2012."*

## **Compliance/Action Taken**

### **Petitioner's Submission**

Regarding replacement of non-functional and defective meters, the PED submits that action had already been initiated to procure fifty thousand numbers of single phase energy meters and nine thousand numbers of three phase energy meters for this purpose. Out of the total of around 21% of defective meters existing in the service connections, it is proposed to bring down the percentage of defective meters to the level of 12 % by the end of the year 2012-13 and to maintain standard of less than 3% as specified in the JERC (Standard of Performance), Regulations, 2010 by the end of 2013-14.

In respect of agriculture & OHOB services in the UT of Puducherry, to have proper accounting of utilization of energy under the above category of consumers, it is proposed to

utilize the healthy meters released from the various consumer services in the town area, where the pilot Smart Grid Project is proposed to be implemented. It is proposed to cover around 87,000 Nos. of consumers of the town area of Puducherry region under the Smart Grid Pilot Project. This action would be more advantageous, as PED could make proper utilization of released healthy meters from the services in the town area.

### **Commission's Comments**

Action taken is noted. The Commission directs that the process of completion be expedited and completed before the next ARR & tariff filing. Quarterly progress report on the status of the above compliance should be submitted to the Commission.

## **8. Billing and Collection Efficiency**

### **Commission's Comments**

*"The Commission is not satisfied with the reply of the Petitioner. The collection efficiency in ED Puducherry has been 85.70% for FY 2009-10, it is 93.80% for FY 2010-11 based on provisional accounts and 93.80% and 96% as projected by EDP for FY 2011-12 and FY 2012-13 respectively.*

*ED, Puducherry is directed to further improve the collection efficiency and submit an action plan on the steps taken by 30<sup>th</sup> September 2012."*

### **Compliance/Action Taken**

#### **Petitioner's Submission**

Separate Metering, Billing and Collection (MBC) modules are proposed under R-APDRP to improve billing and collection efficiency. Hand held devices are proposed to be introduced for spot billing of LT consumers whereby manual intervention will be completely eliminated. For HT consumers, modems are proposed to be installed at the DTs of the consumers' premises and meter data would be acquired directly through online for billing and monitored continuously.

Various modes of Collections are proposed to be introduced under R-APDRP such as

- (a) Internet payment gateway of various banks;
- (b) 24x7 bill collection counter at the customer care centre for any consumer to pay the dues at any time;
- (c) Normal bill collection counter at the section offices for any consumer to pay the dues and;



- (d) Common bill collection counter proposed to be located at select locations in Puducherry / Karaikal region.

Further the facility for online payment of current consumption bills through Internet Banking offered by the State Bank of India has been introduced for domestic, commercial and industrial categories of consumers of Electricity Department, Puducherry on 28-12-2011. Efforts are on to introduce payment through payment gateways of other banks also. HT bill payment through NEFT/RTGS is also proposed to be introduced shortly. MBC works have commenced and expected to be completed by 31st of March 2013.

With this the consumer will have the option to pay by various modes, will have the flexibility to pay round the clock outside office works and would have sufficient time to pay the bill before the due date.

The PED has also conducted a special drive on disconnection of service in order to improve the collection efficiency on 26.09.2012, under leadership of the Secretary to Government (Power) and the same will be continued in the months to come. The paper clipping of the Advertisements in the leading newspaper upon the conduct of special drive is enclosed for kind perusal of the Hon'ble Commission.

#### **Commission's Comments**

The efforts made by the licensee are greatly appreciated. The Commission desires that the implementation of the above mentioned programs be completed as stated by the licensee. Status report be submitted to the Commission by September' 2013. The process of speedy implementation of the RAPDRP should be carried out.

### **9. Collection of arrears**

#### **Commission's Comments**

*"The action taken so far has been noted but the Commission is not satisfied with the same. However, the Petitioner is directed to get its accounts audited so that the receivables may be audited. They are also directed to prepare an action plan for the liquidation of the arrears and submit to the Commission by 31<sup>st</sup> October 2012."*

#### **Compliance/Action Taken**

#### **Petitioner's Submission**

The subject matter of liquidation of arrears has been discussed at the highest level of the Administration. The Chief Secretary to Government has also directed the Revenue officials

of the Government to give top priority in the matter and take appropriate action to recover the arrears in respect of cases referred under the Revenue Recovery Act. The department has already started the special drive for disconnection of service in order to liquidate the arrears in respect of LT consumers. As the liquidation of arrears due to above mentioned action will definitely be improved, the PED requests the Hon'ble Commission to permit the department for the submission of status on the liquidation of arrears and also road map for the liquidation of arrears based on the action initiated by the department, by 31.03.2013.

#### **Commission's Comments**

The submission of the Petitioner has been noted. The audited accounts as part of the above directive have been complied with. However, the liquidation plan should be submitted to the Commission at the earliest since the compliance with this directive is long due. The directive was issued as part of the tariff order for FY 2009-10 and till date has not been fully complied with. Quarterly progress reports in this regard be submitted to the Commission.

### **10. Load Shedding and ensuring proper service to the consumers**

#### **Commission's Comments**

*"The Commission directs the Petitioner to establish customer care center at all the four locations i.e. Karaikal, Puducherry, Yanam and Mahe."*

#### **Compliance/Action Taken**

#### **Petitioner's Submission**

The U.T of Puducherry is having sufficient power to cater to the growing demand and as such there is no scheduled load shedding.

Under the R-APDRP scheme, 24x7 call center is being opened at Puducherry likely before March 2013. The above call center would be made to serve for all regions until respective regional call centers are opened.

#### **Commission's Comments**

Action taken is noted. It should be ensured that the call centre is fully operational and call centers should be opened at different regions of the Puducherry territory before the next ARR filing.

## 11. Demand Side Management and Energy Conservation

### Commission's Comments

*"Action taken is noted. ED Puducherry is directed to conduct a detailed study on demand side management and energy conservation through an external accredited agency for efficient use of electricity by various means.*

*EDP should take further steps to develop and promote energy efficient technologies in line with the guidelines issued by the BEE. BEE, an autonomous body of MOP is taking several steps to make it mandatory to use 5-star equipments such as Refrigerators, AC, Tubelights, lights, distribution transformers upto 200KVA etc. The same should be implemented by the utility in a phased manner and an action plan for the same be furnished by 30<sup>th</sup> September 2012."*

### Compliance/Action Taken

### Petitioner's Submission

The PED submits that to promote energy efficiency technologies, the PED has taken all effort to use star rated air-conditioner, and energy efficient light fittings in all the Government buildings and energy efficient Tube lights fittings for the street lights. Presently the consumers of the PED are advised to use energy efficient and standard electrical equipments / gadgets and the same would be made mandatory in consultation with the REAP a nodal agency for Puducherry for implementation of energy conservation act.

Now, the Electricity Department is using only the Star rated Distribution transformer of capacities 200 KVA and below, for expansion and strengthening of its distribution system. Further, the PED has envisaged using star rated Distribution Transformer of higher capacities subject to availability in the market.

The PED is also taking necessary action to engage an external accredited agency for conducting a detailed study on demand side PED and energy conservation.

### Commission's Comments

Steps taken by the Petitioner are noted. Status report should be submitted to the Commission by June 2013. Action should be undertaken to engage an external accredited agency for conducting a detailed study on demand side PED and energy conservation and report submitted to the Commission alongwith the next ARR filing.

## 12. Pilferage of Energy

### Commission's Comments

*"The Commission is not satisfied with the reply of the Petitioner. The Commission observes that the locals of all the four regions strongly protested against the inadequacy of the anti-theft measures and directs the Petitioner to submit quarterly reports on the action taken and the revenue loss reduced. The first quarterly report should be submitted by 30<sup>th</sup> September 2012."*

### Compliance/Action Taken

#### Petitioner's Submission

During the second quarter of 2012-13, 961 Nos. of LT services were inspected and violations in respect of misuse of tariff have been noticed in 17 Nos. of services. In one of the LT service, the Multiplication Factor of 1 was found to be adopted instead of 1.5. Notices have also been issued for revision of bills. As far as the inspection of HT services, 32 Nos. of HT services have been inspected during the second quarter of 2012-13, and no violations / theft of energy has been noticed. With a view to strengthen the inspection of services, two separate squads have been formed within the department, each headed by an Executive Engineer. Hence, during the quarters to come, the department will intensify the inspection of services and submit the reports to the Hon'ble Commission.

### Commission's Comments

Submission is noted. Quarterly progress reports on the status of the functioning of the enforcement cell should be submitted to the Commission. The concerned officials should see that the inspection of services is carried out regularly and status reports submitted to the Commission in a timely manner. Theft of energy should be identified and action taken against the culprits. Action taken report should also be submitted to the Commission, on the identified misuse of the supply of electricity. The concerned official should submit a quarterly report before the Commission.

## 13. Employee Cost/Manpower Study

### Commission's Comments

*"The submission of the Petitioner is noted."*

*The Commission has analysed the trends of the number of employees/1000 consumers since the year 2009-10. The ratio has been 6.22 and 6.10 for FY 2009-10 and FY 2010-11 based on the provisional actuals. Based on the estimates for the year 2011-12 and 2012-13, this ratio*

is 6.06 and 5.05. Considering an all India average number of employee per thousand consumers is 0.40<sup>14</sup> as per the annual plan of FY 2011-12 published by the Planning Commission in October 2011; it can be construed that the Electricity Department, Puducherry is overstaffed.

Also, in FY 2009-10 one employee was catering to 161 consumers, in FY 2010-11 it was 164 consumers/employee, for FY 2011-12 it is 165 consumers/employee and for FY 2012-13 it is estimated to be 177 consumers/employee.

The deployment of employees for catering to the number of consumers is improving; however the Commission is not satisfied with the progress of the same. The Commission again directs the utility to have a look at its employee strength, its relative deployment and rationalize the staff requirement and the related costs. The excess manpower needs to be pruned and put to more efficient use such as improvement in customer services etc.

A detailed manpower study should be conducted and submitted to the Commission by 30<sup>th</sup> November 2012.”

## **Compliance/Action Taken**

### **Petitioner’s Submission**

The Department submits that no new recruitment was made since 2011. The existing man power is also gradually reducing in numbers as numbers of employees are retiring year on year. All the field works are being carried out by employees with minimal outsourcing. This is evident from significant low R&M expenses on comparing with other utilities as tabulated below.

Rationalization and re-organization of existing staff/Engineers had already been studied and a detailed project report was prepared by Electricity Department, Pondicherry and the Government of Puducherry had recommended and forwarded the same to Central Home Ministry’s approval. Even in the above report, no new recruitment/creation of post is shown. Only the existing strength is restructured to give more responsibility/accountability to the Engineers & staff. The approval of the Central Government is awaited for the above proposed restructuring.

The UT of Puducherry is having four separate regions spread over in three neighboring states and the existing staffs are also being deployed for non-core activities like street light maintenance etc., and hence the staff strength is not comparable with other neighboring

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<sup>14</sup> 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.

utilities. In spite of above, the expenditure such as Employee Cost/unit and R&M expense/unit is still the lowest for PED on comparing with other utilities.

Utility	Tariff Order Year	Employee Expenses (Rs. Crore)	R&M Expenses (Rs. Crore)	Units MU	Employee Cost paise per unit	R&M expense paise per unit
PED	2012-13	54.79	10.77	2388	22.95	4.51
NDPL Delhi	2012-13	252.09	95.52	7269	34.68	13.14
BSES Rajdhani	2012-13	264.78	114.16	9622	27.52	11.86
BSES Yamuna	2012-13	213.23	69.85	5244	40.66	13.32

### Commission's Comments

The submission of the Petitioner is noted. The restructuring plan as stated by the Petitioner should be submitted to the Commission. The status on the approval of the Central Government be submitted to the Commission.

### Compliance of Directives issued by the Commission in the tariff order for FY 2012-13 dated June 12' 2012

#### 1. Load Forecasting study

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

#### Compliance/Action Taken

##### Petitioner's Submission

*" The load forecasting study would be carried out during the financial year 2013-14 and the same would be submitted to the Hon'ble Commission along with the next ARR petition."*

##### Commission's Comments

The submission of the Petitioner is noted. The Commission hopes that the submission as stated by the Petitioner is duly adhered to.

## **2. Interest on Security Deposit**

U/S 47(4) of the Electricity Act 2003, the distribution licensee 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's regulations provide for the basis of calculation of security deposit to be collected from the different categories of consumers, which ranges from 2 months to 3 months of average past consumption.

ED Puducherry is directed to intimate the Commission the amount of security deposit collected from the consumers as on 31.3.2012 by 30<sup>th</sup> September 2012. In this regard, the EDP is directed to segregate the amount of the security deposits, meter security deposits and consumer contribution for service lines from the consumers under separate heads of accounts as a first step if currently being accounted under one account head.

The Petitioner is directed to pay interest on consumer security deposit at the applicable bank rate (presently at 9.5% per annum).

