Order in Petition No. 190/2016

Order on

True-up for FY 2013-14, Annual Performance Review for FY 2015-16 Aggregate Revenue Requirement for First MYT Control Period (FY 2016-17 to FY 2018-19) and Wheeling & Retail Supply Tariff for FY 2016-17

For

Electricity Department, Government of Puducherry

24th May 2016

संयुक्त विद्युत विनियामक आयोग (गोवा राज्य और संघ शासित प्रदेशों के लिए)

JOINT ELECTRICITY REGULATORY COMMISSION

For the State of Goa and Union Territories,

2 तल, वाणिज्य निकुंज, एचएसआईआईडीसी कार्यालय परिसर, उद्योग विहार फेज-V,गुड़गांव - 122016 हरियाणा

2nd Floor, HSIIDC Office Complex, Vanijya Nikunj,

Udyog Vihar, Phase-V, Gurgaon-122 016 (Haryana)

दूरभाष 0124-2875302 ,फैक्स 0124-2342853

Phone: 0124-2875302 Fax: 0124-2342853

Website: www.jercuts.gov.in

Email: secy-jerc@nic.in

Before the

Joint Electricity Regulatory Commission

For the State of Goa and Union Territories, Gurgaon

QUORUM
Shri S.K. Chaturvedi (Chairperson)
Ms. Neerja Mathur (Member)

Petition No. 190/2016

In the matter of

Approval of True-up for FY 2013-14, Annual Performance Review for FY 2015-16, Aggregate Revenue Requirement for First MYT Control Period (FY 2016-17 to FY 2018-19) & Wheeling & Retail Supply Tariff for FY 2016-17.

And in the matter of

Electricity Department, Puducherry……………………………………………………………**Petitioner**

ORDER

Passed On: 24th May 2016

a. This Order is passed in respect of the Petition filed by the Electricity Department, Puducherry for approval of True-up for FY 2013-14, Annual Performance Review for FY 2015-16, Aggregate Revenue Requirement for First MYT Control Period (FY 2016-17 to FY 2018-19) and Wheeling & Retail Supply Tariff for FY 2016-17.

b. As detailed in the Business Plan Order issued in Petition no. 181/2015 dated 4th December 2015, the Commission had directed the Petitioner to submit the duly approved MYT Petition for the Control Period from FY 2016-17 to FY 2018-19 within 30 days of the issuance of the Order. The Commission had also directed that the retail tariff proposals are to be submitted only for the first year of the Control Period namely FY 2016-17 whereas ARR calculations are to be submitted for the full Control Period, FY 2016-17 to FY 2018-19.

c. This Order is passed by the Commission, after detailed scrutiny of the information and documents filed with the Petition, information subsequently submitted during the course of the technical validation session and also other information as available with the Commission.

d. After receiving the Petition, the Commission scrutinized the contents of the Petition and called for further information/data so as to take a prudent view of the Petition. The

Commission also held a technical validation session to determine the sufficiency of the Petition. Comments/objections/suggestions were also invited from the public/Stakeholders. A Public Hearing was held and the parties/people present were heard. The schedule of activities performed under this quasi-judicial process was as below:

Particulars	**Details**
Date of Admission	8th January 2016
Petition No.	190/2016
Technical Validation Session	27th January 2016
Public Hearing	28th January 2016

e. The Commission (JERC) considering that the elections were held for the Legislative Assembly of Puducherry, as per its prudence has followed the Model Code of Conduct applicable till the election process is complete in the UT of Puducherry i.e. 21st May 2016. The Commission has, accordingly, issued the present Tariff Order for EDP after the completion of the election process in UT of Puducherry.

f. The approved tariff of FY 2016-17 as detailed in the Chapter ''Tariff Schedule" shall come into force with effect from 1st April 2016 and shall remain valid till further Orders of the Commission.

g. The licensee shall publish the revised tariff structure and the salient features of the 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.

h. The licensee will compute fuel and power procurement cost variations and adjustments shall be made in the consumer bills based on the Fuel & Power Purchase Cost Adjustment (FPPCA) formula notified by the Commission. **The approved per unit cost of power purchase ($R_{approved}$) for use in the FPPCA formula (paise per unit) is 382 paise per unit for FY 2016-17**.

i. Ordered as above, read with the attached document giving detailed reasons, grounds and conditions.

-हस्ताक्षरित-

नीरजा माथुर

सदस्य

-हस्ताक्षरित-

सुधीर चतुर्वेदी

अध्यक्ष

संयुक्त विद्युत विनियामक आयोग

(गोवा और केंद्र शासित प्रदेशों के लिए)

स्थान : गुडगाँव

दिनांक: 24 मई, 2016

-हस्ताक्षरित-

(प्रमाणित सत्य प्रतिलिपि)

सचिव

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List of Abbreviations

Abbreviation		Full Form
A&G	:	Administration & General
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
DISCOM	:	Electricity Department of Puducherry
CPSU	:	Central Public Sector Undertaking
EA 2003	:	The Electricity Act, 2003
FC	:	Fixed Charges
FPPCA	:	Fuel & Power Purchase Cost Adjustment
FY	:	Financial Year
GFA	:	Gross Fixed Assets
HP	:	Horse Power
HT	:	High Tension
IPDS	:	Integrated Power Development Scheme
JERC	:	Joint Electricity Regulatory Commission for the state of Goa and Union Territories
KVA	:	Kilo Volt Ampere
KWh	:	Kilo Watt Hour
KSEB	:	Kerala State Electricity Board
LPS	:	Late Payment Surcharge
LT	:	Low Tension
MOD	:	Merit Order Dispatch
MU	:	Million Unit
MW	:	Mega Watt
MYT	:	Multi Year Tariff
NDS	:	Non-Domestic Supply
NFA	:	Net Fixed Assets
O&M	:	Operation & Maintenance
PGCIL	:	Power Grid Corporation of India Ltd.
PLF	:	Plant Load Factor
PPCL	:	Puducherry Power Corporation Limited
PX	:	Power Exchange

Abbreviation		Full Form
R-APDRP	:	Restructured Accelerated Power Development and Reforms Programme
REC	:	Renewable Energy Certificate
RoE	:	Return on Equity
RPO	:	Renewable Purchase Obligation
R&M	:	Repair & Maintenance
SLDC	:	State Load Dispatch Centre
SBI PLR/SBAR	:	SBI Prime Lending Rate/State Bank Advance Rate
TANGEDCO	:	Tamil Nadu Generation and Distribution Corporation Limited
T&D	:	Transmission & Distribution
UI	:	Unscheduled Interchange
VC	:	Variable Charges

1. Introduction

1.1.About JERC

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 2nd May 2005. Later 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 30th May 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. The office of the Commission is presently located in Gurgaon, Haryana.

1.2.Electricity Department of UT Administration of Puducherry

The Union Territory of Puducherry is spread over an area of 492 sq. km and consists of four regions which are widely scattered namely - Puducherry and Karaikal regions surrounded by the state of Tamil Nadu, Mahe region in Kerala and Yanam region in Andhra Pradesh. Puducherry which is the headquarters of the Union Territory is located 160 km. south of Chennai while Karaikal is located further down south at about 150 km. from Puducherry. Mahe is located horizontally opposite to Puducherry on the west coast at a distance of about 653 km. from Puducherry, 58 km. from Kozhikode and 24 km. from Kannur in Kerala State. Yanam is located up north of Puducherry on the east coast at about 840 km. from Puducherry and 28 km. from Kakinada. The total population of the UT of Puducherry is 1,244,464 as per the provisional results of Census 2011.

The Electricity Department of UT Administration of Puducherry hereinafter called ED Puducherry (EDP), is a deemed licensee under Section 14 of the Electricity Act 2003 and is carrying on the business of transmission, distribution and retail supply of electricity in Puducherry, Karaikal, Yanam and Mahe regions of the Union Territory of Puducherry. EDP has been allowed to function as an integrated distribution licensee of Union Territory of Puducherry.

The requirement of power for the Union Territory is met from the allocation of power from various Central Generating Stations (CGS), purchase of power from neighboring state utilities and from the state-owned Puducherry Power Corporation Limited (PPCL) which is running a 32.5 MW gas based power plant in Karaikal region. The entire power generated from this plant is consumed within the Karaikal region.

The System Control Centre (SCC), which is under the control of the Electricity Department, interacts with Regional Load Dispatch Centre (RLDC) for optimum scheduling and dispatch of electricity. It monitors grid operation on real time basis and passes on necessary instructions to the field staff to control the flow of energy.

The Department currently serves a consumer base of around 4.16 lakh spread over the four non-contiguous regions. The Department has a mix of domestic, commercial, agriculture, industrial and HT industrial consumers.

EDP operates a transmission network of 230 kV & 110 kV and distribution network at 33 kV, 22 kV, 11 kV and at LT levels. It supplies power to consumers through its 18 EHV substations, 378 km. of EHT line, 1025 km. of HT line, 2294 number of distribution transformers and 3340 km. of LT line. EDP also has about 70 km. of HT and 813 km. of LT underground cabling in certain urban areas.

1.3.Electricity Regulatory Process in Electricity Department - Puducherry

EDP had submitted their Petitions for determination of aggregate revenue requirement and tariff before the Commission, and the Commission subsequently issued the following Tariff Orders and Business Plan Order.

Table 1.1: Details of Tariff Order and Business Plan Order issued by JERC

S No.	For FY	Filing Date	Date of Tariff Order	Petition also Covered
1.	2009-10	5th October 2009	5th February 2010	ARR & Tariff for FY 2009-10
2.	2011-12	29th September 2011	12th June 2012	ARR & Tariff for FY 2011-12 and Review for FY 2009-10
3.	2012-13	21st December 2011	12th June 2012	ARR & Tariff for FY 2012-13, ARR for FY 2011-12, ARR for FY 2010-11 and Review for FY 2009-10
4.	2013-14	15th January 2013	10th April 2013	ARR & Tariff for FY 2013-14, Review for FY 2012-13, Provisional True-up for FY 2011-12, True-up for FY 2010-11 and FY 2009-10
5.	2014-15	20th January 2014	25th April 2014	ARR & Tariff for FY 2014-15 and Review for FY 2013-14
6.	2015-16	2nd January 2015	10th April 2015	ARR & Tariff for FY 2015-16, Review for FY 2014-15, True-up for FY 2012-13 and FY 2011-12
7.	Business Plan for First MYT Control Period	11th August 2015	4th December 2015	Business Plan for First MYT Control Period FY 2016-17 to FY 2018-19

1.4.JERC Multi Year Distribution Tariff Regulations, 2014

In exercise of powers conferred by sub-section (1) of section 181 and clauses (zd), (ze) and (zf) of sub-section (2) of section 181, read with Sections 61, 62, 83 and 86, of the Electricity Act, 2003 (36 of 2003) and all other powers enabling it in this behalf, after previous publication the Joint Electricity Regulatory Commission (JERC) issued the Joint Electricity Regulatory Commission for the State of Goa and Union Territories (except Delhi) (Multi Year Distribution Tariff) Regulations, 2014 on 30th June 2014.

As per clause 3.1.6 of these Regulations, the **"Control Period"** was defined as a multi-year period comprising of three financial years from FY 2015-16 to FY 2017-18.

However, as detailed in last Tariff Order issued in Petition no. 157/2015 and 158/2015 dated 10th April 2015, the Commission had ordered for deferment of the Control Period by one year. The Commission had cited that the details provided in the Business Plan were insufficient for approval of the same. Supporting data such as scheme-wise cost benefit analysis, financing plan, loss trajectory etc. had not been adequately submitted. In view of this, the Commission deferred the implementation of multi-year tariff and the concomitant Business Plan by one year.

The Commission has issued the first amendment to the JERC (Multi Year Distribution Tariff) Regulations 2014 vide notification dated 10th August 2015. As per clause 5.1 of the amendment to the said Regulations, the Control Period for multi-year tariff implementation, is from FY 2016-17 to FY 2018-19. The JERC (Multi Year Distribution Tariff) Regulations, 2014 have been hereinafter referred to as the **''MYT Regulations 2014''**.

1.5. Filing and Admission of Present Petition

As per clause 5.1 of the first amendment to the JERC Multi-year Distribution Tariff Regulations 2014, issued vide notification dated 10th August 2015, the Control Period for Multi-Year Tariff implementation, is from FY 2016-17 to FY 2018-19.

The Commission had directed the Petitioner to submit the duly approved MYT Petition for the Control Period from FY 2016-17 to FY 2018-19 within 30 days of the issuance of the Business Plan Order (issued in Petition no. 181/2015 Order dated 4th December 2015).

The MYT Petition was then filed vide letter dated 4th January 2016; received at the Commission's office on 7th January 2016. The Commission, in the interest of timely issuance of the Order, admitted the Petition on 8th January 2016 as Petition no. 190/2016.

1.6. Interaction with the Petitioner

The Order has referred at numerous places to various actions taken by the "Commission". It may be mentioned for the sake of clarity, that the term "Commission", except for the hearing and Orders, denotes the Secretariat of the Commission for carrying out the technical due diligence and validation of data of the Petitions filed by the utilities, obtaining and analyzing information/clarifications received from the utilities and submitting relevant issues for consideration of the Commission.

For the purpose of analysis of the Petition, the Commission's staff held discussions with the Petitioner/Petitioner's representatives, obtained information/clarifications wherever required and carried out technical validation with regard to the information provided by the Petitioner. The Commission's staff interacted regularly with the Petitioner to seek clarifications and justification on various issues essential for the analysis of the MYT Petition. The Commission's staff conducted Technical Validation Session (TVS) with the Petitioner during which discrepancies in the Petition were pointed out and additional information as required by the Commission was indicated. The Petitioner submitted its replies, as shown below, in response to the various queries raised by the Commission during the course of analysis of the Petition, which were taken into account for finalization of the present Petition.

Table 1.2: List of Interactions with the Petitioner

S .No.	Date	Subject
1.	8th January 2016	Admission of Petition
2.	18th January 2016	Deficiencies pointed out by the Commission in MYT Petition
3	25th January 2016	Reply to the deficiencies pointed out by the Commission on MYT Petition
4.	27th January 2016	Technical Validation Session (TVS) held at Puducherry
5.	2nd February 2016	Supporting documents for the Tariff Petition received
6.	3rd February 2016	Queries raised based on discussions during the TVS
7.	5th February 2016	Additional data received related to RPO cost and month-wise power purchase details based on the queries raised by the Commission during the TVS
8.	9th February 2016	Response of the Department on the Public Hearing comments/objections
9.	22nd February 2016	Reminder on the clarifications/data pending at Petitioner's end based on queries pointed out vide email dated 3rd February 2016
10.	1st March 2016	Pending clarifications/data received on the queries raised vide email dated 3rd February 2016
11.	21st April 2016	Pending data received pertaining to UI details, Public Notices published by the Petitioner etc.

1.7. Public Hearing Process

The Commission directed the Petitioner to publish the summary of the present Petition in the abridged form to ensure public participation. The Public Notices were published by the Petitioner for inviting objections/ suggestions from the stakeholders on the MYT Petition:

Table 1.3: Details of Public Notices published by the Petitioner

Sr. No.	Date	Name of Newspaper	Place of Circulation
1	13th January 2016	The New Indian Express	Puducherry, Karaikal, Mahe and Yanam
2	13th and 14th January 2016	Dina Malar	Puducherry, Karaikal
3	13th and 14th January 2016	Dina Thanthi	Puducherry, Karaikal
4	13th January 2016	Malai Malar	Puducherry, Karaikal
5	18th January 2016	Jana Mitra	Yanam

The Petitioner also uploaded the Petition on its website (www.electricity.puducherry.gov.in) for inviting objections and suggestions on the Petition. Interested parties/stakeholders were requested to file their objections/ suggestions on the Petition to the Commission with a copy to the Petitioner on or before 25th January 2016. The copies of the Public Notices published by the Petitioner are attached as **Annexure 1** to this Order.