### **Compliance/Action Taken**

#### **Petitioner's Submission**

*"The PED would comply with directives and necessary arrangement will be made to give interest credit to the respective consumers from 1st April 2012 after modifying the billing program under R-APDRP programme scheme. The H.T consumers would be advised to convert their existing fixed deposits into cash deposits before March 2013 and there on interest would be paid to each H.T consumers."*

#### **Commission's Comments**

The process of upgrading the billing software and updating the security deposit records should be completed so that consumers can receive the interest on the security deposits as per the Regulations. The Petitioner has submitted that it does maintain the security deposit from the consumers, so the Petitioner is duty-bound to pay the interest on the collected security deposit. The same should be ensured by the licensee so that payment to all consumers due is made with effect from April 1'2012 for FY 2012-13 at the applicable bank rate and also for FY 2013-14.

### **3. Bill Payment:**

The facility of online payments should be introduced. The Petitioner is directed to introduce multiple payment gateways/agencies for online collection and action plan for the implementation of the above program be submitted within three months. In addition, the payment hours should be extended/alternative options explored so that the consumers can make the payment outside the working hours. The bill delivery mechanism should be tuned to provide 15 days time to the consumer to make the payment as per the regulations of the Commission.

#### **Compliance/Action Taken**

##### **Petitioner's Submission**

*" Various modes of Collections are proposed to be introduced under R-APDRP such as*

- (a) Internet payment gateway of various banks;*
- (b) 24x7 bill collection counter at the customer care centre for any consumer to pay the dues at any time;*
- (c) Normal bill collection counter at the section offices for any consumer to pay the dues and;*
- (d) Common bill collection counter proposed to be located at select locations in Puducherry / Karaikal region.*

*Further the facility for online payment of current consumption bills through Internet Banking offered by the State Bank of India has been introduced for domestic, commercial and industrial categories of consumers of Electricity Department, Puducherry on 28-12-2011. Efforts are on to introduce payment through payment gateways of other banks also. HT bill payment through NEFT/RTGS is also proposed to be introduced shortly. Metering Billing Collection works have commenced and expected to be completed by 31st of March 2013.*

*With this the consumer will have the option to pay by various modes, will have the flexibility to pay round the clock outside office works and would have sufficient time to pay the bill before the due date."*

##### **Commission's Comments**

Commission appreciates the efforts made by the Petitioner in this regard. The progress of the above facilities as mentioned by the Petitioner should be submitted to the Commission by September 2013. The process of speedy implementation of the RAPDRP should be carried out.



**4. Rural Electrification:**

The Petitioner is directed to submit the status of rural electrification in their area along with the detailed plan for rural electrification with the timeline proposed to achieve the complete electrification of rural area. The same should be furnished by 31<sup>st</sup> October 2012.

**Compliance/Action Taken**

**Petitioner's Submission**

*"All the villages in the Union Territory of Puducherry had already been electrified and as such, the PED submits no action plan in this regard."*

**Commission's Comments**

Compliance with the Commission's directive is noted.

**5. Capital expenditure:**

The Commission directs the utility to furnish the capital expenditure plan of the utility prior to filing the petition for the respective year. The capex for FY 2013-14 as part of the petition for the respective year would not be considered without the prior approval of the Commission.

The capex plan should clearly highlight the cost benefit analysis of each of the schemes envisaged for the year. Benefits accruing to the consumers out of the schemes should be clearly brought out.

The Commission also directs the utility to furnish a certificate to the Commission showing how the capital expenditure of the previous years has benefited the consumers.

**Compliance/Action Taken**

**Petitioner's Submission**

*"The capital expenditure for the year 2013-14 is furnished along with the ARR petition for the year 13-14 highlighting the scheme-wise cost benefits.*

*The scheme wise cost benefits for the past years would be submitted to the Hon'ble Commission before 31st March 2013."*

**Commission's Comments**

The submission of the Petitioner is noted. The Commission desires a detailed cost-benefit analysis supporting the capex plan of the Petitioner. The Petitioner should ensure that the same are submitted to the Commission before June 30' 2012.

## 6. Gross Fixed Assets

The Petitioner is directed to provide the break-up of the Gross Fixed Assets which are being put to active use by the utility. A detailed break-up of the GFA should be provided to the Commission along with the next year's petition.

### Compliance/Action Taken

#### Petitioner's Submission

*"The directives of the Hon'ble commission have been complied and the details are furnished in the un-audited accounts for the year 2011-12.*

*Audited functional wise Asset & Depreciation Registers are available with the department for the year 2009-10 & 2010-11."*

#### Commission's Comments

The Commission appreciates the efforts made by the licensee in the preparation of the Fixed Asset and the Depreciation Register. The Commission has noted the auditor's observation in the audited accounts that only the fixed assets being put to active use have been considered in the consideration of the Gross Fixed Asset. Compliance is noted.

## 7. Enforcement Cell:

The Petitioner is directed to submit the status of the functioning of enforcement cell and quarterly progress report detailing number of cases, amount involved, sub-judice cases and reduction in losses consequently.

### Compliance/Action Taken

#### Petitioner's Submission

*"During the second quarter of 2012-13, 961 Nos. of LT services were inspected and violations in respect of misuse of tariff have been noticed in 17 Nos. of services. In one of the LT service, the Multiplication Factor of 1 was found to be adopted instead of 1.5. Notices have also been issued for revision of bills. As far as the inspection of HT services, 32 Nos. of HT services have been inspected during the second quarter of 2012-13, and no violations / theft of energy has been noticed. With a view to strengthen the inspection of services, two separate squads have been formed within the department, each headed by an Executive Engineer. Hence, during the quarters to come, the department will intensify the inspection of services and submit the reports to the Hon'ble Commission."*

**Commission's Comments**

Submission is noted. Quarterly progress reports on the status of the functioning of the enforcement cell should be submitted to the Commission. The concerned officials should see that the inspection of services is carried out regularly and status reports submitted to the Commission in a timely manner.

**8. Voltage wise Categorisation:**

There should be two major categorizations LT and HT based on voltage of supply. Within each voltage class, sub-categorisation should be according to use by different consumer categories. This should be proposed in next ARR i.e. voltagewise, consumerwise and category wise.

**Compliance/Action Taken**

**Petitioner's Submission**

*"The directive of the Hon'ble Commission is considered in the ARR for the year 2013-14."*

**Commission's Comments**

The compliance is noted.

**9. Data on the consumption and load profile of Advertisement Hoardings, Sign boards, 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 power during the peak hours.

**Compliance/Action Taken**

**Petitioner's Submission**

*"Preliminary assessment at Puducherry is less than 1% and hence it is not possible to fix separate tariff for the category."*

**Commission's Comments**

The submission of the Petitioner is noted.

**10. Supply of energy to agriculture consumers**

The Petitioner has mentioned in the petition that no connection is given without a meter. It is, however, seen that the meters have not been used either for working out consumption

or for billing. It is not understood what purpose such meters serve when the same are not used. It may be mentioned that the cost of meters is borne by consumers directly or indirectly. So while the consumers have been burdened with the cost, no benefit is being derived from such assets.

Although the Petitioner has not offered any explanation in this regard, one of the possibilities could be that the meters may not be in proper working condition. Also, there could be the issue of reading such meters periodically, say once in 3-4 months, which are located in remote rural areas.

While the Commission is of the view that it is the responsibility of the licensee to ensure proper up keep of meters as well as periodic meter reading, the Commission recognizes that it is not as easy as it appears to be. In some other states, a very large number of agriculture consumers were provided with individual meters but the same had to be removed in a short time due to the fact that either the meters became unfunctional or were tampered thus not allowing to record actual consumption. Keeping the ground realities in view, the Commission directs the Petitioner to come up with a viable scheme, keeping the provisions of the Electricity Act as well as their practical difficulties in view, to suggest billing of such consumers on the basis of actual consumption and not on the basis of present practice of billing on assessed consumption. One option could be to provide meters on distribution transformers coupled with the consumer indexing. Thus the actual consumption recorded by the DTR meters and apportioning the total consumption in the ratio of load (in terms of horse-power) of individual consumers could be the basis for billing. This would alleviate the need to maintain and read large number of individual meters at consumer premises and would also satisfy the legal requirement of supply through a correct meter as provided in the Electricity Act 2003.

The Commission directs the Petitioner to prepare a proper scheme and submit to the Commission by 30<sup>th</sup> September 2012.

### **Compliance/Action Taken**

#### **Petitioner's Submission**

*"As directed by the Hon'ble Commission, the PED has taken initiatives to provide the meters at the distribution transformers feeding power supply predominantly to the Agriculture consumers and assess the actual energy consumption per HP of agriculture consumers. The PED submits that as per the directions given by the Hon'ble Commission to provide meters to an extent of 10% of the Distribution transformers exclusively feeding agriculture consumers.*

*The PED has already initiated action to complete metering of 20% of these Distribution Transformers during the year 2012-13 and has programmed to complete metering of 40 % of these Distribution Transformers during each of the years 2013-14 and 2014-15.*

*The PED has provided 82 nos. of Energy meters at DTRs feeding predominantly agricultural consumers. Necessary study would be made to ascertain the agriculture consumption after a period of one agri-year.”*

### **Commission’s Comments**

The Commission notes that the Petitioner has taken steps in this direction; however the Petitioner has not supported its submission with the actual data on the implementation of the above directive. The Petitioner is directed to submit the data of actual energy consumption per HP of consumers fed from such representative DTRs and support its submission with the number of DTRs that are planned to be metered in the coming years. The progress/status report on the same be submitted to the Commission by September 2013.

## **11. Assessment of the open access consumers**

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

### **Compliance/Action Taken**

#### **Petitioner’s Submission**

*“The road map for setting up of STU and SLDC has been furnished in the open access petition along with the proposed open access tariff by the Electricity Department to the Hon’ble commission on 7.12.2012.”*

#### **Commission’s Comments**

Submission of the Petitioner is noted. Quarterly progress reports on the status of the implementation of the open access in the licensee area should be submitted to the Commission in a time-bound manner.

## **12. Connected Load/Contract Demand based fixed charges for LT Industrial and Commercial categories**

The Petitioner should furnish the connected load/contract demand data for the LT Industrial and Commercial categories and propose tariff based on connected load/contract demand to the Commission in the next tariff proposal.

The Fixed Charges for the LT industrial and Commercial (greater than 20 kW) should be based on connected load/contract demand.

### **Compliance/Action Taken**

#### **Petitioner's Submission**

*"On full implementation of R-APDRP programme the fixed charges based on the connected load would be implemented for both LT /Commercial and Industrial consumers."*

#### **Commission's Comments**

The Commission notes the submission of the Petitioner. Efforts to expedite the implementation of the R-APDRP schemes should be made and connected load/contract demand data for the LT Industrial and Commercial categories should be furnished alongwith the next ARR filing. The fixed charges should accordingly be proposed in the next tariff proposal before the Commission.

## **13. True-up Petition for the respective years**

The Petitioner is directed to file 'true-up' for FY 2009-10, FY 2010-11 and FY 2011-12 and 'Review' for FY 2012-13 alongwith the petition for ARR and tariff determination for FY 2013-14.

### **Compliance/Action Taken**

#### **Petitioner's Submission**

*"The True-up petitions for the year 2009-10 & 2010-11 had already been submitted to the Hon'ble Commission on 07-01-2013. The accounts on accrual basis for 2011-12 have been prepared by the PED and submitted along with this petition for 2013-14. The true-up petition for the year 2011-12 would be submitted after the audit of 2011-12 accounts. The revised estimates of 2012-13 is submitted along with the ARR of 2013-14."*

### **Commission's Comments**

Commission appreciates the efforts of the licensee. The compliance is noted.

### **14. Short-term procurement of power by the licensee**

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

### **Compliance/Action Taken**

#### **Petitioner's Submission**

*"At present the department is not facing any power crisis in the Puducherry UT and the department is not buying any short term power. If any power crisis is faced by the Department the Department would follow the directives of the Hon'ble Commission."*

#### **Commission's Comments**

The submission of the Petitioner is noted.

### **New Directive**

#### **1. Proposal of the Energy Charges for the agriculture category**

The Commission desires the Petitioner to make an assessment of the agriculture category in the licensee area and make a proposal for the inclusion of energy charges for the agriculture category, both for the small farmers and the 'other farmers'. Differential tariff should be proposed for this category based on the size of the agriculture land holdings.

### **13. Rationalization and Reform of Tariff Schedule and Terms & Conditions of Supply**

The Commission in pursuit of the rationalization and reform of the tariff schedule and terms & conditions of supply had floated a draft consultation paper titled 'Draft Consultation Paper - Seeks to provide a policy framework to address uniformity in consumer classification based on uses of electricity, voltage-wise contract load/demand limits and terms and condition of LT and HT supply to various consumer categories' in December 2012.