The Commission also published Public Notices in the leading newspapers giving due intimation to stakeholders, consumers, objectors and the public at large about the Public Hearing to be conducted by the Commission on **28th January 2016** from **09:30 AM** onwards at Hall at Puducherry Multipurpose Social Service Society Complex (PMSSS), No. 81, Laporte Street, Puducherry – 605 001 as given below:

The details of the Public Notices published by the Commission are as below.

Table 1.4: Details of Public Notices published by the Commission

S. No.	Date	Description	Name of Newspaper	Place of Circulation
1.	16th January 2016	1st Notice	Dina Malar	Puducherry
2.	16th January 2016	1st Notice	Malai Malar	Puducherry
3.	16th January 2016	1st Notice	Dina Thanthi	Puducherry
4.	22nd January 2016	Repeat Notice	The New Indian Express	Vishakhapatnam, Chennai
5.	20th January 2016	Repeat Notice	Dina Malar	Puducherry, Karaikal
6.	20th January 2016	Repeat Notice	Malai Malar	Puducherry, Karaikal
7.	20th January 2016	Repeat Notice	Dina Thanthi	Puducherry, Karaikal

The copies of the Public Notices published by the Commission for intimation of the Public Hearing are attached as **Annexure 2** to this Order.

The Commission received four written objections/suggestions on the Petition, for filing objections/suggestion. The replies to the objections during the Public Hearing were sent by the Petitioner after the hearing.

During the Public Hearing, each objector was provided with an opportunity to present his views on the Petition filed by the Petitioner. All those present in the hearing, irrespective of whether they had given a written objection or not, were given an equal opportunity to express their views. The list of objectors is attached at **Annexure 3** to this Order. The list includes the objectors who gave their written objections; those who gave their written objections and presented before the Commission; and other stakeholders who did not give their written objection or prior intimation but presented before the Commission orally. The Commission has examined the issues and concerns expressed by stakeholders. The major issues raised/indicated during the Public Hearing, along with the comments/replies of the utility and the views of the Commission, thereon, have been summarized in **Chapter 3** of this Order.

1.8. Adherence to the Model Code of Conduct

The Election Commission of India announced on 4th March 2016, the schedule of elections for the Legislative Assembly of Puducherry as per which the polling date for the elections in Puducherry was 16th May 2016. As per the notification issued by the Government of Puducherry regarding enforcement of the Model Code of Conduct in the UT of Puducherry due to elections to the Legislative Assembly of Puducherry (Circular No. A. 51011/2/2016/DPAR/SS-I (1) dated 22nd March 2016), the election process will be complete on 21st May 2016. Further, as stated in this notification, the Model Code of Conduct provisions were applicable in the state from 4th March 2016.

The Commission (JERC) while carrying out the analysis of the MYT Petition and subsequent issuance of the Tariff Order, has kept the provisions of the Model Code of Conduct in mind. The Commission (JERC) notes that it had followed the provisions of the Model Code of Conduct enforced at the time of the Lok Sabha Elections, 2014 also during the issuance of the Tariff Order for FY 2014-15 dated 25th April 2014.

Reference is cited of the letter from Principal Secretary, Secretariat of the Election Commission of India (letter no. 437/6/1//2014/-CC&BE/235 dated 29th March 2014) wherein it is clarified to the Forum of Regulators (FOR):

Quote

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

The above-mentioned clarifications as received from the Election Commission was communicated by FOR to all SERCs vide its letter no. 15/2(39)/2013 – FOR/CERC/36750 dated 4th April 2014.

The Commission (JERC) considering that the present elections are held for the Legislative Assembly of Puducherry as per its prudence has followed the Model Code of Conduct applicable till the election process is complete in the UT of Puducherry i.e. 21st May 2016. The Commission has, accordingly, issued the present Tariff Order for EDP after the completion of the election process in UT of Puducherry.

1.9.Organization of the Order

This Order is organized in the following chapters:

- **Chapter 1** of the Order provides the background and brief description of the regulatory process undertaken by the Commission.
- **Chapter 2** of the Order summarizes the salient features of the MYT Petition filed by EDP
- **Chapter 3** of the Order lists out various suggestions and objections raised by the objectors in writing as well as during the Public Hearing before the Commission. Various suggestions and objections have been summarized, followed by the response of the Petitioner and the rulings of the Commission on the various issues.
- **Chapter 4** of the Order discusses the True-up for FY 2013-14
- **Chapter 5** of the Order discusses the Provisional True-up for FY 2014-15
- **Chapter 6** of the Order discusses the Annual Performance Review (APR) for FY 2015-16
- **Chapter 7** of the Order discusses the Annual Revenue Requirement (ARR) for the MYT Control Period FY 2016-17 to FY 2018-19
- **Chapter 8** of the Order discusses the 'Tariff philosophy and Category-wise Tariffs for FY 2016-17'

- **Chapter 9** of the Order discusses the open access and wheeling charges for FY 2016-17
- **Chapter 10** of the Order discusses the necessary 'Directives' of the Commission to EDP based on the analysis carried out in this Order

- **Chapter 11** of the Order discusses the 'Tariff Schedule' for EDP for FY 2016-17

- **Chapter 12** of the Order discusses the 'Schedule of Services and Charges' for EDP for FY 2016-17

2. Salient Features of the Tariff Petition filed by EDP

2.1. Tariff Petition filed by the Petitioner for the True-up of FY 2013-14, Provisional True-up of FY 2014-15, Review for FY 2015-16, ARR for MYT Control Period FY 2016-17 to FY 2018-19 and Tariff for FY 2016-17

The Commission had issued the MYT Regulations 2014 in exercise of the powers conferred by Section 61, 62, 63 and 86 read with Section 181 of Electricity Act 2003 on 30th June, 2014. As per clause 3.1.6 of the MYT Regulations 2014, the Control Period was defined as the three year period from FY 2015-16 to FY 2017-18.

However, as detailed in the last Tariff Order dated 10th April 2015, the Commission had ordered for deferment of the Control Period by one year. The Commission had cited that the details provided in the Business Plan were insufficient for approval of the same. Supporting data such as scheme-wise cost benefit analysis, financing plan, loss trajectory etc. had not been adequately submitted. In view of this, the Commission deferred the implementation of multi-year tariff and the concomitant Business Plan by one year.

The Commission subsequently issued the first amendment to the JERC (Multi Year Distribution Tariff) Regulations 2014 vide notification dated 10th August 2015. As per clause 5.1 of the amendment to the said regulations, the Control Period for multi-year tariff implementation, now, is from FY 2016-17 to FY 2018-19.

Accordingly, the Petitioner submitted the MYT Petition for the Control Period FY 2016-17 to FY 2018-19 has been done.

The Petitioner had submitted the Business Plan Petition on 5th August 2015. The Commission admitted the Petition on 7th September 2015 after seeking further information/data from EDP taking a prudent view of the Petition. The Commission then carried out detailed proceedings in the matter and finally issued the Business Plan Order on 4th December 2015.

The Commission had directed that the MYT Petition should be filed within one month of the issuance of the Business Plan Order. Accordingly, the MYT Petition for the Control Period FY 2016-17 to FY 2018-19 prepared in line with the JERC Tariff Regulations 2009, Business Plan Order, MYT Regulations 2014 (and subsequent amendment) was submitted before the Commission.

The Petitioner, this time has submitted the True-up for FY 2013-14, Provisional True-up for FY 2014-15, Annual Performance Review for FY 2015-16 and Aggregate Revenue Requirement (ARR) for the first Control Period FY 2016-17 to FY 2018-19. The Petitioner has also submitted the tariff proposal for FY 2016-17 to recover the cumulative revenue gap up to FY 2016-17.

The Commission has notified the first amendment to MYT Regulations, 2014 wherein tariff determination under the MYT framework shall be applicable from 1st April 2016. However, clause 39 of MYT Regulations, 2014 states as follows:

Quote

'' 39. Repeal and savings

38.2 Notwithstanding such repeal, any proceedings before the Commission pertaining to the period prior to the commencement of the Control Period, including Petitions for True-up of expenses, annual performance review, etc. shall be governed by Joint Electricity Regulatory Commission (Terms and Conditions for Determination of Tariff) Regulations 2009".

Unquote

In line with the above, EDP has adopted the principles of JERC (Terms and Conditions for Determination of Tariff) Regulations, 2009 during the period FY 2013-14 to FY 2015-16. Accordingly, True-up for FY 2013-14, Provisional True-up for FY 2014-15 and Annual Performance Review for FY 2015-16 has been submitted in accordance with the **JERC (Terms and Conditions for Determination of Tariff) Regulations, 2009** for approval of the Commission. The JERC (Terms and Conditions for Determination of Tariff) Regulations, 2009 have been hereinafter referred to as the ''**JERC Tariff Regulations 2009**''.

The ARR and tariff for the first Control Period from FY 2016-17 to FY 2018-19 has been prepared in line with the **MYT Regulations 2014** and subsequent first amendment and submitted before the Commission.

The outline of the proposal for the various years is as briefed below.

2.2.True-up for FY 2013-14

The Petitioner has submitted the True-up for FY 2013-14 based on the audited accounts in accordance with the JERC Tariff Regulations 2009. The Aggregate Revenue Requirement (ARR) for FY 2013-14 as approved by the Commission in the Review for the year as per Tariff Order dated 25th April 2014 was Rs. 1127.61 Crores. The summary of the ARR and revenue gap for FY 2013-14 as per actuals is as follows:

Table 2.1: ARR for True-up of FY 2013-14 as submitted by the Petitioner (Rs. Crores)

Sr. No.	Particulars	Submitted in APR	Approved in Tariff Order dt. 25th April'14	Claimed in True-up
1	Cost of Power Purchase including RPO provision to meet obligations of the previous years	984.77	1002.78	994.04
2	Employee costs	69.69	64.73	72.70
3	Administration and General expenses	3.96	3.96	7.25
4	R&M expenses	20.15	18.06	13.46
5	Depreciation	23.65	23.65	23.38
6	Interest & Finance Charges	4.53	13.88	15.48
7	Interest on Working Capital + Interest on CSD	8.39	7.18	-
8	Return on NFA /Equity	9.85	9.87	8.88
9	Provision for Bad Debt	-	-	-
10	**Total Revenue Requirement**	**1124.99**	**1144.11**	**1135.19**
11	Less: Non-Tariff Income	16.50	16.50	26.72
12	**Aggregate Revenue Requirement**	**1108.49**	**1127.61**	**1108.47**

The Petitioner hereby requests the Commission to approve the ARR of Rs. 1108.47 Crores for FY 2013-14 as submitted above. The Revenue Gap as approved earlier by the Commission and as calculated on the basis of True-up for FY 2013-14 is as shown below.

Table 2.2: Revenue Gap for True-up of FY 2013-14 as submitted by the Petitioner (Rs. Crores)

S. No.	Particulars	Approved as per Tariff Order dt. 25th April'14	Claimed in True-up
1	Aggregate Revenue Requirement	1127.61	1108.47
2	Revenue from Sale of Power (Excluding Surcharge)	1084.99	1045.82
3	**Revenue Gap/(Surplus)**	**42.62**	**62.65**

The above revenue gap is calculated without considering the 10% surcharge levied to consumers in FY 2013-14 as directed in the Tariff Order 10th April 2013. The Petitioner has submitted that the 10% surcharge collected has been adjusted against the Regulatory Assets as per the previous Tariff Order and the same has been adjusted in the calculation of the total revenue gap. The Commission is requested to approve the revenue gap of Rs. 62.65 Crores for True-up of FY 2013-14.

2.3.Provisional True-up for FY 2014-15

The Petitioner has submitted the Provisional True-up for FY 2014-15 based on the provisional accounts for FY 2014-15 pending the completion of audit of accounts for FY 2014-15. The ARR for FY 2014-15 as approved by the Commission in the Review for the year as per Tariff Order dated 10th April 2015 was Rs. 1121.37 Crores. The calculation of ARR on the basis of actuals (provisional) for FY 2014-15 is as shown below:

Table 2.3: ARR for Provisional True-up of FY 2014-15 as submitted by the Petitioner (Rs. Crores)

Sr. No.	Particulars	Submitted in APR	Approved in Tariff Order dt. 10th April'15	Claimed in Provisional True-up
1	Cost of Power Purchase including RPO provisioning to meet obligation of the previous years	970.62	963.84	940.45
2	Employee costs	75.32	75.32	75.93
3	Administration and General expenses	5.36	5.36	14.59
4	R&M expenses	19.12	19.12	7.71
5	Depreciation	30.86	30.86	25.92
6	Interest & Finance Charges	19.38	19.38	18.81
7	Interest on Working Capital + Interest on CSD	4.00	4.00	2.02
8	Return on NFA /Equity	10.67	8.37	8.37
9	Provision for Bad Debt	-	-	2.60
10	**Total Revenue Requirement**	**1135.33**	**1126.25**	**1096.40**
11	Less: Non-Tariff Income	4.88	4.88	4.60
12	**Aggregate Revenue Requirement**	**1130.45**	**1121.37**	**1091.80**

The Petitioner has requested the Commission to approve the ARR of Rs. 1091.80 Crores for FY 2014-15 as submitted above.

The Revenue Gap as approved earlier by the Commission and as calculated on the basis of Provisional True-up of FY 2014-15 is as follows:

Table 2.4: Revenue Gap for Provisional True-up of FY 2014-15 as submitted by the Petitioner

(Rs. Crores)

S. No.	Particulars	Approved as per Tariff Order dt. 10th April'15	Claimed in Provisional True-up
1	Aggregate Revenue Requirement	1121.37	1091.80
2	Revenue from Sale of Power (Excluding Surcharge)	1142.70	1077.06
3	**Revenue Gap/(Surplus)**	**(21.33)**	**14.74**

The above gap has been calculated without considering the 10% surcharge amount levied on consumers in FY 2014-15. The Petitioner has submitted that the 10% surcharge collected has been adjusted against the Regulatory Assets as per the previous Tariff Order and the same has been adjusted in the calculation of the total revenue gap. The Commission is requested to approve the revenue gap of Rs. 14.74 Crores for Provisional True-up of FY 2014-15 as shown above.

2.4. Annual Performance Review (APR) for FY 2015-16

The Petitioner has submitted the Annual Performance Review (APR) for FY 2015-16 based on (i) the actual performance during the first half of the year and (ii) the revised estimates for the second half of the year projected in line with the performance in the first half of the year. JERC Tariff Regulations 2009 have been referred to for the Review of FY 2015-16.

The ARR for FY 2015-16 as approved by the Commission in the Tariff Order for FY 2015-16 dated 10th April 2015 was Rs. 1253.05 Crores. The ARR on the basis of revised estimates for FY 2015-16 is as follows:

Table 2.5: Review of ARR for FY 2015-16 as submitted by the Petitioner (Rs. Crores)

Sr. No.	Particulars	Submitted in Tariff Petition	Approved in Tariff Order dt. 10th April'15	Claimed in Review
1	Cost of Power Purchase including RPO provision to meet the obligation of the previous years	1108.87	1035.63	1037.92
2	Employee costs	80.91	78.22	80.32
3	Administration and General expenses	5.76	5.68	11.50
4	R&M expenses	18.35	18.35	16.99*
5	Depreciation	35.21	35.21	27.80
6	Interest & Finance Charges	24.87	24.87	24.12
7	Interest on Working Capital + Interest on CSD	14.84	22.36	2.50
8	Return on NFA /Equity	16.21	8.89	9.47
9	Provision to meet arrears of interest on SD	-	27.63	-
10	**Total Revenue Requirement**	**1305.02**	**1256.84**	**1210.63**
11	Less: Non-Tariff Income	3.79	3.79	3.83
12	**Aggregate Revenue Requirement**	**1301.23**	**1253.05**	**1206.80****

Note - * R&M expenses revised downwards to Rs. 15.12 Crores from Rs. 16.99 Crores originally submitted in the Petition.

** Consequent to the change of R&M expenses to Rs. 15.12 Crores, the ARR has been changed to Rs. 1204.92 Crores from Rs. 1206.80 Crores originally submitted in the MYT Petition.

EDP requests the Commission to approve the revised ARR for FY 2015-16 as submitted above. The Revenue Gap approved earlier by the Commission and as calculated on the basis of revised estimates for FY 2015-16 is as follows:

Table 2.6: Revenue Gap for Review of FY 2015-16 as submitted by the Petitioner (Rs. Crores)

Sr. No.	Item of expense	Approved in Tariff Order dt. 10th April'15	Claimed in Review
1	Aggregate Revenue Requirement	1253.05	1204.92
2	Revenue from Sale of Power (Excluding Surcharge)	1210.82	1164.07
3	**Revenue Gap/(Surplus)**	**42.23**	**40.85****

Note : ** Consequent to the change of R&M expenses to Rs. 15.12 Crores, the ARR has been changed to Rs. 1204.92 Crores from Rs. 1206.80 Crores originally submitted in the Petition. Therefore, the revenue gap has been revised downwards to Rs. 40.85 Crores for the Review of ARR for FY 2015-16.

The Commission is requested to kindly allow adjusting the above revenue gap of FY 2015-16 with the cumulative revenue gap of FY 2016-17.

2.5. Annual Revenue Requirement (ARR) for the MYT Control Period FY 2016-17 to FY 2018-19

The MYT proposal has been submitted by the Petitioner for the Control Period i.e. FY 2016-17 to FY 2018-19 based on the MYT Regulations 2014 and its amendment and the Business Plan Order dated 4th December 2015.

The ARR for the Control Period as projected by the Petitioner is as follows:

Table 2.7: ARR from FY 2016-17 to FY 2018-19 as submitted by the Petitioner (Rs. Crores)

Sr. No.	Particulars	FY 2016-17	FY 2017-18	FY 2018-19
1	Cost of Power Purchase including RPO cost	1124.57	1185.47	1251.34
2	Employee costs	75.12	81.75	80.32
3	Administration and General expenses	5.11	5.56	6.05
4	R&M expenses	20.06	22.66	27.15
5	Depreciation	32.24	38.93	46.86
6	Interest & Finance Charges	28.80	36.40	45.67
7	Interest on Working Capital + Interest on CSD	15.02	16.84	18.65
8	Return on NFA /Equity	18.26	22.47	27.61
9	Provision for bad debts	-	-	-
10	**Total Revenue Requirement**	**1319.18**	**1410.07**	**1503.65**
11	Less: Non-Tariff Income	2.80	2.93	3.08
12	**Aggregate Revenue Requirement**	**1316.38**	**1407.14**	**1500.56**

The revenue gap as calculated on the basis of the projection for FY 2016-17 is as shown below:

Table 2.8: Revenue Gap for FY 2016-17 at existing tariff as submitted by the Petitioner (Rs. Crores)

S. No.	Particulars	As claimed by the Petitioner
1	Aggregate Revenue Requirement	1316.38
2	Revenue from Sale of Power (Excluding Surcharge)	1294.76
3	**Revenue Gap**	**21.62**

The Commission is requested to kindly allow the revenue gap of Rs. 21.62 Crores to be recovered during FY 2016-17.

2.6.Additional Claim – Interest on Security Deposit Provision

The Petitioner has submitted that the interest on security deposit to the consumers has not been paid for the previous years and accordingly the Commission has not allowed the same during the True-up from FY 2009-10 to FY 2012-13. The Petitioner has requested the

Commission to allow the provision of actual security deposit from FY 2009-10 to FY 2015-16 (after excluding the amount paid in FY 2014-15 and estimated to be paid in FY 2015-16), to be included in the revenue gap to be recovered in the MYT Control Period from FY 2016-17 to FY 2018-19.

The Petitioner has requested to allow the provision of unpaid security deposit of Rs. 48.40 Crores to be included in the total revenue gap to be recovered in the MYT Control Period i.e. FY 2016-17 to FY 2018-19.

2.7. Treatment of Regulatory Asset and Net Gap

As per Tariff Order dated 12th June 2012, the recovery of the regulatory asset from FY 2009-10 to FY 2012-13 was initiated from FY 2013-14 onwards. The Petitioner has submitted that the calculation of regulatory asset has been revised as per the Tariff Order dated 10th April 2015 based on the actual audited accounts for FY 2011-12 and FY 2012-13.

The calculation of the regulatory asset and the recovery of the same from the consumers is as follows.

Table 2.9: Pending Regulatory Asset calculation as submitted by the Petitioner (Rs. Crores)

Sr. No.	Particulars	Proposed by Petitioner	Approved by Commission	Revised by Petitioner
1	FY 2009-10	59.54	58.02	58.02
2	FY 2010-11	96.19	93.94	93.94
3	FY 2011-12	352.18	348.96	348.96
4	FY 2012-13	125.57	107.54	107.54
5	Less: Government Support	360.28	360.28	360.28
6	**Regulatory Asset**	**273.20**	**248.18**	**248.18**
7	**Recovery of regulatory assets from consumers**			
8	FY 2013-14	101.76	104.36	101.46
9	FY 2014-15	110.50	110.50	103.94
10	**Total regulatory assets recovered**	**212.26**	**214.86**	**205.40**
11	Expected recovery in FY 2015-16	60.94	33.32	30.11
12	**Total expected regulatory assets recovered at the end of FY 2015-16**	**273.20**	**248.18**	**235.51**
13	**Balance regulatory asset at the end of FY 2015-16**			**12.67**

At the end of FY 2015-16 Rs. 12.67 Crores is pending recovery based on the surcharge collected. The Petitioner has proposed to recover the balance regulatory asset during the Control Period.

The calculation of the cumulative revenue gap for FY 2016-17 is as follows:

Table 2.10: Revenue Gap from FY 2013-14 to FY 2016-17 as submitted by the Petitioner (Rs. Crores)

S. No.	Particulars	FY 2013-14	FY 2014-15	FY 2015-16	FY 2016-17
1	ARR	1108.47	1091.80	1206.80	1316.38
2	Revenue at existing tariff excluding surcharge but including FPPCA	1045.82	1077.06	1164.07	1294.76
3	Revenue Gap for the year	62.64	14.74	42.73	21.62
4	Opening balance of gap		62.64	77.39	181.19
5	Addition during the year		14.74	42.73*	21.62
6	**Additional past recoveries to be claimed in the MYT Control Period**				
7	Under-recovered regulatory asset			12.67	
8	Accumulated interest on security deposit to be paid during the Control Period			48.40	
9	**Total cumulative gap for the years**	**62.64**	**77.39**	**181.19**	**202.81***

Note: * In the above Table, the revenue gap for FY 2015-16 as claimed by the Petitioner has been revised downwards to Rs. 40.85 Crores and therefore, the cumulative revenue gap at the end of FY 2016-17 also comes down to Rs. 200.93 Crores (as per revised submission).

The Petitioner has requested the Commission to approve the revenue gap of Rs. 202.81 Crores till FY 2016-17. The Petitioner has requested to allow the revenue gap to be recovered by way of creation of regulatory asset instead of recovering through tariff hike in the next year.

2.8.Proposal for revision in tariff for retail sale of electricity

The Petitioner has submitted that considering the total proposed revenue gap of Rs. 202.81 Crores till FY 2016-17, the Commission may kindly create a regulatory asset to recover the revenue gap during the three years of the MYT Control Period i.e. FY 2016-17 to FY 2018-19.

Further, the Petitioner has submitted that the commercial and domestic sectors are also facing economic hardships due to floods and hence raising tariff at the level of ~16% may become unsustainable and would over-burden all categories of consumers. Therefore, EDP has requested the Commission to approve the revenue gap as regulatory asset to be recovered during the MYT Control Period.

The Petitioner is not proposing any tariff hike in FY 2016-17 and has requested the Commission to allow recovery of the revenue gap via additional surcharge of 5.22% over three years i.e. FY 2016-17 to FY 2018-19. The calculation of the surcharge amount is as follows.

Table 2.11: Additional Surcharge proposed by the Petitioner over the Control Period (Rs. Crores)

S. No.	Particulars	As claimed by the Petitioner
1	Cumulative Revenue Gap	202.81
2	Gap to be recovered every year during the Control Period	67.60
3	Revenue from existing tariff in FY 2016-17	1294.76
4	**Additional surcharge proposed to be levied on the consumers**	**5.22%**

2.9.Prayer to the Commission

The Electricity Department, Government of Puducherry (EDP) has prayed before the Commission to:

Quote

‘’

1. Admit the Petition seeking Final True-up for FY 2013-14, Provisional True-up for FY 2014-15, Annual Performance Review for FY 2015-16 and Multi-Year Tariff Petition for FY 2016-17 to FY 2018-19 as per the provisions of JERC (Multi Year Distribution Tariff) Regulations, 2014.

2. Approve the total recovery of Final True-up of FY 2013-14, Provisional True-up for FY 2014-15, Annual Performance Review for FY 2015-16 and Aggregate Revenue Requirement for FY 2016-17 to FY 2018-19 and other claims as proposed by PED.

3. Review the provisional actual performance of FY 2014-15 and approve the Aggregate Revenue Requirement (ARR) and gap for FY 2014-15 based on the unaudited accounts. It is submitted that the audited accounts will be furnished to the Hon’ble Commission before issue of Order.

4. Approve the Aggregate Revenue Requirement (ARR) for the Control Period i.e. FY 2016-17 to FY 2018-19, Expected Revenue from Charges (ERC) for FY 2016-17 and the gap till FY 2016-17.

5. Approve the consolidated gap till FY 2016-17 as regulatory assets as proposed in the Petition and allow the gap to be recovered during the Control Period through levy of additional surcharge.

6. To allow recovery of balance regulatory asset approved earlier up to FY 2012-13 during the MYT Control Period.

7. To allow cost related to past interest on security deposit into ARR of MYT Control Period of FY 2016-17 to FY 2018-19.

8. Grant approval for the schedule of tariff, charges for services and schedule of charges along with the surcharge as made in the Petition for FY 2016-17.

9. To exempt PED from introducing Time of Day (ToD) Tariff in FY 2016-17 for HT consumers.

10. Grant any other relief as the Hon'ble Commission may consider appropriate. The Petitioner craves leave of the Hon'ble Commission to allow further submission, addition and alteration to this Petition as may be necessary from time to time.

11. To pass any other Order as the Hon'ble Commission may deem fit and appropriate under the circumstances of the case and in the interest of justice. ''

Unquote

3. Summary of Objections/Suggestions received, Response from the Petitioner and Commission's Views

3.1. Regulatory Process

On admitting the Petition, the Commission directed the Petitioner to make copies of the Petition available to the public, upload the Petition on the website and also publish in the newspapers in abridged form in the given format duly inviting comments/objections from the public as per provisions of the JERC Tariff Regulations 2009 and MYT Regulations 2014 as amended.

The Public Hearing was held on 28th January 2016 at Puducherry. During the Public Hearing, some persons who had submitted the objections in writing presented their objections/suggestions in person before the Commission. Other participants from the general public, who did not submit written objections earlier, were also given an equal opportunity to offer their views/suggestions in respect of the present Petition.

The list of objectors is attached as **Annexure 3** to this Order which includes the stakeholders:

1) Who gave their written objections and did not intend to present orally during the Public Hearing
2) Who gave their written objections and expressed a desire to present orally also during the Public Hearing
3) 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) Who did not give their written objection or prior intimation, but participated in the hearing on the spot and/or also gave written submissions

At the beginning of the hearing, the Commission ascertained from the stakeholders that those who had filed the written objection before the date of the Public Hearing, had received the replies to their written objections. All the stakeholders were provided the opportunity to present their suggestions.

3.2. Objections/Suggestions, Response of the Petitioner and Commission's Comments

The Commission appreciates the efforts of various stakeholders for providing suggestions / comments/observations and making the power sector responsive and efficient. The details of the issues raised by the stakeholders, response of the Petitioner thereon and the views of the Commission on the same are as follows:

3.2.1. Proposal to Increase the Tariff Surcharge

Stakeholder's View

The stakeholders have objected to the proposal of the Department to levy additional surcharge from FY 2016-17. The industrial stakeholders have submitted that certain industries are extremely power intensive and the cost of power plays a significant role in determining the price of the end product. Due to the current global economic scenario and slowing down of global economy, the selling prices of industrial products are under severe pressure and facing a downward trend. The increasing cost of power affects the sales volume and the industries are forced to reduce their operations, with very thin operating margin to survive in the market. The proposal to increase the surcharge from 2.64% to 5.22%, will adversely affect industrial growth in the region.

The industrial stakeholders have, therefore, submitted that the power tariff for the industries must be maintained at the existing level for the survival of the industries.

One of the stakeholders has also submitted that domestic consumers should be exempted from this surcharge.

Petitioner's Reply
The Petitioner has not submitted any specific response to this objection.

Commission's View
For determining the tariff for various categories of consumers the Commission is guided by the provisions of Section 61 of Electricity Act, 2003 and the Tariff Policy notified by the Government of India and JERC Tariff Regulations and amendments issued therein.

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 Commission has taken a considered view of the required tariff hike for each consumer category based on the analysis of the Aggregate Revenue Requirement (ARR) and revenue gap for each year analysed in this Order. The detailed analysis of the tariff of each of the consumer categories is in the Chapter on 'Tariff Philosophy and Category-wise Tariffs for FY 2016-17' of this Order.

3.2.2. Timely levy of FPPCA charges

Stakeholder's View

The stakeholders have submitted that as per the Income Tax Act expenses of a particular year are allowed in that year only. So, if expenses pertaining to earlier year are accounted for, the same are considered as prior period expenditure. The income tax benefit is not applicable on such prior period expenditure. The FPPCA charges for the year ascertained/levied by the Department in the next financial year, are disallowed by the Income Tax Department.

The stakeholders have, therefore, submitted that the FPPCA charges for the year should be crystallized in the respective financial year or at the most latest by 30th June in the next financial year.

One of the stakeholders has also pointed out that FPPCA charges are being levied late to the consumers even after the end of the current quarter. They have said that as per the Tariff Order dated 10th April 2015, adjustment of FPPCA charges is to be made in the consumer bill starting after a month following the end of quarter. The stakeholders have, therefore, submitted that EDP should adhere to the Tariff Order terms and conditions in spirit and practice.

Petitioner's Reply

The Petitioner has not submitted anything specific related to this objection.

Commission's View

The Commission in its last Tariff Order dated 10th April 2015 has already given a clear directive regarding the levy of FPPCA charges before 30th June of the following financial year. A similar objection was also made by the stakeholders during the Public Hearing of the last Tariff Order.