The Joint Electricity Regulatory Commission (JERC) for the State of Goa and UTs notified its "Joint Electricity Regulatory Commission (Electricity Supply Code) Regulations, 2010" which was applicable to all distribution licensees and its consumers. Presently, all the seven licensees have different supply voltage for different contract demand / load, different consumer categories and different terms & conditions. The supply voltage for different contract demand/load has not been specified in the JERC (Electricity Supply Code) Regulation, 2010. Until a common uniform supply voltage for different contract demand / load, consumer categories, Terms & Conditions for LT supply and HT supply are framed; there would always be dissimilarities in the above amongst all the seven utilities under JERC.

The objective of the draft paper was to bring about uniformity mainly in the following areas for the seven licensees under the jurisdiction of JERC.

1. Uniform categorization of consumers based on uses;
2. Uniform supply voltage for different contract demand/load;
3. Uniform terms & conditions for LT supply;
4. Uniform terms & conditions for HT supply

Further, there is dissimilarity in the terms and conditions for both LT and HT voltage level between the licensees on various parameters as listed below:

1. Power Factor;
2. Power Factor Incentive;
3. Power Factor Surcharge;
4. Disconnection;
5. Billing;
6. Excess Demand; and
7. Over drawl

The draft paper proposes to bring about uniformity in the above mentioned parameters through a common terms and conditions of supply for all the seven licensees.



The Commission had floated the draft paper for comments/suggestions/objections from the stakeholders for further consideration and implementation in the forthcoming tariff orders. However, the Commission did not receive adequate comments/suggestions from all the licensees and other stakeholders. There were no objections/suggestions from some of the licensees under the jurisdiction of JERC. In view of the lack of awareness and for greater participation from the public at large, the Commission has included a gist of the proposed tariff schedule and terms & conditions of supply in this tariff order which is reproduced below here. **The Commission wants the licensees and other stakeholders to be more participative and give their suggestions/comments/objections so that the proposed common tariff schedule and terms & conditions of supply can be made applicable in the future years with necessary changes.** From the below mentioned schedule, **the Commission has already introduced the proviso of advance payment rebate, prompt payment rebate and power factor surcharge/rebate in this year's tariff schedule for the benefit of the stakeholders.** The Commission is inviting comments/suggestions from the stakeholders on other features of the draft tariff schedule which are yet to be implemented.

The complete draft consultation paper is available on the Commission's website [www.jercuts.gov.in](http://www.jercuts.gov.in).

### **Proposed Uniform Tariff Schedule and Terms & Conditions of Supply**

#### **PART - A: LOW TENSION (LT) SUPPLY**

System of supply: Low Tension – Alternating Current, 50 cycles per second

Single Phase supply at 230 Volts

Three Phase supply at 400 Volts

The tariffs are applicable for supply of electricity to LT consumers with a contracted load/demand upto 75 kW (100 HP) for Domestic, non-domestic, Public lighting, Industrial, Agricultural and Public water works categories.

Single Phase supply - contracted load upto 5.0 kW

Three Phase supply - contracted load above 5.0 kW

#### **CATEGORY OF SERVICE AND TARIFF RATES**

##### **1.0 DOMESTIC SERVICE**

###### **Applicability**

This tariff shall be applicable for supply of electricity for a contracted load/demand upto 75 KW for domestic purposes such as lights, fans, radios, televisions, heaters, air-conditioners, washing machines, air-coolers, geysers, refrigerators, ovens, mixers and other domestic appliances including motor-pumps for lifting water for domestic purposes in residential houses, bungalows, multi-storied flats, farm houses, ashrams, mutts, housing colonies etc. This shall also be applicable to the

common facilities in the multi-storied, purely residential apartments, buildings having contracted load/demand upto 75 kW.

### 1.1 DOMESTIC SERVICE-I (DS-I)

This tariff shall be applicable to all huts and dwelling houses of families below the poverty line (BPL) and houses, including pucca houses, built under Government schemes, including rehabilitation for BPL families, having contracted load of 100 Watts only. Consumption of consumers under this category shall be limited to 30 kwh per month.

**Note:** In case it is detected that load of consumers under this category exceeds 100 watt or monthly consumption exceeds 30 kwh for three consecutive months, it shall be considered under unauthorised use of electricity and shall be dealt as per JERC Electricity Supply Code Regulations, 2010 and the BPL Tariff shall immediately become inoperative and shall further be billed under DS-II category.

### 1.2 DOMESTIC SERVICE-II (DS-II)

This is applicable for domestic premises for single phase supply for contracted load/demand upto 5 kW and three phase supply for contracted load/demand above 5 kW upto 75 KW.

**Note** (i) If a portion of the domestic premises limited to only one room is used for running small household business having DS-II connection, such connection shall be billed under DS-II category provided that the total monthly consumption of the consumer does not exceed 150 KWH.

(ii) If either more than one room or only one room having monthly consumption exceeding 150 KWH for consecutive three months are detected in the domestic premises being used for mixed purposes having DS-II connection, it shall be considered under unauthorised use of electricity and shall be dealt as per JERC Electricity Supply Code Regulations, 2010 and such connection shall further be billed under NDS-I category until a separate connection of appropriate tariff is taken for that portion used for non-domestic purpose.

## TARIFF RATES

### 1.0 DOMESTIC SERVICE

#### 1.1 DOMESTIC SERVICE-I (DS-I)

Sl.	Category of consumers	Fixed charge (Rs/connection/month or part thereof)	Energy charge (Paisa/kwh)
	Metered	x	
	unmetered		X

#### 1.2 DOMESTIC SERVICE-II (DS-II)

Sl.	Category of consumers	Fixed charge (Rs/KW/month or part thereof)	Energy charge Consumption/ month (Units)	Rate (Ps/unit)
	Single / Three Phases		Upto 100 101-300 301-500	

Above 500

**OPTIONAL**

**1.2.1 DOMESTIC SERVICE-II/D (DS-II/D)**

All those consumers under DS-II category with 3 phase supply opting for demand based tariff shall be required to pay at the rates indicated below:

**1.2.1 DOMESTIC SERVICE-II/D (DS-II/D)**

Sl.	Category of consumers	Demand charge (Rs/KW/ month or part thereof)	Energy charge Consumption/ month (Units)	Rate (Ps/unit)
	All Three Phase		For all units	

**2.0 NON-DOMESTIC SERVICE**

**Applicability**

This shall be applicable for supply of electrical energy for non-domestic consumers having contracted load/demand upto 75 kW, using electrical energy for light, fan and power loads for non-domestic purposes like shops, offices, government and semi-government offices, show rooms, laundries, photo-studios, bakery shops, parlours, bars, coffee houses, advertisement hoardings, neon sign-boards, hospitals, nursing homes, clinics, dispensaries, diagnostic centres, X-ray plants, private schools, colleges, libraries, coaching institutes and research institutes, restaurants, hotels, clubs, gymnasium, sport institutions, stadiums, guest houses, boarding / lodging houses, marriage houses, public halls, auditorium, exhibitions, theatres, circus, cinemas, fuel/oil stations, service stations, printing presses, museums, banks, race-course, burial /crematorium grounds, bus-stations, railway stations, telephone exchanges, All India Radio / T.V. installations, shops having welding set, small lathe, electric drill etc, IT establishments, common facilities in multi-storied commercial office / buildings, commercial trusts, societies, shopping malls, multiplexes, commercial establishments and other installations not covered under any other tariff schedule.

This shall also be applicable to government educational institutions, their hostels and libraries, government hospitals, government research institutions, government sport institutions and non-profitable government aided educational institutions, their hostels and libraries, government run youth hostels, harijan hostels, rehabilitation centres, anganwadies, balwadies etc, non-profitable recognized charitable institutions, orphanage homes and old-age homes run by religious and charitable organisations recognised by government, etc.

Religious places such as temples, mosques, gurudwaras, churches etc, are also covered under this tariff.

**2.1 NON-DOMESTIC SERVICE-I (NDS-I)**

This shall be applicable for supply of electrical energy for non-domestic services such as shops, offices, government and semi-government offices, show rooms, laundries, photo-studios, bakery shops, parlours, bars, coffee houses, advertisement hoardings, neon sign-boards, hospitals, nursing homes, clinics, dispensaries, diagnostic centres, X-ray plants, private schools, colleges, libraries, coaching institutes and research institutes, restaurants, hotels, clubs, gymnasium, sport institutions, stadiums, guest houses, boarding / lodging houses, marriage houses, public halls, auditorium, exhibitions, theatres, circus, cinemas, fuel/oil stations, service stations, printing

presses, museums, banks, race-course, burial /crematorium grounds, bus-stations, railway stations, telephone exchanges, All India Radio / T.V. installations, shops having welding set, small lathe, electric drill etc, IT establishments, common facilities in multi-storied commercial office / buildings, commercial trusts, societies, shopping malls, multiplexes, commercial establishments and other installations not covered under any other tariff schedule for single phase supply for contracted load/demand upto 5 kW and three phase supply for contracted /demand above 5 KW upto 75 KW. This shall also be applicable to government educational institutions, their laboratories, hostels and libraries, government hospitals, government research institutions, government sport institutions and government aided educational institutions, their laboratories, hostels and libraries, government run youth hostels, harijan hostels, rehabilitation centres, anganwadies, balwadies etc.

## 2.2 NON-DOMESTIC SERVICE-II (NDS-II)

This shall be applicable for supply of electrical energy for non-domestic services such as orphanage homes and old-age homes run by religious and charitable organisations recognised by the government for single phase supply for contracted load/demand upto 5 kW and three phase supply for contracted load/demand above 5 KW upto 75 KW

This shall be applicable for supply of electrical energy for non-domestic (Religious) service such as places of worship like temples, mosques, gurudwaras, churches.

## 2.3 NON-DOMESTIC SERVICE-III (NDS-III)

This shall be applicable for supply of electrical energy for advertisement hoardings and neon sign boards for single phase supply for contracted load/demand upto 5 kW and three phase supply for contracted load/demand above 5 KW upto 75 KW

### TARIFF RATES

#### 2.0 NON-DOMESTIC SERVICE

##### 2.1 NON-DOMESTIC SERVICE-I (NDS-I)

Sl.	Category of consumers	Fixed charge (Rs/KW/ month or part thereof)	Energy charge Consumption/ month (Units)	Rate (Ps/unit)
	Single/Three Phases		Upto 100 Above 100	

### OPTIONAL

#### 2.1.1 NON-DOMESTIC SERVICE-I/D (NDS-I/D)

All those consumers under NDS-I category with 3 phase supply opting for demand based tariff shall be required to pay at the rates indicated below:

##### 2.1.1 NON-DOMESTIC SERVICE-I/D (NDS-I/D)

Sl.	Category of consumers	Demand charge (Rs/KW/ month or part thereof)	Energy charge Consumption/ month (Units)	Rate (Ps/unit)

All Three Phase

For all units

## 2.2 NON-DOMESTIC SERVICE-II (NDS-II)

Sl.	Category of consumers	Fixed charge (Rs/KW/ month or part thereof)	Energy charge Consumption/ month (Units)	Rate (Ps/unit)
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Single/ Three Phases

For all units

### OPTIONAL

#### 2.2.1 NON-DOMESTIC SERVICE-II/D (NDS-II/D)

All those consumers under NDS-II category with 3 phase supply opting for demand based tariff shall be required to pay at the rates indicated below:

#### 2.2.1 NON-DOMESTIC SERVICE-II/D (NDS-II/D)

Sl.	Category of consumers	Demand charge (Rs/KW/ month or part thereof)	Energy charge Consumption/ month (Units)	Rate (Ps/unit)
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All Three Phase

For all units

## 2.3 NON-DOMESTIC SERVICE-III (NDS-III)

Sl.	Category of consumers	Fixed charge (Rs/KW/ month or part thereof)	Energy charge Consumption/ month (Units)	Rate (Ps/unit)
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Single/ Three Phases

For all units

### OPTIONAL

#### 2.3.1 NON-DOMESTIC SERVICE-III/D (NDS-III/D)

All those consumers under NDS-III category with 3 phase supply opting for demand based tariff shall be required to pay at the rates indicated below:

#### 2.3.1 NON-DOMESTIC SERVICE-III/D (NDS-III/D)

Sl.	Category of consumers	Demand charge (Rs/KW/ month or part thereof)	Energy charge Consumption/ month (Units)	Rate (Ps/unit)
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All Three Phase

For all units

## 3.0 IRRIGATION AND AGRICULTURAL SERVICE (IAS)

### Applicability

This shall be applicable for supply of electrical energy for contracted load/demand upto 100 HP for bonafide use for irrigation pumping and agricultural purposes including processing of Agricultural Produce, confined to chaff - cutter, thrasher, cane crusher and rice Huller including lighting loads when operated by the agriculturist in the field or farm. This is also applicable to nurseries growing flowers/ plants/ saplings/ fruits, hatcheries, poultries (with more than 1000 birds) and fisheries (fish ponds), piggery, aquaculture, sericulture, cattle breeding farms, mushroom growing farms, and those dairy units where only extraction of milk and its processing such as chilling, pasteurisation, etc is done.

#### 3.1 IRRIGATION AND AGRICULTURAL SERVICE-I (IAS-I)

This shall be applicable for supply of electrical energy for contracted load/demand upto 25 HP for bonafide use for irrigation pumping and agricultural purposes including processing of Agricultural Produce

#### 3.2 IRRIGATION AND AGRICULTURAL SERVICE-II (IAS-II)

This shall be applicable for supply of electrical energy for contracted load/demand above 25 HP upto 100 HP for bonafide use for irrigation pumping and agricultural purposes including processing of Agricultural Produce

#### 3.3 IRRIGATION AND AGRICULTURAL SERVICE-III (IAS-III)

This shall be applicable for supply of electrical energy for contracted load/demand upto 100 HP for allied activities such as nurseries growing flowers/ plants/ saplings/ fruits, hatcheries, poultries (with more than 1000 birds) and fisheries (fish ponds), piggery, aquaculture, sericulture, cattle breeding farms, mushroom growing farms, and those dairy units where only extraction of milk and its processing such as chilling, pasteurisation, etc is done.

### Tariff Rates

#### 3.0 IRRIGATION AND AGRICULTURAL SERVICE (IAS)

##### 3.1 IRRIGATION AND AGRICULTURAL SERVICE-I (IAS-I)

Sl. Category of consumers	Fixed charge (Rs/HP/ month or part thereof)	Energy charge (Paisa/kwh)
Metered		
Unmetered		X

##### 3.2 IRRIGATION AND AGRICULTURAL SERVICE-II (IAS-II)

Sl. Category of consumers	Fixed charge (Rs/HP/ month or part thereof)	Energy charge (Paisa/kwh)

### 3.3 IRRIGATION AND AGRICULTURAL SERVICE-III (IAS-III)

Sl.	Category of consumers	Fixed charge (Rs/HP/ month or part thereof)	Energy charge (Paisa/kwh)
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Metered

### 4.0 LOW TENSION INDUSTRIAL SERVICE (LTIS)

#### Applicability

This shall be applicable for supply of electricity to low tension industrial consumers with a contracted load/demand upto 100 HP for industrial processing or agro-industries purposes, cold storage, arc welding sets, workshops, flour mills, wet grinding, oil mills, rice mills, dal mills, atta chakki, Huller, expellers, saw mills, milk dairies (where milk is processed other than chilling, pasteurisation etc to produce other milk products), ice cream manufacturing units, power-looms, garment manufacturing units, tyre retreading units, bakery manufacturing units, etc including lighting loads.

#### 4.1 LOW TENSION INDUSTRIAL SERVICE-I (LTIS-I)

This shall be applicable for supply of electricity to low tension industrial consumers with a contracted load/demand upto 25 HP

#### 4.2 LOW TENSION INDUSTRIAL SERVICE-II (LTIS-II)

This shall be applicable for supply of electricity to low tension industrial consumers with a contracted load/demand above 25 HP upto 100 HP

#### Tariff Rates

### 4.0 LOW TENSION INDUSTRIAL SERVICE (LTIS)

#### 4.1 LOW TENSION INDUSTRIAL SERVICE-I (LTIS-I)

Sl.	Category of consumers	Fixed charge (Rs/HP/ month or part thereof)	Energy charge Rate (Ps/unit)
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#### OPTIONAL

#### 4.1.1 LOW TENSION INDUSTRIAL SERVICE-I/D (LTIS-I/D)

All those consumers under LTIS-I category with 3 phase supply and with contract demand upto 25 HP opting for demand based tariff shall be required to pay at the rates indicated below:

#### 4.1.1 LOW TENSION INDUSTRIAL SERVICE-I/D (LTIS-I/D)

Sl.	Category of consumers	Demand charge (Rs/HP/ month or part thereof)	Energy charge Consumption/ months(Units)	Rate (Ps/unit)
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All Three Phase upto 25  
HP

#### 4.2 LOW TENSION INDUSTRIAL SERVICE-II (LTIS-II)

Sl.	Category of consumers	Fixed charge (Rs/HP/ month or part thereof)	Energy charge Rate (Ps/unit)
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#### OPTIONAL

##### 4.2.1 LOW TENSION INDUSTRIAL SERVICE-II/D (LTIS-II/D)

All those consumers under LTIS-II category with 3 phase supply and with contract demand above 25 HP upto upto 100 HP opting for demand based tariff shall be required to pay at the rates indicated below:

##### 4.2.1 LOW TENSION INDUSTRIAL SERVICE-II/D (LTIS-II/D)

Sl.	Category of consumers	Demand charge (Rs/HP/ month or part thereof)	Energy charge Consumption/ months(Units)	Rate (Ps/unit)
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All Three Phase

#### 5.0 PUBLIC WATER WORKS & PUBLIC LIGHTING

##### Applicability

This shall be applicable to public water works, sewerage treatment plant and sewerage pumping stations including lighting loads functioning under state government and state government undertakings and local bodies for contracted load/demand upto 100 HP.

This shall also be applicable for supply of electricity for contracted load/demand upto 75 KW to street light system including signal system belonging to state / central government / local bodies. Also applicable to traffic lights, mast lights / blinkers etc.

##### 5.1 PUBLIC WATER WORKS (PWW)

This shall be applicable to public water works, sewerage treatment plant and sewerage pumping stations including lighting loads functioning under state government and state government undertakings and local bodies for contracted load/demand upto 100 HP.

##### 5.2 PUBLIC LIGHTING (PL)



This shall be applicable for supply of electricity for contracted load/demand upto 75 KW to street light system including signal system belonging to state / central government / local bodies. Also applicable to traffic lights, mast lights / blinkers etc.

**Tariff Rates**

**5.0 PUBLIC WATER WORKS (PWW)**

**5.1 PUBLIC WATER WORKS-I (PWW-I)**

Sl.	Category of consumers	Fixed charge (Rs/HP/ month or part thereof)	Energy charge Rate (Ps/unit)
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**OPTIONAL**

**5.1.1 PUBLIC WATER WORKS/D (PWW/D)**

All those consumers under PWW category with 3 phase supply and with contract demand upto 100 HP opting for demand based tariff shall be required to pay at the rates indicated below:

**5.1.1 PUBLIC WATER WORKS/D (PWW/D)**

Sl.	Category of consumers	Demand charge (Rs/HP/ month or part thereof)	Energy charge Consumption/ months(Units)	Rate (Ps/unit)
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All Three Phase

**5.2 PUBLIC LIGHTING (PL)**

Sl.	Category of consumers	Fixed charge (Rs/KW/ month or part thereof)	Energy charge (Paisa/kwh)
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Metered

Unmetered

X

**6.0 BULK SUPPLY SERVICES (BS)**

**Applicability**

This tariff shall be applicable to supply of electrical energy for contracted load/demand above 30 KW upto 75 KW at three phase low tension at single point where onward distribution lines / service lines are owned and maintained by the consumers for domestic purpose or non-domestic purpose as specified in the respective tariff category.

**6.1 BULK SUPPLY SERVICES-I (BS-I)**

This tariff shall be applicable to supply of electrical energy for domestic services for contracted load/demand above 30 KW upto 75 KW at three phase low tension at single point where onward

distribution lines / service lines are owned and maintained by the consumers as specified in the domestic service category above.

## 6.2 BULK SUPPLY SERVICES-II (BS-II)

This tariff shall be applicable to supply of electrical energy for non-domestic services for contracted load/demand above 30 KW upto 75 KW at three phase low tension at single point where onward distribution lines / service lines are owned and maintained by the consumers as specified in the non-domestic services category above.

### Tariff Rates

#### 6.1 BULK SUPPLY SERVICES-I (BS-I)

Sl.	Category of consumers	Fixed charge (Rs/KW/ month or part thereof)	Energy charge (Paisa/kwh)
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### OPTIONAL

#### 6.1.1 BULK SUPPLY SERVICES-I/D (BS-I/D)

All those consumers under BS-I category with 3 phase supply opting for demand based tariff shall be required to pay at the rates indicated below:

#### 6.1.1 BULK SUPPLY SERVICES-I/D (BS-I/D)

Sl.	Category of consumers	Demand charge (Rs/KW/ month or part thereof)	Energy charge Consumption (Units)	Rate (Ps/unit)
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All Three Phase

#### 6.2 BULK SUPPLY SERVICES-II (BS-II)

Sl.	Category of consumers	Fixed charge (Rs/KW/ month or part thereof)	Energy charge (Paisa/kwh)
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### OPTIONAL

#### 6.2.1 BULK SUPPLY SERVICES-II/D (BS-II/D)

All those consumers under BS-II category with 3 phase supply opting for demand based tariff shall be required to pay at the rates indicated below:

### 6.2.1 BULK SUPPLY SERVICES-II (BS-II/D)

Sl.	Category of consumers	Demand charge (Rs/KW/ month or part thereof)	Energy charge Consumption/ MONTHS(Units)	Rate (Ps/unit)
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All Three Phase

### TERMS AND CONDITIONS OF LOW TENSION (LT) TARIFF

1. Unless otherwise agreed to, these tariffs are applicable for power supply at one point only.
2. Unless otherwise specifically stated to the contrary, the figures of energy charges relates to paise per unit (kwh) for energy consumed during the month.
3. These tariffs are exclusive of statutory levies like electricity duty/cess or any other taxes, duties/cess etc, imposed by the State Government / Central Government or any other competent authority and shall be charged extra.
4. In case payment is made through cheque and the cheque is dishonoured, an amount of Rs.200/- shall be levied as cheque return charges. The licensee may initiate action u/s 138 of the Negotiable Instrument Act, 1981 in addition to disconnection of the service.
5. Fixed/Demand charges, wherever applicable, shall be charged on pro-rata basis from the date of release of connection. Fixed/Demand charges, wherever applicable, shall be double as and when bi-monthly billing is done. Similarly, slabs of energy consumption shall also be doubled in case of bi-monthly billing.
6. The electricity bill shall be rounded off in whole rupees. Amount less than 50 paise shall be ignored and amount of 50 paise and above shall be considered as one rupee.
7. **Advance Payment Rebate:** If payment is made in advance well before commencement of consumption period for which bill is prepared, a rebate @ 1% per month shall be given on the amount (excluding security deposit) which remains with the licensee at the end of the month. Such rebate, after adjusting any amount payable to the licensee, shall be credited to the account of the consumer.
8. **Prompt Payment Rebate:** If payment is made at least 7 days in advance of the due date of payment a rebate for prompt payment @ 0.25 % of the bill amount shall be given. Those consumers having arrears shall not be entitled for such rebate.
9. **Delayed payment surcharge:** In case a consumer does not pay energy bills in full by the due date specified in the bill, a delayed payment surcharge of one and half (1.5) percent per month or part thereof on the outstanding arrears shall be levied from the due date for payment until the payment is made in full without prejudice to right of the licensee to disconnect the supply in accordance with Section 56 of the Electricity Act, 2003.
10. **Shunt Capacitor Installation**
  - a) Every LT consumer including irrigation pump set consumers whose connected load includes induction motor (s) of capacity 3 HP and above and other low power factor consuming appliances shall arrange to install low tension shunt capacitors of appropriate capacity at his cost across terminals of his motor (s). The consumer shall ensure that the capacitors installed by him are

properly matched with the actual rating of the motor so as to ensure power factor of 90% (0.9 lagging).

b) All LT consumers having welding transformers will be required to install suitable shunt capacitor(s) of adequate capacity so as to ensure power factor of not less than 90% (0.9 lagging).

c) The capacitors shall be of standard manufacture and meet the Bureau of Indian Standards specification.

d) Consumers not complying to above shall be liable to pay a power factor surcharge at the following rates:

(i) For the LT consumers whose meter is capable of recording average monthly power factor and if the monthly average power factor of a consumer falls below 90% (0.9 lagging), such consumer shall pay a surcharge in addition to his normal tariff @ 0.5% on billed demand and energy charges for each fall of 0.01 in power factor upto 0.7(lagging). If such consumers maintains power factor more than 95% (0.95 lagging), a power factor incentive @ 0.25% on demand and energy charges shall be given for each increase of 0.01 in power factor above 0.95 (lagging)

(ii) For the LT consumers whose meter is not capable of recording average monthly power factor and such LT Consumers not complying to conditions a to c above shall be liable to pay a power factor surcharge of 10% (ten percent) of the billed fixed/demand and energy charges till the capacitors in healthy condition are installed.

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

f) No new supply to LT installations having low power factor consuming equipment such as induction motor of 3 HP and above or welding transformers etc., will be released unless shunt capacitors are installed to the satisfaction of the Board.

**11. Maximum Demand:** The maximum demand of supply of electricity during a month shall be twice the largest number of Kilo-Volt Ampere Hours (KVAH) delivered at the point of supply to the consumers during any consecutive 30 minutes in the month.