Reproducing the relevant text from the Tariff Order dated 10th April 2015:

Quote

''The Commission directs the Petitioner to finalize the FPPCA amount due from the consumers with respect to the Financial Year before 30th June of the following financial year and upload the same on the website of the Petitioner and give advertisement in the newspapers. This would facilitate the companies to assess the total liability of the company towards FPPCA of the Financial Year for accrual accounting before compilation, audit & adoption of the annual accounts.''

Unquote

The Commission expects complete compliance of the above directive of the Commission and directs that the FPPCA amount due from the consumers with respect to the Financial Year be finalized before 30th June of the following Financial Year.

Further, the Commission directs that the adjustment of FPPCA charges be made in the bills of the consumers within a month following the end of the current quarter.

3.2.3. Reduction in Power Factor Incentive from 1% to 0.5%

Stakeholder's View

The industrial stakeholders have submitted that the proposal of the Petitioner to reduce the existing power factor (PF) incentive from 1% to 0.5% for the industries sustaining the power factor above 0.95 will discourage many industries from maintaining high power factors. The industrial stakeholders have further submitted that many of them have invested huge sums of money running into Rs. 10 lakhs to as high as Rs. 1 Crores to improve the power factor to 0.99 which benefits the entire distribution system. This investment as envisaged earlier was to be recovered over 5-6 years' time frame and thus the proposed reduction of PF incentive to half will result into heavy financial burden for the industries.

Therefore, the industrial stakeholders have requested the Commission to continue the power factor incentive at 1% as per the earlier Tariff Orders of the Commission.

Petitioner's Reply

The Petitioner has not given a specific response to this particular objection of the stakeholders.

Commission's View

The Commission has noted the submission of the stakeholders. The Commission notes that the proposal of the Petitioner to reduce the power factor incentive from 1% to 0.5% for HT and EHT consumers is not supported by any rationale. The Commission in the last Tariff Order for FY 2015-16 dated 10th April 2015 had mentioned the power factor incentive at 1% for every increase of 0.01 in power factor above 0.95 (lagging). The surcharge amount in addition to normal tariff applicable was also 1% for each fall of 0.01 in power factor below 0.90 (lagging) up to 0.70 (lagging).

The Commission does not see any reason to reduce the power factor incentive amount from 1% to 0.5% for the HT and EHT consumers for increase in power factor above 0.95 (lagging). The Commission retains the above clause as in the last Tariff Order for FY 2015-16 dated 10th April 2015.

3.2.4. Night Tariff and Peak Tariff Time of Day (TOD) Meters

Stakeholder's View

The industrial stakeholders have submitted that most HT/EHT consumers in Puducherry have TOD meters and hence the Commission should seriously consider incentive for industries to run their units in the night when the UT has surplus power and does not draw the allotted quantity from its power vendors. To disincentivise consumption during peak hours, EDP resorts to unscheduled load shedding disrupting the efficient planning of labor, material and maintenance. The industrial stakeholders have submitted that during peak hours, higher tariff should be levied and at night, a night-time tariff significantly lower than the peak tariff should be introduced. This would help improve the financial and revenue-mix of the Department.

Petitioner's Reply

The Petitioner has submitted that the Tariff Order for FY 2015-16 mentions that TOD metering is optional. Hence, the Petitioner has decided to send notices to HT consumers to get the TOD option activated. The meters will be calibrated for the consumers who opt for TOD metering. The software is also being modified accordingly. A status report on the implementation of TOD metering will be submitted to the Commission by the end of June 2016.

Commission's View

The TOD tariff for HT and EHT consumers was optional as per the terms and conditions of TOD tariff as per Tariff Order for FY 2014-15 dated 25th April 2014. However, as per Tariff Order for FY 2015-16 dated 10th April 2015, the Commission had directed the Petitioner to introduce TOD tariff for the HT and EHT consumers during FY 2015-16. The Commission notes that in the MYT Petition, the Petitioner has requested the Commission to exempt the Department from introducing TOD tariff for HT/EHT consumers in FY 2016-17.

The Commission is of the view that adequate time has been given to the Petitioner to introduce TOD tariff. Therefore, the Commission retains the terms & conditions of TOD tariff as per the Tariff Order dated 10th April 2015. The Commission directs the Petitioner to introduce TOD tariff for the HT and EHT consumers during FY 2016-17. The tariff and other terms & conditions for TOD tariff have been laid out in this Tariff Order in the Chapter on 'Tariff Schedule'. The status report on the implementation of TOD metering should be submitted to the Commission by the end of October 2016.

3.2.5. Status of the 100% Metering Programme

Stakeholder's View

The stakeholders have submitted that the Petitioner has not yet implemented the 100% metering programme in its territory. The Petitioner has been delaying the implementation of the said programme despite the Commission's directive on the same. The stakeholders have pointed out that without 100% metering, exact assessment of losses is difficult and consumers are unduly bearing the revenue loss of the Department.

Petitioner's Reply

The Petitioner has submitted that the order for the first lot of 41,000 meters is expected by February 2016 end. The Department has decided to form a special team for each O&M circle exclusively to replace the defective meters. Providing of meters in unmetered services and replacement of defective meters will be done on priority. A status report on the progress of replacement of meters will be submitted by the end of June 2016.

Commission's View

The Commission has already given a directive to the Petitioner to implement 100% metering programme in its territory. This programme covers metering of consumer installations and replacement of non-functional or defective meters in the territory of EDP.

The Commission in the Business Plan Order dated 4th December 2015, has expected full compliance of the 100% metering programme by FY 2017-18 and has accordingly approved the capital expenditure for this scheme for FY 2016-17 and FY 2017-18. The relevant text from the Business Plan Order is as reproduced below:

Quote

'' The Commission notes that the Petitioner has proposed the 100% metering programme to be carried out over a period of three years from FY 2016-17 to FY 2018-19. The Commission has been repeatedly giving directive to the Petitioner to implement 100% metering in its territory. The Commission, in the interest of the stakeholders, approves the entire capital expenditure proposed by the Petitioner under the head '100% Metering Programme' over the three-year period from FY 2016-17 to FY 2018-19 i.e. Rs. 8.37 Crores to be implemented in two-year time-frame during FY 2016-17 and FY 2017-18.

The Commission has considered equal split of the capital expenditure for FY 2016-17 and FY 2017-18. The Commission, accordingly, approves capital expenditure of Rs. 4.19 Crores for FY 2016-17 and Rs. 4.19 Crores for FY 2017-18.

The Commission expects full compliance of the 100% metering directive by FY 2017-18 and has accordingly approved the capital expenditure for this scheme for FY 2016-17 and FY 2017-18.''

Unquote

Further, the Commission in the Business Plan Order has directed as below:

Quote

'' The Commission directs the department to provide detailed plan to undertake metering in the different areas, especially Karaikal. The details regarding plan of distribution of meters in different areas of Puducherry needs to be elaborated and submitted before the Commission.''

Unquote

The Commission expects full compliance with the above. The Petitioner is directed to submit the present status of replacement of defective meters, meters already available, additional meters proposed to be ordered and timeline for receipt of additional meters. EDP is directed to report time schedule for replacement of defective meters as on 30.04.2016. The status report must be submitted by June 2016.

3.2.6. Payment of the Interest on Consumer Security Deposit

Stakeholder's View

The stakeholders have submitted that even though the consumer security deposits are being collected from the consumers, the interest on the same is not being paid to the consumers in a timely manner. The stakeholders have inquired about the status of the security deposit amount and interest payment on it thereof.

Petitioner's Reply

The Petitioner has not given a specific response to this particular objection of the stakeholders.

Commission's View

The Commission has noted the concerns of the stakeholders. The Commission, in this regard, has already given a directive to the Petitioner for timely payment of the interest on security deposits to the consumers and also to liquidate the outstanding arrears. The Commission notes that as per the latest submission in the MYT petition, a provision of Rs. 48.40 Crores has been proposed by the Petitioner towards the unpaid interest on security deposit from FY 2009-10 to FY 2015-16 and the same has been included in the total revenue gap to be recovered in FY 2016-17. The Commission notes that of the total interest on security deposit of ~Rs. 52.92 Crores estimated to be paid from FY 2009-10 to FY 2015-16, only a marginal amount of Rs. 4.52 Crores is estimated to be actually paid up to FY 2015-16 and the rest has been provisioned in FY 2016-17.

The Commission has also noted that a provision of Rs. 27.63 Crores in FY 2015-16 was made during the last Tariff Order dated 10th April 2015. However, the Petitioner as per the revised estimates submitted this time for the year has shown only an amount of Rs. 2.50 Crores to be paid during FY 2015-16. A provision of Rs. 9.78 Crores was approved in the Tariff Order for FY 2014-15. The Commission notes with serious concern that despite the provisioning of the unpaid interest on security deposit amount during FY 2014-15 and FY 2015-16, only a marginal amount amounting to Rs. 4.52 Crores is estimated to be actually paid up to FY 2015-16. The Petitioner is directed to clearly submit the reasons for non-payment of the interest on security deposit and reasons for accumulating arrears on this account. The status report on the payment of the pending amount due to the consumers from FY 2009-10 to FY 2015-16 must be submitted to the Commission by 31st October 2016.

3.2.7. Collection of Outstanding Arrears

Stakeholder's View

The stakeholders have pointed out that there are huge arrears outstanding, particularly from the industries. They have further pointed out that the public should be informed about the status of the same and details pertaining to outstanding arrears from the large consumers should be made public.

Petitioner's Reply

The Petitioner has not given a specific response to this particular objection of the stakeholders.

Commission's View

The Commission has been repeatedly giving directives to the Petitioner on the collection of outstanding arrears from all consumers including Government Departments and public undertakings. The Commission reiterates that its earlier directives on the collection of arrears should be duly adhered to. The Petitioner must submit quarterly progress reports on the status of the collection of the arrears along with an action plan for liquidating the same. The list of consumers defaulting on payment should be announced in public.

3.2.8. High AT&C, High Line Losses and Increase in Power Theft

Stakeholder's View

The stakeholders have pointed out that due to poor collection efficiency, very high AT&C losses are being reported by the Department. It is seen that T&D losses are of the order of ~13%, whereas corresponding AT&C losses are very high at ~20% on account of poor collection efficiency of the order of ~92%. Such low levels of collection efficiency affect the profitability and financial sustainability of the Department. Further, this also leads to huge amount of outstanding arrears.

The stakeholders have also pointed out that line losses are high. The Department should take serious steps to improve the infrastructure to reduce the T&D losses. Further, if the losses are contained, there would be no reason for increasing the power tariff of the Department.

As regards the increase in power theft, stakeholders have submitted that thefts should be reduced to contain the line losses. Further, immediate action should be taken for rectification of under-ground (UG) cable faults to contain the losses. The stakeholders inquired about the progress related to work being carried out to rectify the cable faults and laying of additional UG cables to reduce the breakdown of UG cable network.

Petitioner's Reply

The Petitioner has not given a specific response to the objection regarding high AT&C loss levels. As regards the high line losses, the Petitioner has submitted that the Department has proposed to improve the infrastructure by various measures like erecting new EHV sub-stations, new EHT lines, setting up of distribution transformers at load centers, relaying of under-ground (UG) cables in the areas where UG cables were laid long back, laying of UG cables in the new areas, introduction of HV distribution and setting up of aerial bunched cables by funding from JICA/R-APDRP/ IPDS/DDGYS.

Further, the Department is also strengthening the Anti-Power Theft Squad (APTS) to increase the number of squads for carrying out theft inspection drives. The O&M engineers will also be asked to inspect the services at random to reduce theft and thereby contain line losses.

Commission's View

The Commission notes the very low figures of collection efficiency being reported. As per the True-up of FY 2013-14, collection efficiency of 91.60% has been submitted by the Petitioner. Further, the Petitioner in the MYT Petition has submitted that it would be able to achieve collection efficiency of 95% for FY 2015-16. Likewise, 95% for FY 2016-17, 96% for FY 2017-18 and 97% for FY 2018-19 has been submitted by the Petitioner.

The Commission does not find such low levels of collection efficiency as acceptable. The Commission has already given a directive to the Petitioner to improve the billing and collection efficiency. Billing and collection efficiency should be improved through various channels and the process of speedy implementation of the R-APDRP should be carried out so that related activities can improve. The Commission during the Public Hearing directed the Petitioner to announce the list of defaulters in payment of power bills in the public domain.

The Commission in the Business Plan Order for EDP dated 4th December 2015, has directed the Petitioner to achieve 100% collection efficiency by the end of the Control Period i.e. FY 2018-19. Further, targets of 98% for FY 2016-17 and 99% for FY 2017-18 have been set. The Commission retains these targets as set out in the Business Plan Order for purposes of this Tariff Order.

As regards the high line losses, the Commission has noted the grievances of the stakeholders. The Commission in this regard directs the Petitioner to conduct DT wise energy audit and anti-theft drive in the high loss level areas and submit the quarterly report to the Commission.

The Commission has already given a directive to the Petitioner to reduce the pilferage of energy. The Commission reiterates that theft of energy should be identified and action taken against the culprits. The concerned official(s) should see that the inspection of services is carried out regularly and status reports be submitted to the Commission in a timely manner.

Action taken report should also be submitted to the Commission, on the identified misuse of the supply of electricity. The concerned official(s) should submit a quarterly report before the Commission on the same.

3.2.9. Corporatization of the Department

Stakeholder's View

The stakeholders have submitted that the Department has still not been unbundled completely. Puducherry has a separate Corporation for generation. However, the transmission activities continue as a Department of the Government of Puducherry. The Electricity Act 2003 also mandates separate Corporations to be formed for generation, transmission and distribution activities. The stakeholders have submitted that EDP should quicken the reform process and the Commission should give strict directions in this regard.

Petitioner's Reply

The Petitioner has not given a specific response to this particular objection of the stakeholders.

Commission's View

The Commission in the last Tariff Order dated 10th April 2015, has already given a directive to the Petitioner regarding unbundling of transmission and distribution activities and subsequent corporatization of the unbundled entities. The earlier directive of the Commission is reiterated as below:

Quote

''As part of the Power Sector reforms as envisaged by the Electricity Act, 2003, the transmission and distribution activities are to be separated and independent corporations are to be formed. The transmission companies and the distribution companies thus formed under the Companies Act will have a distinct legal identity, apart from providing the management with better financial autonomy and more delegation of powers. Further, the new management structure ensures financial accountability and better consumer satisfaction.

The Commission directs the Petitioner to take up this matter with the Government of Puducherry for early implementation.''

Unquote

The Commission expects speedy compliance with the above directive and status report on the same should be submitted to the Commission by October 2016.

3.2.10. Issues regarding Consumer Bills

Stakeholder's View

The stakeholders have submitted that the consumer bills are not generated and served on time. They have submitted that the bills should be served from 1st to 10th of every month. Further, they have submitted that the billing format should be made simpler. They have said that one year billing details of each consumer should be made available like it is done in Tamil Nadu.

Petitioner's Reply

Regarding the introduction of the new bill format, the Petitioner has submitted that the methodology of capturing of details from the meters is being studied. Also, the methodology of printing the bill forms and dispatch of the bills to the consumers is to be decided. Once the modalities are finalized, the new bill format will be introduced. The status report on the same will be furnished by the end of June 2016.

Commission's View

The Commission has noted the concerns of the stakeholders. It is seen from the submission of the ARR last year that the Petitioner had proposed to introduce various new modes of payment such as internet payment gateway, 24X7 bill collection counter at customer care center, common bill collection counter proposed to be located at select locations in Puducherry/Karaikal region etc. The status of the progress of each of the above measures needs to be submitted before the Commission by June 2016.

The Commission also directs the Petitioner to initiate immediate action to introduce online billing, collection and online consumer complaints system to facilitate the consumers to make timely payments. The Commission will monitor the compliance of this directive very strictly as many stakeholders during the public hearing had pointed out that the billing is delayed and they get very little time to make the payment by due date.

The Commission, during the Public Hearing, directed the Petitioner to introduce a new bill format from 1st April 2016.

3.2.11. Promotion of Alternative Sources of Energy

Stakeholder's View

The stakeholders during the Public Hearing have submitted that alternate energy generation schemes should be encouraged by the Department. Solar power should be propagated as is being done in Tamil Nadu.

Petitioner's Reply

The Petitioner has not given a specific response to this particular objection of the stakeholders. However, as stated by the Petitioner in the MYT Petition, it would be taking adequate steps to procure physical solar power instead of Renewable Energy Certificates (REC) to meet its solar obligations. Presently, due to non-availability of physical renewable power, the Renewable Power Obligation (RPO) has been considered to be met through REC purchase.

Commission's View

The Commission appreciates the concern of the stakeholders. The Commission, as also stated in the Business Plan Order dated 4th December 2015, expects that the Petitioner would give priority to obtaining physical solar and non-solar power to meet its pending and future Renewable Purchase Obligations. This would ensure promotion of alternative sources of energy.

3.2.12. Miscellaneous Issues

Stakeholder's View

The stakeholders have submitted that for some of them, meter rent is being levied on the meter purchased by the consumers themselves.

Computers are not working properly in the bill collection center and therefore the bills could not be paid. Further, repeated visits had to be made to the collection centers for bill payment.

One of the stakeholders raised a query whether the ARR was the Department proposal or the Government proposal; whether the Department has taken approval of the Government.

The stakeholders, in general, appreciated the Department's efforts during the heavy rains, to maintain the power supply in Puducherry region.

Petitioner's Reply

The Petitioner has submitted that the consumer grievance meetings by the Executive Engineers will be conducted regularly. The Petition received will be entered in the registers and the same will be reviewed by the Superintendent Engineer (SE) once in 3 months.

The Petitioner confirmed that the formal order approving the Tariff Petition had been issued by the Government vide Order # D.D 21016/15/ID(P) D/2016/P3 dated 11th January 2016.

Commission's View

The Commission notes that meter rent is not to be levied for consumer purchased meter; if any such cases have been pointed out by the consumers, the same should be corrected immediately by the Department.

The Commission, as also directed in the earlier Tariff Orders, reiterates that the Petitioner should convene monthly public grievance meetings with the consumers to sort out issues related to the supply of power, quality of power and other related issues. These meetings shall be held on monthly basis at different locations in all the regions coming under ED-Puducherry and monthly report in this regard should be submitted to the Commission. The Commission insists that the Department should sort out various stakeholder grievances in these meetings.

Further, the Commission directs the Petitioner to give proper publicity about the monthly public grievance meetings to the consumers through bills, advertisement in local newspapers etc. During the monthly consumer grievance meetings, the entire system for handling the consumer grievances as envisaged in the Electricity Act and the Regulations of the Commission should be explained to the general public. This will create awareness amongst the consumers to approach the proper forum for redressal of their grievances.

The Commission, during the Public Hearing, directed the Petitioner that a new bill format is to be introduced from 1st April 2016 and the Time of Day (ToD) metering should be introduced during FY 2016-17 itself.

4. True-up for FY 2013-14

4.1. Applicable Provisions of JERC Tariff Regulations 2009

The True-up of FY 2013-14 is to be carried out as per the following provision of Regulation 8 of JERC Tariff Regulations 2009:

Quote

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

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

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

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

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

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

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

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

Unquote

4.2.Background and Approach for True-up of FY 2013-14

The Commission had determined the ARR for FY 2013-14 vide its Order dated 10th April 2013 and subsequently carried out the Review for FY 2013-14 vide its Order dated 25th April 2014. The Commission in the last Tariff Order dated 10th April 2015 had directed the Petitioner to submit the True-up for FY 2013-14 based on the audited accounts by June 2015.

Accordingly, the True-up of FY 2013-14 has been submitted by the Petitioner by comparing actual audited figures with those approved by the Commission vide Tariff Order dated 25th April 2014.

The Petitioner, in the True-up for FY 2013-14 has submitted the details of expenditure and revenue for FY 2013-14 based on the audited accounts for FY 2013-14. The Petitioner has provided the comparison of actual revenue and expenditure against each head with the revenue and expenditure approved by the Commission in the Review for the year.

In this Chapter, the Commission has analyzed all the elements of actual revenue and expenses for FY 2013-14 based on the audited accounts submitted by the Petitioner, and has carried out the True-up of expenses and revenue with reference to the final actual figures as per the audited accounts, after prudence check and has permitted necessary adjustments in cases where variations are for reasonable and justifiable reasons.

4.3.Consumers, Connected Load and Energy Sales

Petitioner Submission:

The Petitioner has submitted the number of consumers for FY 2013-14 as 416,208 based on actual as against 407,115 approved earlier by the Commission in the 'Review' for the year.

The connected load for the agriculture category is submitted as 59538 HP and for the HT categories as 399950 kVA.

The total energy sales for FY 2013-14 are 2365.72 MU based on actual as against 2406.12 approved earlier by the Commission vide Tariff Order dated 25th April 2014. The Petitioner has submitted that FY 2013-14 has witnessed a global economic downturn whereby economy started reviving from FY 2014-15 onwards. Due to recession and economic downturn, industrial category has witnessed reduction in sales for FY 2013-14 resulting in a lower sale compared to the sales approved earlier by the Commission.

Commission Analysis:

Consumers

The Commission has analyzed the past trends of the consumer base. The Commission has observed that the Petitioner has revised the number of consumers slightly upwards based on actual as compared to the figure approved earlier as part of the 'Review' exercise for the year. The Commission considers the number of consumers based on actual to be reasonable and considers it approved as part of the True-up exercise for the year. The Commission, therefore, approves the number of consumers as 416,208 for the True-up of FY 2013-14.

The number of consumers approved for the respective consumer categories are as below:

Table 4.1: Number of consumers approved by the Commission for True-up of FY 2013-14

Consumer Category	Estimates submitted in FY 13 - 14 Petition	Approved in Tariff Order dt. 10th April 2013	Submitted in APR	Approved in Tariff Order dt. 25th April 2014	Petitioner Submission (True-up)	Approved (True-up)
Domestic	299772	299772	299772	299772	272198	272198
OHOB					35537	35537
Commercial	44485	44485	44485	44485	45311	45311
Agriculture	6842	6842	6842	6842	6810	6810
Public Lighting	49326	49326	49326	49326	49524	49524
LT Industrial	6221	6221	6221	6221	6338	6338
Temporary Supply	-	-	-	-	-	-
HT Industrial	411	411	411	411	363	363
HT Commercial	-	-	-	-	71	71
HT State and Central Government Establishments	49	49	49	49	49	49
HT Industrial Extra High Tension	9	9	9	9	7	7
TOTAL	**407115**	**407115**	**407115**	**407115**	**416208**	**416208**

Connected Load

The Commission considers the connected load based on actual to be reasonable and considers it approved as part of the True-up exercise for the year. The connected load approved for the respective consumer categories is as follows:

Table 4.2: Connected Load approved by the Commission for True-up of FY 2013-14 (HP/kVA)

Consumer Category	Estimates submitted in FY 13 - 14 Petition	Approved in Tariff Order dt. 10th April 2013	Submitted in APR	Approved in Tariff Order dt. 25th April 2014	Petitioner Submission (True-up)	Approved (True-up)
Domestic	-	-	-	-	-	-
OHOB						
Commercial	-	-	-	-	-	-
Agriculture (HP)	59660	59660	59538	59538	59538	59538
Public Lighting	-	-	-	-	-	-
LT Industrial	-	-	-	-	-	-
Temporary Supply	-	-	-	-	-	-
HT Industrial (kVA)	251969	251969	230680	230680	270500	270500
HT Commercial (kVA)					20450	20450
HT State and Central Government Establishments (kVA)	14265	14265	14265	14265	18500	18500
HT Industrial Extra High Tension (kVA)	80495	80495	80495	80495	90500	90500

Energy Sales

The Commission notes that the Petitioner has submitted the actual energy sales for FY 2013-14 lower than that approved earlier as part of the 'Review' exercise for the year.

The Commission has considered the approval of the energy sales based on actuals other than that for the 'unmetered' categories, which have been approved on normative basis.

For the OHOB consumers, the Commission has observed that the Petitioner has submitted the consumption of 12.09 MU for FY 2013-14. The basis and the details of the estimation of the OHOB sales have not been provided in the Petition. The Commission has considered the consumption of this category based on the normative approach approved earlier during the 'Review' exercise for the year as per Tariff Order dated 25th April 2014. The Commission has considered the consumption norm of 2 fluorescent tube lights each of 40 W running 10 hours per day for each OHOB consumer. The Commission has approved 35,537 consumers for the OHOB category. Therefore, the Commission considers the consumption of 10.38 MU for this category to be reasonable and thereby approves the same.

For the agriculture category, the consumption norm of 951.1 units/HP/year is considered reasonable as per the TNERC Order dated 30th March 2012 as per the approach followed by the Commission in the previous Tariff Orders dated 10th April 2013 and 25th April 2014. The 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 True-up of FY 2013-14.

The sales for the metered categories have been considered as submitted by the Petitioner to be reasonable and thereby approved.

The sales approved for the respective consumer categories is as follows:

Table 4.3: Energy Sales approved by the Commission for True-up of FY 2013-14 (MU)

Consumer Category	Estimates submitted in FY 13 - 14 Petition	Approved in Tariff Order dt. 10th April 2013	Submitted in APR	Approved in Tariff Order dt. 25th April 2014	Petitioner Submission (True-up)	Approved (True-up)
Domestic	625.71	564.33	614.00	570.92	600.00	600.00
OHOB					12.09	10.38
Commercial	190.08	179.81	180.00	170.46	181.00	181.00
Agriculture	56.56	56.74	57.00	56.63	57.00	56.63
Public Lighting	28.39	26.76	28.00	26.88	26.00	26.00
LT Industrial	205.62	213.10	247.00	251.63	226.10	226.10
Temporary Supply	20.00	20.00	20.00	11.95	10.10	10.10
HT Industrial & Commercial	969.94	977.75	948.00	929.28	878.01	878.01
HT State and Central Government Establishments	50.21	50.21	47.00	51.49	48.77	48.77
HT Industrial Extra High Tension	323.79	346.08	309.00	336.88	326.65	326.65
TOTAL	**2470.30**	**2434.79**	**2450.00**	**2406.12**	**2365.72**	**2363.64**

Therefore, the energy sales approved for the True-up of FY 2013-14 is 2363.64 MU.

4.4.Intra-State Transmission and Distribution Losses

Petitioner Submission:

The Petitioner has submitted 13.00% as the energy distribution losses for FY 2013-14 as compared to that approved by the Commission at 12.50%. The Petitioner has submitted that the Department has not made significant capex specifically towards reduction of transmission and distribution loss. Given the consumer sale mix, wherein the growth of LT consumers is higher than HT consumers, it is difficult for the utility to maintain the T&D loss levels as approved by the Commission.

The Petitioner has submitted that there is a reduction in T&D loss as compared to the earlier years and at this rate tremendous change is difficult. The Petitioner has submitted that in comparison with the approved figures, actual T&D losses are marginally higher and has therefore requested the Commission to approve the T&D loss of 13.00% for FY 2013-14.

Commission Analysis:

The Commission has noted the submission of the Petitioner as regards the actual T&D loss of 13.00%. The Commission has also analyzed the actual T&D losses based on the drawal schedule as available on the SRPC website. The actual drawal at the periphery of 2719.06 MU has been considered from the weekly UI sheets for the year as available on the SRPC website. Further, the sales allowed for the year of 2363.64 MU have been considered, to arrive at the actual T&D loss of 13.07% for the utility.

However, the Commission notes that the Petitioner has not been able to perform within the T&D loss level set by the Commission for FY 2013-14 as per the Tariff Order dated 25th April 2014 i.e. 12.50%.

Regulation 9 of JERC Tariff Regulations 2009, deals with Excess or Under Recovery with respect to Norms and Targets.

Regulation 9 (2) of the said JERC Tariff Regulations 2009 provides as follows:

Quote *"The generating company or the licensee, as the case may be, shall bear the entire loss on account of its failure to achieve the norms laid down by the Commission or targets set by the Commission from time to time."* **Unquote**

The penalty on account of the under-achievement of the T&D loss target has been deducted from the allowed power purchase cost for the year and is discussed in the power purchase cost section of the True-up for FY 2013-14.

The Commission has analyzed the past trends of the T&D loss levels and retains the T&D loss for FY 2013-14 as approved in the Tariff Order dated 25th April 2014 as reasonable. The Commission desires the Petitioner to be more efficient in the reduction of T&D losses and take adequate steps to ensure the achievement of the T&D target set for the utility.

Table 4.4: T&D Losses approved by the Commission for True-up of FY 2013-14 (in %)

Particulars	Estimates submitted in FY 13 - 14 Petition	Approved in Tariff Order dt. 10th April 2013	Submitted in APR	Approved in Tariff Order dt. 25th April 2014	Petitioner Submission (True-up)	Approved (True-up)
T&D Losses	13.00%	12.50%	13.00%	12.50%	13.00%	12.50%

The Commission, therefore, considers the T&D loss of 12.50% as reasonable for the True-up of FY 2013-14 and thereby approves the same.

4.5.Energy Balance

Petitioner Submission:

Based on the actual sales, T&D losses and surplus energy sale/UI sales, the energy requirement at the periphery of 2902.85 MU has been drawn. The energy availability has been drawn based on the gross energy purchase and external losses incurred. The Petitioner has submitted net energy availability of 2902.85 MU.

Commission Analysis:

The power purchase quantum has been verified from the Regional Energy Accounts and power purchase bills on random basis and the Commission has found the submission of the Petitioner to be in order. The power purchase quantum of 2984.63 MU (excluding UI over-drawal) based on actual analyzed is considered for the purpose of drawing the energy balance on actual basis.

The Commission has considered the separate effect of UI over-drawal / under-drawal for FY 2013-14; therefore the UI over-drawal of 26.33 MU and UI under-drawal of 166.00 MU (verified from the UI weekly sheets available on the SRPC website) under UI mechanism is considered for the purpose of True-up of FY 2013-14.

Further, the Commission notes the inter-state exchange of 17.79 MU with TANGEDCO (at the periphery) and acknowledges the same for the purpose of drawing the energy balance on actual basis. This results into sale at the periphery of 166.00 MU+17.79 MU = 183.79 MU.

The actual drawal at the periphery of 2719.06 MU has been considered from the weekly UI sheets for the year as available on the SRPC website. Further, the sales allowed for the year of 2363.64 MU have been considered, to arrive at the actual T&D loss of 13.07% for the utility.

Based on this, the energy balance on actual basis has been drawn by the Commission (actual analyzed).