**12. Billing Demand:** Any LT consumer who has opted for demand based tariff, the billing of such consumer shall be on the maximum demand recorded during the month or contracted demand, whichever is higher. Such billing demand shall be rounded off to next higher digit for the purpose of billing.

**13. Excess Demand:** If in any month, the recorded maximum demand of the consumer exceeds 105% of its contracted demand, the normal tariff shall be applicable upto the 105% of the contract demand and that portion of demand which is in excess of 105% of the contracted demand shall be billed at double the normal rate. If the actual recorded demand of a consumer exceeds 105% of the contracted demand consecutively for three months, the licensee may issue a notice and inform the consumer to get additional contract demand sanctioned or to limit their drawl as per their contract. Otherwise the licensee shall take action as per provisions of the Act/Rules/Regulations.

**Illustration:** If contract demand is 60 kw whereas maximum demand recorded during the month is 70 kw, then demand for 63 kw (105% of 60 kw) shall be billed at normal rate and demand for 7 kw (70 kva-63 kw) shall be billed at twice the normal rate.

**14. Defective / Damaged / Burnt Meter:** In case of meter being defective / damaged / burnt the Licensee or the consumer as the case may be shall replace the same within the period specified in "Standards of Performance" Regulations issued by the Commission. Till defective meter is replaced

the consumption shall be assessed and billed on an average consumption of last six meter reading cycles or average monthly consumption of corresponding six meter reading cycles of the preceding year whichever is higher from the date of meter being out of order. Such consumption shall be treated as actual consumption for all practical purposes until the meter is replaced/ rectified.

In case a functional check-meter is available then the readings of the check meter shall be used for billing purposes when main meter becomes defective/damaged/burnt.

In case the meter becomes defective within three meter reading cycles after its installation and prior consumption is not available, then billing shall be done provisionally on the basis of following load factor subject to adjustment on the average consumption of three meter reading cycles of the replaced meter:

Sl	Category of consumers	Load Factor	Average Unit
1.	Domestic	0.15	100 units/kW
2.	Non-domestic	0.20	150 units/kW
3.	Public Water Works	0.20	100 units/HP for water works 125 unit/kW for street light
4.	Irrigation & Agricultural	0.15	80 units/HP
5.	LT Industrial	0.25	135 units/HP
6.	HT Industrial (at P.F.=0.90 lag)	0.40	260 units/kVA

**15. Contracted/Connected load/Demand exceeding LT load limit:** In case of existing LT consumers whose contracted/connected load or demand exceeds the upper limit of LT supply, such consumers may either shift to HT supply or optionally continue to remain as LT consumers subject to payment of 10% surcharge on fixed and energy charges. The licensee shall not release any new connection or enhance load of existing consumers whose contracted load/demand exceeds LT limits.

**16. Usage of electricity for other purpose than authorized:** If either more than one room or only one room having monthly consumption exceeding 150 KWH for consecutive three months are detected in the domestic premises being used for mixed purposes having DS-II connection or any other premises which is used for a purpose other than for which it was authorized and the tariff applicable for which is higher, it shall be considered under unauthorised use of electricity and shall be dealt as per JERC Electricity Supply Code Regulations, 2010 and such connection shall further be billed on appropriate higher tariff category until a separate connection of appropriate tariff is taken for that portion.

**17. FPPCA:** The adjustment on account of Fuel and Power Purchase Cost variation shall be calculated in accordance with FPPCA formula notified by the Commission. The value of K-factor shall be applicable to the different consumer categories as per the values approved in this tariff order. Such charges shall be recovered / refunded in accordance with terms & conditions specified in the FPPCA formula.

**18. Temporary Supply (LT)**

(i) Temporary Supply is for connection temporary in nature for a maximum period of two year. The applicability shall be as given in the respective tariff category. Temporary supply cannot be claimed by a prospective consumer as a matter of right but will normally be arranged by the licensee when a requisition is made giving due notice subject to technical feasibility and in accordance with electricity supply code issued by the Commission.

(ii) The tariff shall be chargeable as applicable to the corresponding appropriate tariff category at the following rates subject to minimum Rs .....:

<b>Sl</b>	<b>Period of Supply</b>	<b>Tariff Rate</b>
1.	Upto 12 months	150% of normal rate of appropriate tariff category
2.	More than 12 months and upto 18 months	175% of normal rate of appropriate tariff category
3.	More than 18 months and upto 24 months	200% of normal rate of appropriate tariff category

Fixed/Demand charges, wherever applicable, shall be charged on pro-rata basis from the date of release of connection.

(iii) Terms of Supply of Temporary Supply shall be as below:

a) Temporary supply may be given for a period not exceeding 3 months in the first instance, the duration of which, may be extended on quarter to quarter basis subject to maximum total duration of two year.

b) In addition to the tariff charges, the consumer shall have to deposit the following charges before commencement of the temporary supply:

(i) Estimated cost of erection of temporary service line and dismantling.

(ii) Cost of irretrievable materials which cannot be taken back to service.

(iii) Meter rent for the full period of temporary connection as per appropriate tariff schedule and other miscellaneous charges.

(iv) Rental on the cost of materials of the licensee as per estimate at the rate of Rs. 15/- per month on every Rs. 100/- or part thereof.

(v) Ten per cent on the total cost of the estimate for the temporary service connection to cover as security for loss of materials and contingencies. In case such loss is not noticed, the amount will be refunded.

c) The applicants for temporary supply shall be required to make a deposit in advance of the cost as detailed above including fixed/demand charges and the energy consumption charges estimated for full period on the basis of contracted load/demand. This will however, be adjusted against the final bill that will be rendered on disconnection of supply.

d) If the consumer intends to extend the temporary supply beyond the period originally applied for, he will have to deposit in advance all applicable charges as detailed above including the estimated electricity consumption charges, for the period to be extended and final bill as well, for the previous period, if any.

### **19. Seasonal Supply (LT)**

(i) Seasonal supply shall be given to any consumer on written request to the licensee subject to the following conditions.

<b>Sl</b>	<b>Period of Supply</b>	<b>Tariff Rate</b>
1.	Upto 3 consecutive months in a year	Appropriate tariff plus 40 percent
2.	More than 3 consecutive months and	Appropriate tariff plus 30 percent

- upto 6 consecutive months in a year
3. More than 6 consecutive months Appropriate tariff plus 20 percent and upto 9 consecutive months in a year
4. More than 9 consecutive months Appropriate tariff plus 10 percent. but less than one year

(ii) The meter rent and other charges as provided in the appropriate tariff are applicable to seasonal loads and would be charged extra for the entire period of supply.

(iii) The supply would be disconnected after the end of the period unless the consumer wants the supply to be continued. Any reconnection charges have to be borne by the consumer.

(iv) Consumer proposing to avail seasonal supply shall sign an agreement with the licensee to avail power supply for a minimum period of 2 years in the case of LT category of supply.

(v) The consumers must avail supply in terms of whole calendar month continuously.

(vi) The consumer is required to apply for seasonal supply and pay initial cost and security deposit as an applicant for normal electricity supply.

(vii) The consumer shall ensure payment of monthly energy bills within 7 days of its receipt. The supply will be disconnected if payment is not made on due date.

**20.** Schedule of Tariff and Other charges approved in this Tariff Order shall remain in force until it is amended by the Commission.

## **PART - B: HIGH TENSION (HT) SUPPLY**

System of supply: High Tension – Alternating Current, 50 cycles per second, 3 phase at 11 KV / 22 KV / 33 KV

The tariffs shall be applicable for supply of electricity for use in installations with a minimum contract demand of 80 KVA and maximum contract demand of 5000 KVA depending upon the supply voltage for different contract demand as specified below:

Sl	Supply Voltage	Contract Demand	
		Minimum	maximum
1	11 kV or 22 kV	80 kVA	1500kVA
2	33 kV	1501 kVA	5000 kVA

## **CATEGORY OF SERVICE AND TARIFF RATES**

### **8.0 HIGH TENSION SERVICE-HTS**

#### **Applicability**

The tariffs shall be applicable for supply of electricity for use in installations with a minimum contract demand of 80 KVA and maximum contract demand of 5000 KVA on high tension voltage at 11 KV / 22 KV / 33 KV as per the specified voltage wise contract demand.

**Note:**

- (i) A surcharge @ 10% shall be levied on fixed/demand charge and energy charge if supply is availed at LT voltage by the existing consumers against specified 11 kV.
- (ii) A surcharge @ 5% shall be levied on fixed/demand charge and energy charge if supply is availed at 11 kV or 22 kV by the existing consumers against specified 33 kV.
- (iii) An incentive @ 3% shall be given on demand charge and energy charge if supply voltage is at 33 kV against specified 11 kV.
- (iv) An incentive @ 3% shall be given on demand charge and energy charge if supply voltage is at 66 kV EHT voltage against specified 33 kV HT voltage.

**8.1 HIGH TENSION/DS (HT/DS)**

The tariffs shall be applicable for supply of electricity for domestic use defined under 1.0 above in installations with a minimum contract demand of 80 KVA and maximum contract demand of 5000 KVA on high tension voltage at 11 KV / 22 KV / 33 KV as per the specified voltage wise contract demand.

**8.2 HIGH TENSION/NDS (HT/NDS)**

**8.2.1 HIGH TENSION/NDS-I (HT/NDS-I)**

The tariffs shall be applicable for supply of electricity for non-domestic use defined under 2.0 above including shopping malls, multiplexes and other commercial installations with a minimum contract demand of 80 KVA and maximum contract demand of 5000 KVA on high tension voltage at 11 KV / 22 KV / 33 KV as per the specified voltage wise contract demand.

**8.2.2 HIGH TENSION/NDS-II (HT/NDS-II)**

The tariffs shall be applicable for supply of electricity for non-domestic (religious and charitable) use defined under 2.0 above with a minimum contract demand of 80 KVA and maximum contract demand of 5000 KVA on high tension voltage at 11 KV / 22 KV / 33 KV as per the specified voltage wise contract demand.

**8.3 HIGH TENSION/IAS (HT/IAS)**

The tariffs shall be applicable for supply of electricity for irrigation and agricultural use defined under 3.0 above in installations with a minimum contract demand of 80 KVA and maximum contract demand of 5000 KVA on high tension voltage at 11 KV / 22 KV / 33 KV as per the specified voltage wise contract demand.

**8.4 HIGH TENSION/INDUSTRIAL (HTIS-I)**

The tariffs shall be applicable for supply of electricity for industrial use defined under 4.0 above other than power intensive covered under HTS-IV tariff in installations with a minimum contract demand of 80 KVA and maximum contract demand of 5000 KVA on high tension voltage at 11 KV / 22 KV / 33 KV as per the specified voltage wise contract demand.



### 8.5 HIGH TENSION/POWER INCENTIVE (HTIS-II)

The tariffs shall be applicable for supply of electricity for power intensive, metal alloy, steel melting, ferro-alloy, ferro-metallurgical use in installations with a minimum contract demand of 80 KVA and maximum contract demand of 5000 KVA on high tension voltage at 11 KV / 22 KV / 33 KV as per the specified voltage wise contract demand.

### 8.6 HIGH TENSION/PWW (HT/PWW)

The tariffs shall be applicable for supply of electricity for public water works use defined under 5.0 above in installations with a minimum contract demand of 80 KVA and maximum contract demand of 5000 KVA on high tension voltage at 11 KV / 22 KV / 33 KV as per the specified voltage wise contract demand.

## Tariff Rates

### 8.0 HIGH TENSION SERVICE-HTS

#### 8.1 HIGH TENSION/DS (HT/DS)

Sl.	Category of consumers	Fixed charge (Rs/KVA/month or part thereof)	Energy charge Rate (Ps/unit)
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#### 8.2.1 HIGH TENSION/NDS (HT/NDS-I)

Sl.	Category of consumers	Fixed charge (Rs/KVA/month or part thereof)	Energy charge Rate (Ps/unit)
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#### 8.2.2 HIGH TENSION/NDS (HT/NDS-II)

Sl.	Category of consumers	Fixed charge (Rs/KVA/month or part thereof)	Energy charge Rate (Ps/unit)
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#### 8.3 HIGH TENSION/IAS (HT/IAS)

Sl.	Category of consumers	Fixed charge (Rs/KVA/month or part thereof)	Energy charge Rate (Ps/unit)
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#### 8.4 HIGH TENSION/INDUSRIAL (HTIS-I)

<b>Sl. Category of consumers</b>	<b>Fixed charge (Rs/KVA/ month or part thereof)</b>	<b>Energy charge Rate (Ps/unit)</b>
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**8.5 HIGH TENSION/POWER INCENTIVE (HTIS-II)**

<b>Sl. Category of consumers</b>	<b>Fixed charge (Rs/KVA/ month or part thereof)</b>	<b>Energy charge Rate (Ps/unit)</b>
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**8.6 HIGH TENSION/PWW (HT/PWW)**

<b>Sl. Category of consumers</b>	<b>Fixed charge (Rs/KVA/ month or part thereof)</b>	<b>Energy charge Rate (Ps/unit)</b>
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**PART - C: EXTRA HIGH TENSION (EHT) SUPPLY**

System of supply: Extra High Tension – Alternating Current, 50 cycles per second, 3 phase at 66 KV / 110 KV / 132 KV / 220 KV

The tariffs shall be applicable for supply of electricity for use in installations with contract demand more than 5000 KVA depending upon the supply voltage for different contract demand as specified below:

Sl	Supply Voltage	Contract Demand	
		minimum	Maximum
1	66 kV	5001 kVA	25000 kVA
2	110 kV or 132 kV or 220 kV	Above 25000 kVA	

**CATEGORY OF SERVICE AND TARIFF RATES**

**9.0 EXTRA HIGH TENSION**

**Applicability**

The tariffs shall be applicable for supply of electricity for use in installations with a minimum contract demand of 5001 KVA on extra high tension voltage at 66 KV / 110 KV / 132 KV / 220 KV as per the specified voltage wise contract demand.