Table 4.5: Energy Balance analyzed by the Commission for True-up of FY 2013-14 (MU)

Particulars	Estimates submitted in FY 13 - 14 Petition	Approved in Tariff Order dt. 10th April 2013	Submitted in APR	Approved in Tariff Order dt. 25th April 2014	Petitioner Submission (True-up)	Actual (Analyzed by Commission)
ENERGY REQUIREMENT						
Energy Sales in the UT	2,470.30	2,434.79	2,450.00	2,406.12	2365.72	2363.64
T&D Losses (%age)	13.00%	12.50%	13.00%	12.50%	13.00%	13.07%
Energy required for the Territory	2839.42	2,782.61	2816.09	2,749.85	2719.06	2719.06
Add: Sales to common pool consumers/ UI	426.80	-	92.53	92.53	183.79	183.79
Energy Requirement @ periphery	**3,266.23**	**2,782.61**	**2,908.62**	**2,842.38**	**2902.85**	**2902.85**
ENERGY AVAILABILITY						
Gross Energy Purchase	**3,419.20**	**2,909.94**	**3,019.73**	**2,959.92**	**3010.96**	**3010.96**
External Losses	152.97	127.33	111.12	117.54	108.11	108.11
Net Energy Availability	**3,266.23**	**2,782.61**	**2,908.62**	**2,842.38**	**2902.86**	**2902.85**

The Commission in the above Table has mentioned the energy balance on actual basis and as verified/analyzed by the Commission. However, the Commission in the subsequent section has allowed the power purchase cost for the year after consideration of the penalty on account of the under-achievement of the T&D loss target set for the utility.

4.6.Power Purchase Quantum & Cost for FY 2013-14

Petitioner Submission:

The Petitioner has submitted that it meets its total energy requirement from allocation from the Central Generating Stations (CGS) and state utilities like TANGEDCO, KSEB and PPCL. PPCL is a generating company within the UT of Puducherry catering to the requirement of Karaikal region. KSEB supplies for Mahe region under the UT of Puducherry. Also from FY

2013-14, supply from Kudankulam Nuclear Plant and Vallur Thermal Plant has also been started resulting in additional power allocation to the Union Territory of Puducherry to meet the demand.

The summary of the power purchase quantum and cost submitted by the Petitioner for FY 2013-14 is as:

Table 4.6: Power Purchase submitted by the Petitioner for True-up of FY 2013-14 (Rs. Crores)

Sr No	Particulars	Approved (FY 2013-14)			Actuals (FY 2013-14)		
		Purchase (MUs)	Cost (Rs.Cr)	Rate (Rs/Unit)	Purchase (MUs)	Cost (Rs.Cr)	Rate (Rs/Unit)
1	NTPC	1,405.22	383.43	2.73	1,333.83	378.70	2.84
2	NLC	703.79	212.71	3.02	782.79	232.40	2.97
3	NPCIL	264.45	77.14	2.92	311.27	86.14	2.77
4	KSEB	40.38	20.07	4.97	40.75	21.64	5.31
5	TANGEDCO	292.43	112.79	3.86	274.76	100.13	3.64
6	PPCL	241.88	89.70	3.71	241.22	100.47	4.17
7	Overdrawl	11.77	2.56	2.18	26.33	2.28	0.86
8	Transmission Charges		58.60			69.04	
9	RPO obligations		18.33			15.71	
10	Other Adjustment		(1.70)			(12.46)	
	Total	**2,959.92**	**973.63**	**3.29**	**3,010.96**	**994.04**	**3.30**

The Petitioner has further submitted that for FY 2013-14, RPO provision allowed by the Commission was Rs. 18.33 Crores against which Rs. 15.71 Crores has been purchased for FY 2013-14. However, based on the RPO regulations as issued by JERC, a separate working has been considered for estimation of RPO which is covered in the subsequent sections.

The Commission is requested to approve Rs. 994.04 Crores as power purchase cost for FY 2013-14.

Commission Analysis:

The Commission had approved the power purchase cost including transmission charges at Rs. 973.63 Crores for purchase of 2959.92 MU in the Review for FY 2013-14 as per Tariff Order dated 25th April 2014. The Petitioner in the True-up for the year has submitted the actual power purchase at Rs. 994.04 Crores including transmission costs to procure 3010.96 MU for FY 2013-14 (including UI over-drawal).

The Petitioner has submitted that it has considered the source-wise power purchase cost including transmission charges as per the audited accounts of FY 2013-14. During the Technical Validation Session and in reply to the Commission's listing of data gaps, the Petitioner has submitted the month wise power purchase quantum and cost along with its summary for full FY 2013-14 which showed that the Petitioner has purchased 3010.96 MU at a cost of Rs. 994.04 Crores. The Commission as part of its prudence check has verified the submission of the Petitioner from the month-wise and station-wise bills of power purchase submitted by the Petitioner. The Commission has found the submission of the Petitioner to be in order and has therefore, considered the cost as verified from the bills and also reflected in the audited accounts for the year. The power purchase quantum has been verified from the Regional Energy Accounts and power purchase bills on random basis and the Commission has found the submission of the Petitioner to be in order.

As mentioned in the section on energy balance, the Commission has considered the separate effect of UI over-drawal / under-drawal for FY 2013-14; therefore the UI over-drawal of 26.33 MU and UI under-drawal of 166.00 MU (verified from the UI bills as submitted by the Petitioner) under UI mechanism is considered for the purpose of True-up of FY 2013-14. Further, the inter-state sale of 17.79 MU to Tamil Nadu Generation and Distribution Corporation Limited (TANGEDCO) has been considered as submitted by the Petitioner.

The UI over-drawal of 26.33 MU at a cost of Rs. 2.28 Crores (as per the UI bills for FY 2013-14) is considered and allowed as part of the power purchase cost of the utility.

The rebate availed for the year as submitted and verified by the Commission of Rs. 12.46 Crores is considered and allowed for the year.

Renewable Purchase Obligation (RPO)

The Petitioner has submitted that it has spent Rs. 15.71 Crores towards meeting the RPO of the utility for the year. The Commission has noted the submission of the Petitioner and has verified the same from the REC submitted by the Petitioner for FY 2013-14. The Commission notes the following REC purchase for FY 2013-14.

Table 4.7: REC purchase for FY 2013-14

Platform	Non-Solar		Solar	
	No. of RECs	Equivalent MUs	No. of RECs	Equivalent MUs
IEX	50000	50.00	-	-
PTC	62000	62.00	-	-
Total	**112000**	**112.00**	-	-

The Commission as verified from the REC submitted by the Petitioner has found the cost of Rs. 15.71 Crores as reasonable towards meeting the RPO of the utility.

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

Quote

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

Unquote

The Commission as per its Order dated 2nd January 2014 has specified the RPO of the utilities, and accordingly the RPO has been considered as 3.00% for FY 2013-14; 0.4% from solar and 2.60% from non-solar sources.

The Commission observes that in order to comply with the RPO, the Petitioner had to procure 9.45 MU from solar and 61.45 MU from non-solar. The Commission observes that as per the Petitioner's submission, the Petitioner has not met the solar RPO target and has over-met the non-solar RPO target for the year. The carry-over and pending RPO for the year is as follows:

Table 4.8: RPO Compliance by the Petitioner for FY 2013-14 (MU)

S. No.	Description	FY 2013-14
1	Sales Within State	2363.64
2	RPO (in MU)	
	- Solar (0.4% of sales within the state)	9.45
	-Non Solar (2.6% of sales within the state)	61.45
3	Actual Physical Purchase	
	- Solar	0.00
	-Non Solar	0.00
4	RPO Compliance (REC Purchase)	
	- Solar	0.00
	-Non Solar	112.00
5	Total RPO Compliance	
	- Solar	0.00
	-Non Solar	112.00
6	Shortfall/(Excess) in RPO Compliance	
	- Solar	9.45
	-Non Solar	(50.55)

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

Quote

"4. Consequences of default

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

Provided

1. That the fund so created shall be utilized as may be directed by the Commission for purchase of the certificates.

2. Further that the Commission may empower an officer of the State Agency to operate the fund and procure from the Power Exchange the required number of certificates to the extent of the shortfall in the fulfillment of the obligations, out of the amount in the fund.

3. That the obligated entities shall be in breach of its license condition if it fails to deposit the amount directed by the Commission within 15 days of the communication of such direction.

4. That in case of genuine difficulty in complying with the renewable purchase obligation because of non-availability of certificates, the obligated entity can approach the Commission for carry forward of compliance requirement to the next year."

Unquote

In its Business Plan Order dated 4th December 2015, the Commission had issued the following directive to the Petitioner:

Quote

"The Commission directs that all pending RPO up-to FY 2015-16 must be fulfilled by the Petitioner by 31st March, 2016 and no backlog would be allowed to be carried forward to the Control Period FY 2016-17 to FY 2018-19. The Commission expects that the Petitioner would give priority to obtaining physical solar and non-solar power."

Unquote

Keeping in view of the above, the Commission has not considered any penalty for shortfall in the RPO Compliance for FY 2013-14. The provisioning of the pending/carry-over RPO for the year has been discussed in the Chapter on Review for FY 2015-16.

The amount actually spent towards meeting the RPO of Rs. 15.71 Crores has been considered allowed as part of the power purchase cost for the year.

The Commission, therefore, considers the actual power purchase cost of Rs. 994.04 Crores as per the audited accounts and 3010.96 MU as per the REA statement and power purchase bills for FY 2013-14.

The summary of the actual power purchase quantum and cost for FY 2013-14 as analyzed by the Commission during the True-up including UI over-drawal, is given in the following Table:

Table 4.9: Actual Power Purchase Quantum and Cost analyzed by the Commission for True-up of FY 2013-14

S. No.	Source	Purchase (MU)	VC (Ps/ Unit)	FC (Rs. Crores)	VC (Rs. Crores)	Others (Rs. Crores)	Supplementary (Rs. Crores)	Total (Rs. Crores)
A	**Central Sector Power Stations**							
I	**NTPC**	**1333.83**		**108.59**	**256.92**	**2.52**	**10.67**	**378.70**
	RSTPS Stage I & II	623.49	208.67	39.23	130.11	0.42		169.75
	RSTPS Stage - III	136.49	261.15	14.15	35.64	0.09		49.88
	Talcher Stage-II	492.83	148.42	39.88	73.15	1.96		114.99
	Simhadri Stage- II	81.02	222.51	15.33	18.03	0.05		33.41
II	**NLC**	**782.79**		**45.64**	**179.66**	**0.76**	**6.34**	**232.40**
	NLC TPS II Stage I&II	664.55	230.61	32.92	153.25	0.15	5.59	191.92
	NLC TPS I (Expn.)	118.25	223.36	12.71	26.41	0.61	0.75	40.48
III	**NPCIL**	**277.84**		**-**	**81.30**	**0.08**	**0.98**	**82.36**
	MAPS	32.23	231.05	-	7.45	-	(0.01)	7.44
	KAPS Stage I	245.62	300.69	-	73.85	0.08	0.99	74.92
IV	**Others**	**348.94**		**12.52**	**111.43**	**0.76**	**0.83**	**125.55**
	TANGEDCO (Pondy)	14.64	347.00	-	5.08	0.00	0.25	5.34
	TANGEDCO (Karaikal)	222.29	347.00	-	77.13	0.00	-	77.14
	Vallur	37.83	212.44	9.72	8.04	(0.11)	-	17.65
	KSEB	40.75	442.00	2.80	18.01	0.83	-	21.64
	KKNP	33.43	94.72	-	3.17	0.03	0.58	3.78
V	**OVER-DRAWAL**	**26.33**	**86.48**		**2.28**			**2.28**
B	**Within State Generations**							
I	**PPCL**	**241.22**	**291.60**	**23.59**	**70.34**	**0.14**	**6.40**	**100.47**
C	**OTHER CHARGES**					**69.04**		**69.04**

S. No.	Source	Purchase (MU)	VC (Ps/ Unit)	FC (Rs. Crores)	VC (Rs. Crores)	Others (Rs. Crores)	Supple mentary (Rs. Crores)	Total (Rs. Crores)
	PGCIL Transmission Charges, Wheeling & Other Charges					67.25		67.25
	POSOCO					0.92		0.92
	PCKL					0.87		0.87
D	**Rebate**					**(12.46)**		**(12.46)**
E	**RPO**					**15.71**		**15.71**
F	**Total**	**3,010.96**	**291.60**	**190.34**	**699.65**	**76.55**	**25.22**	**994.04**

<u>Penalty on account of under-achievement of T&D loss target</u>

As per Regulation 9 of the JERC Tariff Regulations 2009, Excess or Under Recovery with Respect to Norms and Targets

Quote

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

2) The generating company or the licensee, as the case may be, shall bear the entire loss on account of its failure to achieve the norms laid down by the Commission or targets set by the Commission from time to time."

Unquote

Consequent to the increase in actual T&D losses over the target approved by the Commission, power purchase in actual is more than that corresponding to approved losses as per the Review for the year as per the Tariff Order dated 25th April 2014. The excess power purchase due to higher T&D losses has been deducted from the power purchase cost allowed by the Commission in the True-up for FY 2013-14. The approved per unit power purchase cost (paisa per kWh) at the periphery for sale to retail consumers has been determined considering the energy requirement at the state periphery and cost as approved by the Commission as per the audited accounts (excluding the revenue earned through outside sales at the periphery). The approved power purchase cost at the periphery based on actual is [(994.04-23.29)*10]/2719.06= Rs. 3.57/kWh. Revenue earned through outside sales is discussed subsequently in the relevant section in this Chapter.

Table 4.10: Assessment of Losses for True-up of FY 2013-14

Particulars	FY 2013-14 (True-up)	
	Actual	Approved
Sales within the UT (MU)	2363.64	2363.64
T&D Losses within the UT (%)	13.07%	12.50%
Energy required at UT periphery for sale to retail consumers (MU)	2719.06	2701.30
Excess energy requirement at the periphery (MU)	17.76	
Approved per unit power purchase cost (at the periphery) for sale to retail consumers (Rs/kWh)	3.57	
Penalty for under-achievement (Rs. Crores)	**6.34**	

Keeping in view the above mentioned provisions of the Regulations, the Commission disallows Rs. 6.34 Crores from the power purchase cost considered in the True-up for FY 2013-14.

The Commission after the verification of the audited accounts for FY 2013-14, and deducting the excess power purchase cost of Rs. 6.34 Crores as discussed above**, considers the power purchase cost of Rs. 987.70 Crores (Rs. 994.04 Crores – Rs. 6.34 Crores) for the purpose of True-up of FY 2013-14 towards the purchase of 3010.96 MU.**

The summary of the power purchase quantum and cost approved by the Commission for the True-up of FY 2013-14 is as follows:

Table 4.11: Power Purchase approved by the Commission for True-up of FY 2013-14

Particulars	Estimates submitted in FY 13 - 14 Petition	Approved in Tariff Order dt. 10th April 2013	Submitted in APR	Approved in Tariff Order dt. 25th April 2014	Petitioner Submission (True-up)	Approved (True-up)
Power Purchase Quantum (MU)	3419.20	2909.94	3019.73	2959.92	3010.96	3010.96
Power Purchase Cost (Rs. Crores)	1049.64	924.91	984.77	973.63	994.04	987.70*

Note - * after deduction of the penalty on under-achievement of T&D losses

The Commission considers the power purchase quantum and cost of 3010.96 MU and Rs. 987.70 Crores respectively as reasonable and approves the same for the True-up of ARR for FY 2013-14.

4.7.Operation and Maintenance Expenses

The O&M Expenses consists of three elements i.e. employee expenses, A&G expense and R&M expense.

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

Employee Expenses

Petitioner Submission:

The Petitioner has submitted the employee expenses for FY 2013-14 based on the actual employee expenses incurred during the entire year. The Petitioner has submitted employee cost of Rs. 72.70 Crores for FY 2013-14.

The Petitioner has submitted that the transport allowance as included in the 'employee cost' break-up is considered in A&G expenses in the audited accounts. However, in line with the ARR formats, the same has been considered in the employee cost in ARR. Therefore, it is submitted that difference to the tune of transport allowance will be there in the employee expenses and A&G expenses as per audited accounts.

The Petitioner has requested the Commission to approve Rs. 72.70 Crores as employee cost for FY 2013-14.

Commission Analysis:

The Commission had approved employee expenses of Rs. 64.73 Crores in the Review of ARR for FY 2013-14 as per the Tariff Order dated 25th April 2014.

The Commission has verified the break-up of the employee expenses as submitted by the Petitioner from the audited accounts submitted alongside. The Commission notes that the transport allowance as included in the employee cost has been included under the head of A&G expenses in the audited accounts. The Commission, considering the break-up of the employee expenses as required as per the regulatory formats allows Rs. 72.70 Crores as employee expenses as verified from the audited accounts for the True-up of ARR for FY 2013-14.

The break-up of the employee expenses as approved for the True-up of FY 2013-14 is as below.

Table 4.12: Break-up of employee expenses approved by the Commission for True-up of FY 2013-14 (Rs. Crores)

S. No.	Particulars	Approved (True-up)
	Salaries & Allowances	
1	Salary	82.67
2	Wages	0.59
3	Stipend	0.35
4	Transport Allowance	0.62
5	Overtime Allowance	0.81
	Sub-total	**85.04**
6	Less: Add/Deduct share of others	1.15
7	Less: Amount capitalized	11.20
	Net Employee Expenses	**72.70**

As per the sub-regulation 2 (i) of regulation 8 of JERC Tariff Regulations 2009, **the Commission considers the employee expenses of Rs. 72.70 Crores as per the audited accounts as reasonable and approves Rs. 72.70 Crores as employee expenses for the True-up of ARR for FY 2013-14.**

Table 4.13: Employee expenses approved by the Commission for True-up of FY 2013-14 (Rs. Crores)

Particulars	Estimates submitted in FY 13 -14 Petition	Approved in Tariff Order dt. 10th April 2013	Submitted in APR	Approved in Tariff Order dt. 25th April 2014	Petitioner Submission (True-up)	Approved (True-up)
Employee Expenses	67.60	62.75	69.69	64.73	72.70	72.70

Administrative and General (A&G) Expenses

Petitioner Submission:

The administrative expenses mainly comprise of rents, professional charges, office expenses, etc. The Petitioner has submitted A&G expenses of Rs. 7.25 Crores for FY 2013-14 based on actuals. The Petitioner has submitted that the transport allowance considered as part of the A&G expenses in the accounts has been considered as part of the employee cost as per the ARR formats. Therefore, it is submitted that difference to the tune of transport allowance will be there in employee expenses and A&G expenses as per the audited accounts.

There is a major increase in the professional charges and office expenses due to payment of license fees corresponding to two years and appointment of consultants to assist in regulatory affairs and as well as for preparing final accounts and asset registers.

Also, incentives were provided to HT consumers for maintaining better power factors which has been considered as part of the A&G expenses. This incentive amount is Rs. 1.17 Crores.

The Petitioner has requested the Commission to approve Rs. 7.25 Crores as A&G expenses for FY 2013-14 based on actual.

Commission Analysis:

The Commission had approved A&G expenses of Rs. 3.96 Crores in the Review of ARR for FY 2013-14 as per its Tariff Order dated 25th April 2014.

The Commission has noted the break-up of the A&G expenses as submitted by the Petitioner for the True-up of ARR of FY 2013-14. The Commission has verified the break-up of the various sub-heads claimed under the head of A&G expenses from the audited accounts for FY 2013-14 and has found the submission of the Petitioner to be in order.

The transport allowance has been clubbed under the head of employee expenses and has accordingly been considered. The incentive amount provided to HT consumers for maintaining better power factors has been considered allowed at Rs. 1.17 Crores under the head of A&G expenses.

The break-up of the A&G expenses approved for the True-up of FY 2013-14 is as follows:

Table 4.14: Break-up of A&G expenses approved by the Commission for True-up of FY 2013-14 (Rs. Crores)

S. No.	Particulars	Approved (True-up)
1	Rent, rates & taxes	0.43
2	Other Professional charges including Regulatory Expenses (License + Petition Fees)	2.43
3	Office Expenses including Legal, Professional & Special Service Charges	1.77
4	Advertisement & Publicity	0.24
5	Other A&G Charges	0.04
6	Others	0.37
7	Incentives to consumers	1.17
8	Grant - in - Aid	0.72
9	Other material related expenses	0.07
	Total	**7.25**
10	Less: Capitalized	-
	Net expenses	**7.25**
11	Add: Prior period	-
	Total A&G expenses charged to revenue	**7.25**

As per the sub-regulation 2 (i) of regulation 8 of JERC Tariff Regulations 2009, **the Commission has considered the administration and general (A&G) expenses of Rs. 7.25 Crores as per the audited accounts as reasonable and approves the same for the True-up of ARR for FY 2013-14.**

Table 4.15: A&G expenses approved by the Commission for True-up of FY 2013-14 (Rs. Crores)

Particulars	Estimates submitted in FY 13 -14 Petition	Approved in Tariff Order dt. 10th April 2013	Submitted in APR	Approved in Tariff Order dt. 25th April 2014	Petitioner Submission (True-up)	Approved (True-up)
A&G Expenses	5.35	5.27	3.96	3.96	7.25	7.25

Repairs and Maintenance (R&M) Expenses

Petitioner Submission:

The Petitioner has submitted that R&M expenses have been claimed as per actual during FY 2013-14 at Rs. 13.46 Crores. The R&M expenses actually incurred were much less than the amount approved in Review for the year as per Tariff Order dated April 25' 2014. The Petitioner has submitted that the R&M expense is being met from the budgetary provision and therefore it is limited to the amount allocated under such budgetary provision only.

The Petitioner has submitted that R&M expenses are necessary for maintenance of infrastructure and for ensuring proper Standards of Performance of the utility. It is submitted that the Department has been expanding their distribution infrastructure whereby Rs. 100 Crores (approximately) has already been spent in the last two years. Accordingly, there is a need for R&M expenses to be growing in line with the increase in GFA also. The Petitioner therefore requests the Commission to approve Rs. 13.46 Crores as R&M expenses for FY 2013-14.

Commission 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 during the next ARR filing. The Commission has approved the R&M expenses based on actual 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 (R&M) expense of Rs. 13.46 Crores as per the audited accounts as reasonable and approves the same for the True-up of ARR for FY 2013-14.**

Table 4.16: R&M expenses approved by the Commission for True-up of FY 2013-14 (Rs. Crores)

Particulars	Estimates submitted in FY 13 -14 Petition	Approved in Tariff Order dt. 10th April 2013	Submitted in APR	Approved in Tariff Order dt. 25th April 2014	Petitioner Submission (True-up)	Approved (True-up)
R&M Expenses	17.64	17.64	20.15	18.06	13.46	13.46

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

The O&M expenses as submitted and approved for FY 2013-14 is as follows:

Table 4.17: O&M Expenses approved by the Commission for True-up of FY 2013-14 (Rs. Crores)

Particulars	Estimates submitted in FY 13 -14 Petition	Approved in Tariff Order dt. 10th April 2013	Submitted in APR	Approved in Tariff Order dt. 25th April 2014	Petitioner Submission (True-up)	Approved (True-up)
O&M Expenses	90.58	85.65	93.80	86.75	93.41	93.41

4.8.Capitalization, GFA & Depreciation

Petitioner Submission:

The Petitioner has submitted the opening GFA at Rs. 555.30 Crores, addition in GFA of Rs. 8.29 Crores and closing GFA of Rs. 563.59 Crores for FY 2013-14. The Petitioner has submitted that the asset and depreciation registers have been prepared and duly audited fixed assets gross amount, accumulated depreciation and depreciation for the year have been shown in the accounts for FY 2013-14.

The Petitioner has further submitted that depreciation for the assets shall be calculated annually at the rates specified by CERC from time to time. The same have been applied on different asset categories. The approved depreciation rates specified for different asset classes have been applied on the different asset categories. The same is as per the audited annual accounts for the respective year. The Petitioner has requested the Commission to approve Rs. 23.38 Crores as depreciation for FY 2013-14.

Commission Analysis:

GFA and Capitalization

The Commission has noted the submission of the Petitioner. The Commission has also noted that the Petitioner has prepared the Asset and Depreciation registers for the year and the duly audited fixed assets gross amount, accumulated depreciation and depreciation for the year have been shown in the accounts for FY 2013-14. The Commission has verified the submission of the Petitioner from the audited accounts submitted alongside and has found the submission of the Petitioner to be reasonable.

The opening GFA of Rs. 555.30 Crores and addition in GFA of Rs. 8.29 Crores is being considered allowed for the True-up of FY 2013-14. The same is in accordance with the audited accounts for the year. The GFA and capitalization allowed for the True-up of FY 2013-14 is as follows:

Table 4.18: GFA and Capitalization approved by the Commission for True-up of FY 2013-14 (Rs. Crores)

Particulars	Estimates submitted in FY 13 -14 Petition	Approved in Tariff Order dt. 10th April 2013	Submitted in APR	Approved in Tariff Order dt. 25th April 2014	Petitioner Submission (True-up)	Approved (True-up)
Opening value of GFA at beginning of the year	545.84	545.84	541.27	545.84	555.30	555.30
Additions during the year	34.63	34.63	10.00	10.00	8.29	8.29
Closing value of GFA at end of the year	**580.47**	**580.47**	**551.27**	**555.84**	**563.59**	**563.59**

Depreciation

The Commission in its additional data queries raised to the Petitioner, had asked the Petitioner to clarify whether the assets which have already attained the 90% depreciable limit have been excluded from the depreciation computation. The Petitioner responded that the assets which have already attained the 90% depreciation limit have not been considered for computation of the depreciation. The Petitioner further clarified that these assets have not been reflected in the depreciation as per the audited accounts for the year. The applicable CERC rates have been applied on the different asset categories.

The Commission is satisfied with the claim 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. The Commission has considered the submission of the Petitioner as per the audited accounts as reasonable and approves the same for the True-up of ARR for FY 2013-14.

The following Table captures the depreciation as submitted by the Petitioner and that approved by the Commission for True-up of FY 2013-14.

Table 4.19: Depreciation approved by the Commission for True-up of FY 2013-14 (Rs. Crores)

Particulars	Estimates submitted in FY 13 -14 Petition	Approved in Tariff Order dt. 10th April 2013	Submitted in APR	Approved in Tariff Order dt. 25th April 2014	Petitioner Submission (True-up)	Approved (True-up)
Depreciation	25.03	25.03	23.65	23.65	23.38	23.38

The Commission considers the depreciation of Rs. 23.38 Crores as reasonable and approves the same for the True-up of ARR for FY 2013-14.

4.9.Interest and Finance Charges

Petitioner Submission:

The Petitioner has submitted that the majority of capital assets are created out of the equity contribution from the Government of Puducherry and the actual borrowing of loan is only to the extent of the R-APDRP schemes. However, the Department has been claiming interest charges based on normative loan calculation. The Interest and Finance Charges have been arrived based on normative loan considered to the extent of capitalization during the year.

The Petitioner has considered an addition of Rs. 8.29 Crores in the Gross Fixed Assets for FY 2013-14, which are considered funded through normative debt to the tune of 70% in line with the Tariff Regulations. The rate of interest considered is the prevailing Prime Lending Rate of the State Bank of India as on 1st April of the relevant year.

Along with the normative interest claimed, it is submitted that certain financial charges are also incurred by the Department of Rs. 1.57 Crores which are related to charges claimed by the bank charges, finance charges, L/C., etc. which are claimed along with the interest. The increase in the bank charges is due to opening of new L/C to the tune of Rs. 19.5 Crores wherein margin money of 10% of it was submitted.

The Commission is requested to approve the Interest & Finance Charges at Rs. 15.48 Crores for FY 2013-14.

Commission Analysis:

As per Regulation 25 of JERC 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 2009 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) 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 2009. 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 normative interest under the JERC Tariff Regulations 2009 has therefore been considered on the assets created during FY 2009-10 onwards excluding the opening capital base for FY 2009-10 as per the audited accounts for the year and has accordingly allowed interest on normative loan for the respective years.

The Commission has considered an addition of Rs. 8.29 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. 5.80 Crores for FY 2013-14. The opening normative loan has been considered same as the closing normative loan of Rs. 98.30 Crores as approved by the Commission in the True-up of FY 2012-13 as per the Tariff Order dated 10th April 2015. Repayment for the year has been considered as 10% of the opening loans. Further, the Commission has considered the weighted average SBI PLR rate of interest at 14.58% for the year.

The calculation of the interest on the normative loan is as follows:

Table 4.20: Normative Interest on Loan approved by the Commission for True-up of FY 2013-14

(Rs. Crores)

Sr. No.	Particulars	Submitted (FY 2013-14)	Approved (FY 2013-14)
1	Opening Normative Loan	98.30	98.30
2	Add: Normative Loan during the year	5.80	5.80
3	Less: Normative Repayment	9.83	9.83
4	Closing Normative Loan	94.27	94.27
5	**Average Normative Loan**	**96.28**	**96.28**
6	**Rate of Interest**	**14.45%**	**14.58%**
7	**Interest on Normative Loan**	**13.91**	**14.04**

The Commission has also analyzed the nature of interest and finance charges as submitted by the Petitioner. The Commission has observed that the Petitioner has submitted other finance charges of Rs 1.57 Crores for FY 2013-14. The Commission considering the reasonableness of expenditure submitted by the Petitioner allows Rs 1.57 Crores as finance charges additionally besides the interest on the normative loan amount.

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

Table 4.21: Interest and Finance charges approved by the Commission for True-up of FY 2013-14

(Rs. Crores)

Particulars	Estimates submitted in FY 13 -14 Petition	Approved in Tariff Order dt. 10th April 2013	Submitted in APR	Approved in Tariff Order dt. 25th April 2014	Petitioner Submission (True-up)	Approved (True-up)
Interest & Finance Charges	2.13	15.13	4.53	13.88	15.48	15.61

The Commission considers the interest and finance charges of Rs. 15.61 Crores as reasonable and approves the same for the True-up of ARR for FY 2013-14.

4.10. Interest on Working Capital

Petitioner Submission:

The interest on working capital has been claimed in accordance with the Regulation no. 29 of the JERC (Terms and Conditions for Determination of Tariff) Regulations 2009. The

Petitioner has submitted that it has adopted the same methodology as adopted by the Commission in its Tariff Order for FY 2013-14 for arriving at the working capital requirement whereby it has excluded the security deposits available with the Petitioner from the working capital requirement though the same has not been specified in the Regulations.

The Interest on Working Capital approved by the Commission and claimed for FY 2013-14 is NIL since the opening security deposit is much higher than the working capital requirement.

Commission Analysis:

As per Regulation 29 of JERC Tariff Regulations 2009 –

Quote

'' 29. WORKING CAPITAL AND INTEREST RATE ON WORKING CAPITAL

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

Unquote

The Commission has considered the calculation of the different components of the working capital on the basis of the above-stipulated norms. The Commission has considered the amount collected from the consumers as security deposit available with the Petitioner. 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 requirement for FY 2013-14.

The Commission is of the view that by utilizing such security deposit to meet the working capital, the interest on working capital is reduced resulting into lower tariff determination. Hence, the Commission has deducted this amount from the working capital requirement.