**Note:**

- (i) A surcharge @ 5% shall be levied on fixed/demand charge and energy charge if supply is availed at 33 kV HT voltage by existing consumers against specified 66 kV EHT voltage.
- (ii) A surcharge @ 5% shall be levied on fixed/demand charge and energy charge if supply is availed at 66 kV EHT voltage by existing consumers against specified 110 KV / 132 KV / 220 KV EHT voltage.
- (iii) An incentive @ 3% shall be given on demand charge and energy charge if supply voltage is at 110 kV or 132 kV or 220 kV against specified 66 kV.

**Tariff Rates**

**9.0 EXTRA HIGH TENSION SERVICES (EHTS)**

Sl.	Category of consumers	Fixed charge (Rs/KVA/month or part thereof)	Energy charge Rate (Ps/unit)
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**TERMS AND CONDITIONS OF HT and EHT TARIFF**

1. Unless otherwise agreed to, these tariffs are applicable for power supply at one point only.
2. Unless otherwise specifically stated to the contrary, the figures of energy charges relates to paisa per unit for energy consumed during the month.
3. These tariffs are exclusive of statutory levies like electricity duty/cess or any other taxes, duties/cess etc., imposed by the State Government / Central Government or any other competent authority and shall be charged extra.
4. In case, payment is made through cheque and the cheque is dishonoured, an amount of Rs.200/- shall be levied as cheque return charges. The licensee may initiate action u/s 138 of the Negotiable Instrument Act, 1981 in addition to disconnection of the service.
5. The supply voltage for different contract demand as specified below:

Sl	Supply Voltage	Contract Demand	
		minimum	maximum
1	11 kV or 22 kV	80 kVA	1500kVA
2	33 kV	1501 kVA	5000 kVA
3	66 kV	5001 kVA	25000 kVA
4	110 kV or 132 kV or 220 kV	Above 25000 kVA	

6. Demand charges, wherever applicable, shall be charged on pro-rata basis from the date of release of connection. Demand charges, wherever applicable, shall be double as and when bi-monthly billing is done. Similarly, slabs of energy consumption shall also be doubled in case of bi-monthly billing.

7. The electricity bill shall be rounded off in whole rupees. Amount less than 50 paise shall be ignored and amount of 50 paise and above shall be considered as one rupee.

**8. Advance Payment Rebate:** If payment is made in advance well before commencement of consumption period for which bill is prepared, a rebate @ 1% per month shall be given on the amount (excluding security deposit) which remains with the licensee at the end of the month. Such rebate, after adjusting any amount payable to the licensee, shall be credited to the account of the consumer.

**9. Prompt Payment Rebate:** If payment is made at least 7 days in advance of the due date of payment a rebate for prompt payment @ 0.25 % of the bill amount shall be given. Those consumers having arrears shall not be entitled for such rebate.

**10. Delayed payment surcharge:** In case a consumer does not pay energy bills in full by the due date specified in the bill, a delayed payment surcharge of one and half (1.5) percent per month or part thereof on the outstanding arrears shall be levied from the due date for payment until the payment is made in full without prejudice to right of the licensee to disconnect the supply in accordance with Section 56 of the Electricity Act, 2003.

**11. Power Factor Surcharge / Incentive**

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

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

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

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

**12. Maximum Demand:** The maximum demand of supply of electricity during a month shall be twice the largest number of Kilo-Volt Ampere Hours (KVAH) delivered at the point of supply to the consumers during any consecutive 30 minutes in the month.

**13. Billing Demand:** The billing shall be on the maximum demand recorded during the month or 75% of contracted demand, whichever is higher. Such billing demand shall be rounded off to next higher digit for the purpose of billing.

**14. Excess Demand:** If in any month, the recorded maximum demand of the consumer exceeds 105% of its contracted demand, the normal tariff shall be applicable upto the 105% of the contract demand and that portion of demand which is in excess of 105% of the contracted demand shall be billed at double the normal rate. If the actual recorded demand of a consumer exceeds 105% of the contracted demand consecutively for three months, the licensee may issue a notice and inform the

consumer to get additional contract demand sanctioned or to limit their drawl as per their contract. Otherwise the licensee shall take action as per provisions of the Act/Rules/Regulations.

**Illustration:** If contract demand is 100 kva whereas maximum demand recorded during the month is 115 kva, then demand for 105 kva (105% of 100 kva) shall be billed at normal rate and demand for 15 kva (120 kva-105 kva) shall be billed at twice the normal rate.

**15. Defective / Damaged / Burnt Meter:** In case of meter being defective / damaged / burnt, the licensee or the consumer as the case may be shall replace the same within the period specified in "Standards of Performance" Regulations issued by the Commission. Till defective meter is replaced the consumption shall be assessed and billed on an average consumption of last six meter reading cycles or average monthly consumption of corresponding six meter reading cycles of the preceding year whichever is higher from the date of meter being out of order. Such consumption shall be treated as actual consumption for all practical purposes until the meter is replaced/ rectified.

In case a functional check-meter is available then the readings of the check meter shall be used for billing purposes when main meter becomes defective/damaged/burnt.

In case the meter becomes defective immediately after its installation and prior consumption is available, then billing shall be done provisionally on the basis of following load factor subject to adjustment on the average consumption of three meter reading cycles of the replaced meter.

**16. FPPCA:** The adjustment on account of Fuel and Power Purchase Cost variation shall be calculated in accordance with FPPCA formula notified by the Commission. The value of K-factor shall be applicable to the different consumer categories as per the values approved in this tariff order. Such charges shall be recovered / refunded in accordance with terms & conditions specified in the FPPCA formula.

**17. Temporary Supply (HT & EHT)**

(i) Temporary Supply is for connection temporary in nature for a maximum period of two year. The applicability shall be as given in the respective tariff category. Temporary supply cannot be claimed by a prospective consumer as a matter of right but will normally be arranged by the licensee when a requisition is made giving due notice subject to technical feasibility and in accordance with electricity supply code issued by the Commission.

(ii) The tariff shall be chargeable as applicable to the corresponding appropriate tariff category at the following rates subject to minimum Rs .....:

Sl	Period of Supply	Tariff Rate
1.	Upto 12 months	150% of normal rate of appropriate tariff category
2.	More than 12 months and upto 18 months	175% of normal rate of appropriate tariff category
3.	More than 18 months and upto 24 months	200% of normal rate of appropriate tariff category

Demand charges, wherever applicable, shall be charged on pro-rata basis from the date of release of connection.

(iii) Terms of Supply of Temporary Supply shall be as below:

a) Temporary supply may be given for a period not exceeding 3 months in the first instance, the duration of which may be extended on quarter to quarter basis subject to maximum total duration of two year.

b) In addition to the tariff charges, the consumer shall have to deposit the following charges before commencement of the temporary supply:

(i) Estimated cost of erection of temporary service line and dismantling.

(ii) Cost of irretrievable materials which cannot be taken back to service.

(iii) Meter rent for the full period of temporary connection as per appropriate tariff schedule and other miscellaneous charges.

(iv) Rental on the cost of materials of the licensee as per estimate at the rate of Rs. 15/- per month on every Rs. 100/- or part thereof.

(v) Ten per cent on the total cost of the estimate for the temporary service connection to cover as security for loss of materials and contingencies. In case such loss is not noticed, the amount will be refunded.

c) The applicants for temporary supply shall be required to make a deposit in advance of the cost as detailed above including demand charges and the energy consumption charges estimated for full period on the basis of contracted demand. This will however, be adjusted against the final bill that will be rendered on disconnection of supply.

d) If the consumer intends to extend the temporary supply beyond the period originally applied for, he will have to deposit in advance all applicable charges as detailed above including the estimated electricity consumption charges, for the period to be extended and final bill as well, for the previous period, if any.

### **18. Seasonal Supply (HT & EHT)**

(i) Seasonal supply shall be given to any consumer on written request to the Board subject to the following conditions.

<b>Sl</b>	<b>Period of Supply</b>	<b>Tariff Rate</b>
1.	Upto 3 consecutive months in a year	Appropriate tariff plus 40 percent
2.	More than 3 consecutive months and upto 6 consecutive months in a year	Appropriate tariff plus 30 percent
3.	More than 6 consecutive months and upto 9 consecutive months in a year	Appropriate tariff plus 20 percent
4.	More than 9 consecutive months but less than one year	Appropriate tariff plus 10 percent.

(ii) The meter rent and other charges as provided in the appropriate tariff are applicable to seasonal loads and would be charged extra for the entire period of supply.

(iii) The supply would be disconnected after the end of the period unless the consumer wants the supply to be continued. Any reconnection charges have to be borne by the consumer.

(iv) Consumer proposing to avail seasonal supply shall sign an agreement with the licensee to avail power supply for a minimum period of 3 years in the case of HT category of supply.

(v) The consumers must avail supply in terms of whole calendar month continuously.

(vi) The consumer is required to apply for seasonal supply and pay initial cost and security deposit as an applicant for normal electricity supply.

(vii) The consumer shall ensure payment of monthly energy bills within 7 days of its receipt. The supply will be disconnected if payment is not made on due date.

**19. Time of Day tariff (ToD)**

(i) Under the Time of Day (ToD) Tariff, electricity consumption and maximum demand in respect of HT/EHT consumers for different periods of the day, i.e. normal period, peak load period and off-peak load period, shall be recorded by installing a ToD meter.

(ii) The maximum demand and consumption recorded in different periods shall be billed at the following rates on the tariff applicable to the consumer.

<b>Time of use</b>	<b>Demand Charges</b>	<b>Energy Charges</b>
Normal period (6:00 a.m. to 6:00 p.m)	Normal Rate	Normal rate of energy charges
Evening peak load period (6:00 p.m to 10.00 p.m)	Normal Rate	120% of normal rate of energy charges
Off-peak load period (10:00 p.m to 6:00 a.m)	Normal Rate	90% of normal rate of energy charges

(iii) Applicability and Terms and Conditions of TOD tariff:

(a) TOD tariff shall be optional unless otherwise specifically stated to the contrary in the tariff order.

(b) The facility of aforesaid TOD tariff shall not be available to HT/EHT consumers having captive power plants and/or availing supply from other sources through wheeling of power.

(c) The HT/EHT industrial consumers who have installed standby generating plants shall also be eligible for the aforesaid TOD tariff.

(d) In the event of applicability of TOD tariff to a consumer, all other terms and conditions of the applicable tariff shall continue to apply.

**20.** Schedule of Tariff and Other charges approved in this Tariff Order shall be as approved in the tariff order.

**PART - D: MISCELLANEOUS AND GENERAL CHARGES (FOR ALL CATEGORIES OF CONSUMERS)**

**1 METER RENT:**

i) BPL

ii) LT Single Phase except BPL

iii) LT Three Phase Upto 100 Amps
iv) LT meter with CT
v) HT meter with CTPT combined unit
vi) EHT meter with CTPT combined unit

**2 APPLICATION FEE FOR NEW CONNECTION / REDUCTION OF CONTRACTED LOAD OR DEMAND / ENHANCEMENT OF CONTRACTED LOAD OR DEMAND/REQUEST FOR PERMANENT DISCONNECTION:**

(i) BPL
(ii) LT Single phase except BPL
(iii) LT Three phase
(iv) HTS
(v) EHTS

**3 TESTING / INSPECTION OF CONSUMER'S INSTALLATION:**

(i) Initial Test / Inspection Free of cost
(ii) Subsequent test and inspection Rs. 100.00 for single phase necessitated by fault in installation or by not complying with terms and conditions of supply connection
a) for three phase LT connection
b) for HT connection.

**4 METER TESTING FEE:**

(i) LT Single Phase meter
(ii) LT Three Phase meter
(iii) LT Three Phase meter with CT
(iv) LT Tri-vector meter
(v) HT Tri-vector meter
(vi) EHT Tri-vector meter
(vii) LT CT set
(viii) HT metering equipment
(ix) EHT metering equipment

Note: If the meter is tested at third party testing laboratory at the request of the consumer then the fees charged by the testing laboratory will be payable by the consumer.

**5 REMOVING / RE-FIXING / CHANGING OF METER / METER BOARD AT CONSUMER'S REQUEST:**

(i) BPL
(ii) LT Single Phase meter
(iii) LT Three Phase meter
(iv) LT Three Phase meter with CT



(v) LT Tri-vector meter with CT
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(vi) HT Tri-vector meter with metering equipment
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(vii) EHT Tri-vector meter with metering equipment
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Note: Cost of material, as required, will be borne by the consumer

**6 RECONNECTION CHARGE:**

(i) BPL
---------

(ii) LT Single Phase supply
-----------------------------

(iii) LT Three Phase supply
-----------------------------

(iv) HT supply
----------------

(v) EHT supply
----------------

**7 SUPERVISION, LABOUR AND ESTABLISHMENT CHARGE FOR SERVICE CONNECTION:**

(i) BPL
---------

(ii) LT Single Phase
----------------------

(iii) LT Three Phase
----------------------

(iv) HT As per approved estimate
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(v) EHT As per approved estimate
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## 14. CONCLUSION OF COMMISSION'S ORDER

Having considered the Petitions of Electricity Department of UT Puducherry for approval of Aggregate Revenue Requirement (ARR) and determination of retail tariffs for supply of energy, the Commission approves the Aggregate Revenue Requirement (ARR) and the revised tariff schedule for ED Puducherry.

1. The break-up of the Aggregate Revenue Requirement approved for ED Puducherry for FY 2013-14 is given below.

Particulars	Approved by the Commission (FY 2013-14) (Rs. Crores)
Cost of power purchase	924.91
Employee Costs	62.75
A&G expenses	5.27
R&M Expenses	17.64
Depreciation	25.03
Interest & Finance Charges	15.13
Interest on Working Capital + Int on CSD	12.41
Provision for bad debts	NIL
Return on NFA @ 3% of NFA	10.88
Less: Non tariff Income	2.00
<b>Aggregate revenue requirement</b>	<b>1072.02</b>

2. The Commission approves the revenue gap for the true-up of ARR for FY 2009-10 at Rs 59.54 Crores, revenue gap for the true-up of ARR for FY 2010-11 at Rs 96.19 Crores, revenue gap for provisional true-up of ARR for FY 2011-12 at Rs 346.01 Crores and revenue gap for Review of ARR for FY 2012-13 at Rs 179.10 Crores.
3. The approved retail tariff (as given below) shall be in accordance with the tariff schedule specified in this order.

S. No.	Category/Consumption Slab/month	Approved Tariff for FY 2013-14 (in Rs.)	
		Fixed Charges	Variable Charges
		Rs per month per connection/kVA/HP	Rs/KWh
<b>1</b>	<b>Domestic</b>		
	OHOB	25.00	-
	0 - 100	20.00	1.00
	101 - 200	20.00	1.50
	201 - 300	30.00	2.80
	>300	30.00	3.50
<b>2</b>	<b>Commercial</b>		
	0 - 100	60.00	3.50
	101 - 250	60.00	4.50
	> 250	60.00	5.00
<b>3</b>	<b>Agriculture Services</b>		
	<b>Agriculture</b>		
	Small farmers	8.00	-
	Other farmers	25.00	-
	<b>Cottage Industries/Poultry/Horticulture/Pisciculture</b>		
	0 - 100	20.00	1.00
	101 - 200	20.00	1.50
	201 - 300	30.00	2.80
	>300	30.00	3.50
<b>4</b>	<b>Public lighting</b>	50.00	4.20
<b>5</b>	<b>LT Industrial</b>		
	0 - 1000	60.00	4.30
	> 1000	60.00	4.50
	Water tank	60.00	4.60
<b>6</b>	<b>Temporary supply - LT</b>	-	9.00
<b>7</b>	<b>HT 1 Industrial and Commercial</b>		
	<b>Industrial</b>		
<b>(a)</b>	Contracted maximum demand upto 2000 kVA		
	0 - 100000	200.00	4.35
	>100000	200.00	4.50
<b>(b)</b>	Contracted maximum demand greater than 2000 kVA and upto 5000 kVA	220.00	4.70
	<b>Commercial</b>		
<b>(c)</b>	Contracted maximum demand upto 5000	220.00	4.70

	kVA		
8	HT 2 - Government & water tank	220.00	4.60
9	HT 3 - EHT	200.00	4.50

4. As regards to the recovery of the past gap the Commission hereby approves an additional surcharge of 10% to be levied to all consumers above tariff rates on the fixed and energy charges (excluding taxes etc.) towards the recovery of the past accumulated deficit. However, the Agriculture and OHOB category would be excluded from the levy of this surcharge.
5. The approved tariff shall come in force with effect from 1<sup>st</sup> April 2013 and shall remain valid till 31<sup>st</sup> March 2014. 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.
6. The licensee will compute fuel and power procurement cost variations and adjustments shall be made in consumer bills based on the Fuel & Power Purchase Cost Adjustment (FPPCA) formula/regulation separately notified by the Commission. For the purpose of calculation using FPPCA formula, **the approved per unit cost of power purchase ( $R_{\text{approved}}$ ) for use in the FPPCA formula (paisa per unit) is 355 paisa per unit for FY 2013-14.**
7. Copy of this order may be sent to Petitioner, CEA and Administration of UT of Puducherry. It shall be placed on the website of the Commission.

Sd/-  
(S. K. Chaturvedi)  
Member

Sd/-  
(Dr. V. K. Garg)  
Chairman

Certified copy

Sd/-  
(R. K. Malik)  
Secretary

Place: Gurgaon

Date: April 10' 2013

## **15. Tariff Schedule**

### **TARIFF FOR SUPPLY OF ELECTRICITY AT LOW TENSION AND HIGH TENSION**

#### **GENERAL**

1. The tariff indicated in this tariff schedule is the tariff rate payable by the consumers of Union Territory of Puducherry.
2. These tariffs are exclusive of electricity duty, tax on sale of electricity, taxes and other charges levied by the Government or other competent authorities from time to time.
3. Unless otherwise agreed to, these tariffs for power supply are applicable to single point of supply.
4. The power supplied to a consumer shall be utilized only for the purpose for which supply is taken and as provided for in the tariff. If energy supplied for a specific purpose under a particular tariff is used for a different purpose, not contemplated in the contract for supply and / or for which higher tariff is applicable, it will be deemed as unauthorized use of electricity and shall be dealt with for assessment under the provisions of section 126 of the Electricity Act, 2003 & Supply Code Regulation notified by JERC.

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

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

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

#### **6. Power Factor Charges for HT and EHT**

The monthly average power factor shall mean the ratio expressed as percentage of total kWh to total kVAh supplied during the month. The ratio shall be rounded up to two figures.

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

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

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

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

7. If the consumer fails to pay the energy bill presented to him by the due date, the Department shall have the right to disconnect the supply after giving 15 days' notice as per provision of the Act & Supply Code Regulation.

8. 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.

9. The billing in case of HT/EHT shall be on the maximum demand recorded during the month or 75% of contracted demand, whichever is higher. If in any month, the recorded maximum demand of the consumer exceeds its contracted demand, that portion of the

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

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

8. Unless specifically stated to the contrary, the figures of energy charges relates to Rs per unit (kWh) charge for energy consumed during the month.

9. **Delayed payment surcharge** shall be applicable to all categories of consumers. Delayed payment surcharge of 2% per month or part thereof shall be levied on all arrears of bills. Such surcharge shall be rounded off to the nearest multiple of one rupee. Amount less than 50 paise shall be ignored and amount of 50 paise or more shall be rounded off to next rupee. In case of permanent disconnection, delayed payment surcharge shall be charged only upto the month of permanent disconnection.

10. **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.

11. **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.

## 12. Time of Day (TOD) tariff

(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.

13. The adjustment on account of Fuel and Power Purchase Cost variation shall be calculated in accordance with FPPCA formula separately notified by the Commission under the Regulation. Such charges shall be recovered / refunded in accordance with the terms and conditions specified in the FPPCA formula.

14. As regards to the recovery of the past gap the Commission hereby approves an additional surcharge of 10% to be levied to all consumers above tariff rates on the fixed and energy charges (excluding taxes etc.) towards the recovery of the past accumulated deficit. However, the Agriculture and OHOB category would be excluded from the levy of this surcharge.



14. The values of the 'K' factor applicable for the different consumer categories for use in the FPPCA formula shall be as specified in this Tariff Order for FY 2013-14.

15. Schedule of service charges and other charges would be as approved in this tariff order.

The detailed tariff schedule is as below.

## A. LOW TENSION SUPPLY

### Domestic Purposes

#### 1.0 Domestic Purposes (A2)

**1.1 This tariff is applicable to services for lights, fans, Air-conditioning, Heating and other small domestic appliances etc used for:**

- a) Genuine domestic purposes including common services for stair-case, lifts, water tanks in the purely domestic apartments.
- b) Supply to actual places of public worship such as temples, mosques, churches etc.
- c) Ashrams and Mutts, Non-commercial orphanage homes and old people homes run by religious and charitable institutions, social welfare and voluntary organisations.
- d) Youth hostels, Harijan hostels, Rehabilitation Centres, Anganwadies and Balwadies run by Social Welfare Department.
- e) For own residences where one room is set apart for the purpose of consultation by doctors, lawyers, engineers, architects and auditors.
- f) To handloom in residence of handloom weavers (regardless of the fact whether outside labour is employed or not) and to handloom in sheds erected.
- g) To the residences where supply from a house is extended to tailoring shops, job typing, document writing, laundry pressing, and small caterers set up in the verandah of the house with small lighting load only (one tube light only).

1.2 The charges for domestic service are as indicated in the table below:

Consumption range	Fixed Charges Rs/connection/month	Energy charge Rs./KWh
0-100 units per month	20.00	1.00
101-200 units per month	20.00	1.50
201-300 units per month	30.00	2.80
Above 300 units per month	30.00	3.50

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 20/month and energy charges Rs 80 (80 units X Rs 1.00/unit)

(b) In case the units billed are 275, then the fixed charges will be Rs 30/month and energy charges will be Rs 460 (100 units X 1.00 + 100 units X 1.50 + 75 units X 2.80)

## **2.0 HUT SERVICES (A3)**

2.1 For supply to bonafide hut services with only two numbers of 40 W Florescent Tube lights.

2.2 The charges for hut service (OBOH) are as indicated in Table below:

<b>Description</b>	<b>Fixed charges</b>
Hut Services	Rs 25.00 per connection per month

### **NOTE:**

1. Hut is defined as a living place not exceeding 300 sq. ft. or 27.87 sq.m. with mud wall/brick wall or thatched wall and thatched roof only. Hut does not include farm huts. If any of the conditions is changed at a later stage, this concessional supply will be discontinued and the consumer will have to take metered supply.

2. The tariff under this item is also applicable for houses constructed for economically weaker sections under the "Chief Minister's 5000 houses programme" and houses constructed by the District Rural Development Agency under Indira Awaas Yojana and by the Adi Dravidar Welfare Department having a living space not exceeding 300 sq. ft. or 27.87 sq.

3. The consumer under this category should use only two numbers of 40 watts florescent tube lights. He should not use bulbs/tube lights of higher wattage or connect any other electrical equipment/ appliances other than those mentioned above. Supply from such services should not be tapped for any other purposes including functions, public meetings and also for neighboring huts. If at any time, any unauthorized load or extension, use of higher wattage bulbs or use of service for other purposes is detected, the service will be disconnected forthwith.

### 3.0 COMMERCIAL (A1)

3.1 This tariff is for Lights and combined installation of lights and fans, mixed loads of lights and power, heating and air-conditioning applicable to:

- a) Non-domestic and non-industrial consumers, trade and commercial premises.
- b) Educational institutions, hostels, public libraries.
- c) Hotels, Restaurants, Boarding and Lodging Homes
- d) Hospitals, Private clinics, Nursing Homes, Diagnostic Centres, X-ray Units etc.
- e) IT related development Centres and Service centres.
- f) Common services for Stair-case, lifts, water tanks etc in the purely commercial / combination of commercial and domestic.

3.2 The charges are as indicated in the table below:

Consumption range	Fixed Charges Rs/connection/month	Energy charge Rs./KWh
0-100 units per month	60.00	3.50
101-250 units per month	60.00	4.50
Above 250 units per month	60.00	5.00

Note: The method of calculation of charges shall be same as explained in para 1.2 above

### 4.0 AGRICULTURE SERVICES (D)

**Agriculture/Cottage Industries etc.**

#### 4.1 Agriculture (D1)

For supply to bonafide Agricultural Services with a connected load of not less than 3 HP per service.

Description	Fixed Charges
Small Farmers	Rs 8.00 per HP per month
Other Farmers	Rs 25.00 per HP per month Plus Service Charges Rs 225 per

service per annum

**NOTE:**

1. Electricity will be supplied under the tariff category "Small farmers" to those consumers whose families are solely dependent on the income derived from their agricultural land holding, which should not exceed two and half acres of wet land or five acres of dry land. A certificate to this effect from Revenue authority shall be produced. "Small farmer means a person whose total holding, whether as owner, tenant or mortgaged with possession or partly in one capacity and partly in another, does not exceed two-and-a half acres of wet lands or five acres of dry land. In computing the extent of land held by a person who holds both wet and dry lands, two acres of dry land shall be taken as equivalent to one acre of wet land.
2. The above concession will be withdrawn if resale of energy or unauthorized load / extension or use for other purpose is detected by the Department.
3. Agricultural power loads below 3 H.P. will be charged under Tariff Category A1. A bonafide farmer may use his motor in the Agricultural Service for allied agricultural purposes such as sugarcane crushing, thrashing etc. with the prior approval of concerned Executive Engineer (Operation & Maintenance), Electricity Department.
4. Power supply to Farm Houses shall be metered separately and charged under domestic tariff (A2).

**Payment of Tariff Charges by Agriculture Consumers**

1. The Tariff shall be collected in three equal installments payable in April, August and December in each year. The installments shall be payable before the 15th of the respective months. The service charges of Rs 225 per annum shall also be collected in three installments of Rs. 75, Rs. 75 and Rs. 75 along with installment of fixed charges in April, August and December months.
2. For new service, the first installment shall be proportionate to the number of whole months remaining till the month in which the first installment is due. Fraction of a month shall be reckoned as a whole month.

## 4.2 Cottage Industries /Poultry Farms/ Horticulture/Pisiculture (D2)

It is applicable to bonafide cottage industries, horticultural nurseries including plant tissue culture media, bona fide poultry farms and pisiculture.

The charges are as indicated in the table below:

Consumption range	Fixed Charges Rs/connection/month	Energy charge Rs/kWh
0-100 units per month	20.00	1.00
101-200 units per month	20.00	1.50
201-300 units per month	30.00	2.80
Above 300 units per month	30.00	3.50

### Note:

#### (a) Cottage industries

The following conditions should be satisfied in order that an industry may be classified as a bona fide cottage industry:

- (1) It should be conducted entirely within the home, the home being deemed to be permanent residence of the proprietor.
- (2) The industry shall not cause any residence to constitute a factory within the meaning of the Factories Act, 1948.
- (3) Not more than two persons outside the immediate family of the proprietor shall be employed in the factory.
- (4) It should be certified by the Director of Industries that the industry for which power is used is a cottage industry.
- (5) The produce is not purely utilized mainly for the domestic consumption of the proprietor but should also be available for sale to the public.

#### (b) Poultry farms

The following conditions should be satisfied in order that the service may be classified as a bona fide poultry farm.

- (1) The capacity of the farm shall be a minimum of 100 birds and maximum of 5,000 birds (both layer and broiler birds).
- (2) The application of the beneficiary seeking such concession shall be verified and recommended by the Animal Husbandry Department.

**(c) Horticultural/Pisciculture**

(1) The applications of the beneficiary seeking such concession shall be verified and recommended by the Director, Agriculture Department. For Pisciculture, applications of the beneficiary seeking such concession shall be verified and recommended by the Director, Fisheries Department.

**5.0 Public Lighting**

5.1 The tariff for public lighting shall be as follows:

<b>Description</b>	<b>Fixed Charges Rs/pole/month</b>	<b>Energy charge Rs/KWh</b>
Public Lighting	50.00	4.20

5.2 This tariff will also apply to public lighting in markets, bus stands, traffic signals, high mast lights on public ways, public parks, public lighting in notified industrial estates.

**6.0 Industrial (C)**

**6.1 LT Industrial (C1)**

Applicable to low tension industrial consumers including lighting in the industrial services except those mentioned in Tariff `C2' category.

6.2 The charges are as indicated in the table below.

<b>Consumption range</b>	<b>Fixed Charges Rs/connection/month</b>	<b>Energy charge Rs/KWh</b>
Upto 1000 units per month	60.00	4.30
Above 1000 units per month	60.00	4.50

### 6.3 LT Industrial (C2)

Applicable to water tanks including lighting in the premises maintained by State Government Departments / Undertakings and Local Bodies.

The energy charges are as indicated in the table below.

Description	Fixed Charges Rs/connection/month	Energy charge Rs/KWh
<b>Water Tank C2</b>		
Entire Consumption	60.00	4.60

#### LT Supply Limit for all LT categories

For single phase connection, the connected load shall not exceed 4 kW, and for 3 phase connection, the connected load shall not exceed 130 HP or 97 kW

## B. HIGH TENSION SUPPLY

### 7.0 High Tension – I

#### 7.1 High Tension I (a)

Applicable to industrial establishments, registered under Factories Act with Contracted Maximum demand upto 2000 kVA.

#### High Tension I (b)

Applicable to industrial establishments, registered under Factories Act with Contracted Maximum demand of greater than 2000 kVA & upto 5000 kVA

#### High Tension I (c)

For Commercial Establishments including Laboratories, Hotels, Marriage Halls, Cinema Theatres, Private educational Institutions, Private Hospitals, shopping Malls, Telephone exchanges, broadcasting companies, IT companies with contracted maximum demand upto 5000 kVA.

7.2 The Demand and the Energy Charges are as indicated in the table below:

<b>Description</b>	<b>Charges</b>
<b>HT (I) (a) For contract demand upto 2000 kVA</b>	
Fixed (Demand) Charges	Rs 200 per kVA per month
Energy Charges	
(i) Upto 100000 units	Rs 4.35/kWh
(ii) Above 100000 units	Rs 4.50 /kWh
<b>HT (I) (b) For contract demand greater than 2000 kVA and upto 5000 kVA</b>	
Fixed (Demand) Charges	Rs 220 per kVA per month
Energy Charges	Rs 4.70/kWh
<b>HT (I) (c) For contract demand upto 5000 kVA</b>	
Fixed (Demand) Charges	Rs 220 per kVA per month
Energy Charges	Rs 4.70/kWh

7.3 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 will 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 Supply Code Regulation. If such over-drawl is more than 20% of the contract demand then the connections shall be disconnected immediately.

**Explanation:**

Assuming the contract demand as 100 kVA, maximum demand at 120 kVA and total energy consumption as 12000 units, then the consumption corresponding to the contract demand will be 10,000 units ( $12000 \times 100 / 120$ ) 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 HT(I) (b) category, excess demand and consumption will be billed at the rate of Rs 440 per kVA per month and Rs 9.40/kWh respectively.



## 8.0 High Tension – II

8.1 Applicable to State and Central Government establishments of non-industrial and non-commercial nature.

8.2 The fixed/demand charges and energy charges are as indicated in the table below.

Description	Charges
Fixed (Demand) Charges	Rs 220 per kVA per month
Energy Charges	Rs 4.60/kWh

8.3 The billing shall be 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 will 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 Supply Code Regulation. If such over-drawl is more than 20% of the contract demand then the connections shall be disconnected immediately. Refer para 7.3 for illustration.

## 9.0 High Tension – III

9.1 Applicable to all types of industries supplied at 110 KV or 132 KV as the case may be.

9.2 The demand and energy charges are as indicated in the table below:

Description	Charges
Fixed (Demand) Charges	Rs 200 per kVA per month
Energy Charges	Rs 4.50/kWh

9.3 The billing shall be 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 will 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 Supply Code Regulation. If such over-drawl is more than 20% of the contract demand then the connections shall be disconnected immediately. Refer para 7.3 of this schedule for illustration.

### **Supply Voltage for all HT categories**

The supply voltage for HT consumer's upto 5000 kVA will be 33 kV, 22 kV or 11 kV as the case may be. New High Tension consumers who want to avail a contract demand above 5000 KVA or existing High Tension consumers who want to enhance their demand beyond total contract demand of 5000 kVA should avail power at 110 KV or 132 KV as the case may be.

### **C. TEMPORARY SUPPLY**

10. The tariff applicable and minimum charges for the temporary supply of energy will be as follows:

<b>S.No.</b>	<b>Category</b>	<b>Tariff Applicable</b>	<b>Minimum Charges</b>
(a)	Lights or combined installation of lights and fans, motive power, heating and others	Entire Consumption: Rs 9.00/kWh	Rs 200 per connection per month or part thereof
(b)	Special Illumination	Entire Consumption: Rs 9.00/kWh	Rs 500 per connection per month or part thereof
(c)	Construction and testing purpose for load exceeding 130 HP or 97 kW	Entire Consumption: Rs 9.00/kWh	Rs 500 per connection per month or part thereof

#### **NOTE:**

(1) The rate for Special illumination shall apply to weddings, garden-parties and other Private/Government functions when the illumination is obtained through bulbs fastened in other surfaces of wall of buildings, on trees and poles inside the compound and in pandal etc., outside the main building.

(2) In cases where such Special illumination is done in the existing regular services the energy utilized for such illumination shall be metered separately and the consumption will be charged under Special illumination charge as levied under temporary supply.

(3) Wherever such Special illumination is done unauthorisedly, a penal charge of Rs. 500 for service shall be levied in addition to the existing tariff of the installation.

(4) Other conditions for connection of line and service connection charges, dismantling, security deposit etc. will be as per the rules now in force.

(5) For supply required at short notice that is within three days from the date of application for temporary service connections, an urgency charge of Rs. 50 shall be paid along with other normal tariff charges.

## 16. Schedule of Services and Charges

### Charges for service connections

		Category	Charges [Rs]
(A)	New LT overhead service lines	(i) One hut one Bulb	Nil
		(ii) Other single phase Services	250
		(iii) Three phase Services	500
		(iv) L.T C.T operated Meter services	3000
		(v) H.T Services	5000
(B)	New LT underground service lines	(i) Single Phase services	500
		(ii) Three phase Services	1000
(C)	Rating / re-rating of services	(i) Single phase Services	125
		(ii) Three phase Services	250
		(iii) L.T C.T operated Meter service	1500
		(iv) H.T Service	2500

Note: The above charges under (A) & (B) will be applicable for addition or alteration or reduction of connected load and enhancement or reduction of CMD or alteration of internal Electrical installations.

### Testing of installation

Testing for servicing a new installation (or of an extension or alteration) - For the first test No Charge. Subsequent testing warranted due to absence of contractor or his

representative (or) due to defects in wiring of consumer's premises or at the request of the consumer or at occasions that warrant testing of installations for the second time for reasons attributable to the consumers.

	Charges (Rs.)
i) Domestic lighting / Commercial lighting / Agriculture Services	200
(ii) Other LT Services	900
(iii) HT/EHT Services	7500

### Testing of meters & metering arrangements

For testing of meter at the instance of the consumer:

	Charges (Rs.)
(i) Single phase direct meter	150
(ii) Three phase direct meter upto 50 A	200
(iii) L.T C.T coil test	800
(iv) H.T Tri-vector Meter (0.5 class accuracy or CT operated LT meters.	1500
(v) H.T Tri-vector Meter (0.2 class accuracy)	2000
(vi) H.T Metering Cubicle	3500

### Testing of HT/EHT consumer protective equipment

	Charges (Rs.)
Testing charges for protective relays (Earth fault, line fault etc.)	4500

Testing charges for one set of current transformer.	4500
Testing charges for one set of potential transformers.	4500
Testing charges for one set of circuit breaker	4500
Testing charges for measurement of earth resistance.	3000
Testing charges for Transformer oils	500

### Disconnection / Re-connection charges

	Charges (Rs.)
(i) Disconnection of L.T service on request	100
(ii) Disconnection of HT service on request	500
(iii) Reconnection of L.T Service (on all occasions) .	100
(iv) Reconnection of HT Service (on all occasions).	500

### Title transfer of services

	Charges (Rs.)
(i) Domestic	250
(ii) Commercial lighting installation	500
(iii) All other LT installation	1000
(iv) HT/EHT Services	2000

### Furnishing of certified copies

(To be issued to the consumer only)

Charges (Rs.)

Issue of duplicate Monthly bills for a month.	10.00
(ii) Contractor's completion-cum-test report	10.00
(iii) Ledger extract	20.00 / calendar year or part thereof.
(iv) Agreement	50.00
(v) Estimate	50.00

### Meter rent charges

S. No.	Particulars	Charges (Rs.)
(i)	single-phase meter	10/- per meter/ month. or part thereof
(ii)	Three phase meter	25/- per meter/ month. or part thereof
(iii)	LT C.T operated meters	200/- per meter/ month. or part hereof
(iv)	HT/EHT metering equipments	500/- per meter/ month .or part thereof

### Fuse renewal charges

	Charges (Rs.)
(i) Domestic	-NIL
(ii) Commercial	50
(iii) L.T Industrial	50
(iv) High Tension/Extra High Tension installation	250

### Shifting of meter board at consumer's request

	Charges (Rs.)
(i) LT single phase supply	125
(ii) LT Three phase supply	250