The Commission has considered the average security deposit amount as submitted by the Petitioner and verified from the audited accounts for the year to be reasonable for the purpose of calculation of the interest on working capital. Further, the Commission has considered the interest rate (SBI PLR) as on 01st April 2013 (https://www.sbi.co.in/portal/web/interest-rates/benchmark-prime-lending-rate-historical-data). The detailed calculation of the interest on working capital is as follows:

Table 4.22: Interest on working capital approved by the Commission for True-up of FY 2013-14

(Rs. Crores)

Particulars	Estimates submitted in FY 13 - 14 Petition	Approved in Tariff Order dt. 10th April 2013	Submitted in APR	Approved in Tariff Order dt. 25th April 2014	Petitioner Submission (True-up)	Approved (True-up)
Power Purchase Cost for one month	87.47	77.08	84.80	79.80	82.84	82.31
Employee Cost for one month	5.63	5.23	5.81	5.39	6.06	6.06
A&G Expenses for one month	0.45	0.44	0.33	0.33	1.12	1.12
R&M Expenses for one month	1.47	1.47	1.68	1.51	0.60	0.60
Total Working Capital for one month	**95.02**	**84.21**	**92.61**	**87.03**	**90.62**	**90.09**
Less: Average Security Deposit (amount already with EDP)	-	141.88	95.89	109.72	95.90*	109.69
Total Working Capital considered for one month	**95.02**	**(57.66)**	**(3.28)**	**(22.69)**	**(5.28)**	**(19.60)**
SBI PLR Rate	**14.50%**	**14.45%**	**14.45%**	**14.45%**	**14.75%**	**14.45%**
Interest on Working Capital	**13.78**	**NIL**	**NIL**	**NIL**	**NIL**	**NIL**

Note - * opening security deposit amount has been considered by the Petitioner

The Commission considers the Interest on Working Capital as NIL as reasonable and approves the same for True-up of ARR for FY 2013-14.

4.11. Interest on Security Deposit

Petitioner Submission:

The Regulation 25 of JERC Tariff Regulations, 2009 provides for Interest on Security Deposit, if any, made by the consumer with the licensee. The provision of interest on security deposits is to be made at the bank rate. The prevailing bank rate is considered at 8.50% for FY 2013-14.

The Commission is requested to approve the Interest on Security Deposit of Rs. 9.32 Crores for FY 2013-14. The Petitioner has submitted that since there has been no payment made to the consumers in relation to the interest on the security deposit, the same has not been claimed in the ARR of the relevant year i.e. FY 2013-14. However, the cumulative adjustment of pending interest on security deposit in line with the principles adopted by the Commission in the Tariff Order dated 25th April 2014 has been carried out by the Department in the ARR for MYT Control Period FY 2016-17 to FY 2018-19.

Commission Analysis:

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

Table 4.23: Interest on Security Deposit analyzed by the Commission for True-up of FY 2013-14

(Rs. Crores)

S. No.	Description	FY 2013-14 (Submitted)	FY 2013-14 (Analyzed by Commission)
1	Opening Security Deposit (Rs Crores)	95.90	95.90
2	Add: Deposits during the year (Rs Crores)	27.58	27.58
3	Less: Deposits refunded (Rs Crores)	-	-
4	Less: Deposits in form of BG/FD (Rs Crores)	-	-
5	Closing Security Deposit (Rs Crores)	123.48	123.48
6	**Average Security Deposit (Rs Crores)**	**109.69**	**109.69**
7	**Bank Rate (%age)**	**8.50%**	**8.50%**
8	**Interest on Security Deposit (Rs Crores)**	**9.32**	**9.32**

The Commission has considered the security deposit amounts as submitted by the Petitioner and verified from the audited accounts for the year to be reasonable. The Commission has considered the average security deposit amount outstanding for the year for consideration of the payment of the interest on security deposit for FY 2013-14.

The Commission, thereby, allows the interest on security deposit of Rs. 9.32 Crores, on the average security deposit amount of Rs 109.69 Crores at the bank rate of 8.50%[1], to be paid to the consumers effective 1st April 2013.

However, the Commission notes that no actual payment has been made to the consumers towards the interest on security deposit for FY 2013-14 and therefore, the same has not been considered in the True-up of ARR for FY 2013-14. The same has been carried forward and cumulative adjustment towards the interest on security deposit has been discussed subsequently in Chapter-7 of this Tariff Order.

4.12. Return on Capital Base

Petitioner Submission:

Regulation 23 (2) and Regulation 24 of JERC Tariff Regulations 2009 provides for entitlement for Returns on Capital Base/ Net Fixed Assets by utility/licensee. Thus, in line with the regulation and the methodology adopted by the Commission in its previous Order, the Department has calculated the return on capital base at 3%.

The Commission is requested to allow the Return on Net Fixed Assets of Rs. 8.88 Crores for FY 2013-14.

Commission Analysis:

EDP being an integrated utility is entitled to return on capital base as per Regulation 23 of JERC Tariff Regulations 2009. The return on capital base as per the provisions of the Regulations is as below.

Table 4.24: Return on Capital Base approved by the Commission for FY 2013-14 (Rs. Crores)

Sr. No.	Particulars	Submitted (FY 2013-14)	Approved (FY 2013-14)
1	Gross block at beginning of the Year/Opening GFA	555.30	555.30
2	Less: opening accumulated depreciation	251.25	251.25
3	Less: opening accumulated consumer contribution	8.00	8.00
4	**Net fixed assets at beginning of the year**	**296.05**	**296.05**
5	**Reasonable return @3% of NFA**	**8.88**	**8.88**

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

The Commission has verified the consumer contribution amount from the audited accounts for the year and found the same to be in order. The opening accumulated depreciation amount has been taken from the True-up of FY 2012-13 as per Tariff Order dated 10th April 2015.

The Return on Capital Base as claimed and approved for the year is as follows:

Table 4.25: Return on Capital Base approved by the Commission for True-up of FY 2013-14

(Rs. Crores)

Particulars	Estimates submitted in FY 13 -14 Petition	Approved in Tariff Order dt. 10th April 2013	Submitted in APR	Approved in Tariff Order dt. 25th April 2014	Petitioner Submission (True-up)	Approved (True-up)
Return on Capital Base	10.95	10.88	9.85	9.87	8.88	8.88

The Commission considers the Return on Capital Base of Rs. 8.88 Crores as reasonable and approves the same for True-up of ARR for FY 2013-14.

4.13. Provision for Bad and Doubtful Debts

Petitioner Submission:

The provision for bad debts has not been claimed by the Petitioner.

Commission Analysis:

As specified in Regulation 28 of JERC Tariff Regulations 2009 (to be read with the format):

Quote *''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.	*Amount of receivable bad and doubtful debts (audited)*	
2.	*Provision made for debts in ARR*	*''*

Unquote

JERC Tariff Regulations 2009 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 2013-14 as per the audited accounts submitted alongside. The Commission, therefore, has not considered any bad and doubtful debts for True-up of FY 2013-14.

Table 4.26: Provision for bad & doubtful debts approved by the Commission for True-up of FY 2013-14

Particulars	Estimates submitted in FY 13 -14 Petition	Approved in Tariff Order dt. 10th April 2013	Submitted in APR	Approved in Tariff Order dt. 25th April 2014	Petitioner Submission (True-up)	Approved (True-up)
Provision for bad and doubtful debts	Not claimed	NIL	Not claimed	NIL	NIL	NIL

The Commission, therefore, has not considered any expenses on account of bad & doubtful debts for True-up of ARR for FY 2013-14.

4.14. Revenue from Sale of Power

Petitioner Submission:

The Petitioner has submitted UI sales/sales to exchange amount of Rs. 23.29 Crores for sale of 183.79 MU. The same has been considered as part of the non-tariff income and the Petitioner has requested the Commission to allow the same.

Commission Analysis:

The Commission has verified the UI bills for FY 2013-14 submitted by the Petitioner and has found the submission of the Petitioner to be in order. Also, it is noted that there has been inter-state exchange of 17.79 MU with TANGEDCO for the year.

The Commission has considered the revenue from outside sales at Rs. 23.29 Crores as per the audited accounts to be reasonable and thereby approved for the True-up of ARR for FY 2013-14.

4.15. Non-Tariff Income

Petitioner Submission:

The Non-Tariff Income comprises metering, late payment charges, interest on staff loans, and income from trading, reconnection fee, and UI sales/Sales to Exchanges and miscellaneous income among others. The Non-Tariff Income approved by the Commission in the APR for FY 2013-14 was Rs. 16.50 Crores.

In view of the UI sales being the major income which is non-tariff in nature as mentioned above, the Commission is requested to kindly allow Non-Tariff Income of Rs. 26.72 Crores for FY 2013-14.

Commission Analysis:

The Commission has found the submission of the Petitioner under the head of 'other income' reasonable as per the audited accounts submitted alongside for the year. This taken together with the 'Revenue earned from outside sales' approved above of Rs. 23.29 Crores gives total approved sum of Rs. 26.72 Crores under the head of 'Non-Tariff Income'.

Table 4.27: Non-Tariff Income approved by the Commission for True-up of FY 2013-14 (Rs. Crores)

Particulars	Estimates submitted in FY 13 - 14 Petition	Approved in Tariff Order dt. 10th April 2013	Submitted in APR	Approved in Tariff Order dt. 25th April 2014	Petitioner Submission (True-up)	Approved (True-up)
Non-Tariff Income (including revenue from outside sales)	144.30	2.00	16.50	16.50	26.72	26.72

The Commission considers the Non-Tariff Income of Rs 26.72 Crores as reasonable and approves the same for True-up of ARR for FY 2013-14.

4.16. Revenue at approved retail tariff for FY 2013-14

Petitioner Submission:

The Revenue from Tariff for FY 2013-14 was Rs. 1,045.82 Crores including FPPCA of Rs. 22.76 Crores. The surcharge of 10% in addition to the billing amount works out to Rs. 101.47 Crores. The Commission is requested to allow the total revenue of Rs. 1147.29 Crores from tariff for FY 2013-14 including FPPCA and 10% surcharge.

Commission Analysis:

As per the sub-regulation 2 (i) of Regulation 8 of JERC Tariff Regulations 2009, **the Commission considers the figures of revenue of Rs. 1045.82 Crores from the sale of power within the state (including FPPCA charges) as per the audited accounts as reasonable and approves the same for True-up of FY 2013-14.**

The additional surcharge amount of Rs. 101.47 Crores for FY 2013-14 is considered reasonable as per the audited accounts and the adjustment of the same has been considered towards the liquidation of the regulatory asset originally created in the Tariff Order dated 12th June 2012 to cover the revenue gap from FY 2009-10 to FY 2012-13 and subsequently revised in Tariff Orders dated 10th April 2013, 25th April 2014 and 10th April 2015. The treatment of the same is discussed subsequently in this Tariff Order in the liquidation of the regulatory asset in the Chapter on Review for FY 2015-16.

4.17. Aggregate Revenue Requirement (ARR) for True-up of FY 2013-14

Petitioner Submission:

The Aggregate Revenue Requirement as approved by the Commission in the Review of ARR for FY 2013-14 was Rs. 1127.61 Crores. The Petitioner based on the True-up for FY 2013-14 requests the Commission to approve ARR of Rs. 1108.47 Crores.

Commission Analysis:

The Commission has considered and approved the True-up of ARR for FY 2013-14 based on the items of expenditure discussed in the preceding sections and the same has been summarized in the following Table. The Commission approves the ARR at Rs. 1102.26 Crores for True-up of FY 2013-14.

Table 4.28: ARR approved by the Commission for True-up of FY 2013-14 (Rs. Crores)

Particulars	Estimates submitted in FY 13 - 14 Petition	Approved in Tariff Order dt. 10th April 2013	Submitted in APR	Approved in Tariff Order dt. 25th April 2014	Petitioner Submission (True-up)	Approved (True-up)
Cost of Power Purchase	1,049.64	924.91	984.77	973.63	994.04	987.70*
Employee Expenses	67.60	62.75	69.69	64.73	72.70	72.70
A&G Expenses	5.35	5.27	3.96	3.96	7.25	7.25
R&M Expenses	17.64	17.64	20.15	18.06	13.46	13.46
Depreciation	25.03	25.03	23.65	23.65	23.38	23.38
Interest & Finance Charges	2.13	15.13	4.53	13.88	15.48	15.61
Interest on Working Capital + Interest on CSD	13.78	12.41	8.39	7.18	NIL	NIL
Provision for Bad Debts	NIL	NIL	Not claimed	NIL	NIL	NIL
Return on NFA @ 3% of NFA	10.95	10.88	9.85	9.87	8.88	8.88
RPO provision to meet obligation of the previous years	-	-	-	29.15	-	-
Total	**1,192.12**	**1,074.02**	**1,125.00**	**1,144.11**	**1135.19**	**1128.98**
Less: Non-Tariff Income	144.30	2.00	16.50	16.50	26.72	26.72
Add: Amortization of regulatory asset of the previous years	92.60				-	-**
Aggregate Revenue Requirement	**1,140.43**	**1,072.02**	**1,108.50**	**1,127.61**	**1108.47**	**1102.26**

Note: * after deduction of the penalty of Rs. 6.34 Crores on under-achievement of T&D losses

**- This has been discussed subsequently in this Tariff Order in the calculation of the cumulative revenue gap for FY 2016-17.

4.18. Revenue Gap/ (Surplus) for True-up of FY 2013-14

Petitioner Submission:

The revenue gap approved by the Commission in the Review of ARR for FY 2013-14 was Rs. 42.62 Crores. The revenue gap calculated by the Petitioner on the basis of True-up for FY 2013-14 is Rs. 62.65 Crores. The above gap has been without considering the 10% surcharge amount levied to consumer in FY 2013-14 as directed in the Tariff Order. The Petitioner has submitted that the 10% surcharge collected has been adjusted against the Regulatory Assets as per the previous Tariff Order and the same has been adjusted in the cumulative revenue gap for FY 2016-17 based on expected recovery up to FY 2015-16. The Commission is requested to approve the revenue gap of Rs. 62.65 Crores for FY 2013-14.

Commission Analysis:

The revenue gap approved for the year is Rs. 56.44 Crores on the basis of the approved aggregate revenue requirement of Rs. 1102.26 Crores and revenue from existing tariff of Rs. 1045.82 Crores for FY 2013-14 (including FPPCA charges).

Table 4.29: Revenue Gap approved by the Commission for True-up of FY 2013-14 (Rs. Crores)

Particulars	Estimates submitted in FY 13 - 14 Petition	Approved in Tariff Order dt. 10th April 2013	Submitted in APR	Approved in Tariff Order dt. 25th April 2014	Petitioner Submission (True-up)	Approved (True-up)
Aggregate Revenue Requirement	1,140.43	1,072.02	1,108.50	1,127.61	1108.47	1102.26
Revenue from Tariff (Exc. Surcharge)	833.80	1076.67	1089.13	1084.99	1045.82	1045.82
Revenue Gap/(Surplus) for the year	**306.63**	**(4.65)**	**19.37**	**42.62**	**62.65**	**56.44**

The revenue gap of Rs. 56.44 Crores for FY 2013-14 has been considered approved for the True-up of FY 2013-14. This gap has been carried over to the revenue gap of the next year i.e. FY 2014-15.

Additional revenue surcharge of 10% in FY 2013-14 on all the consumer categories (other than Agriculture and OHOB categories) results in additional revenue recovery of Rs. 101.47 Crores. This has been adjusted against the regulatory asset created from FY 2009-10 to FY 2012-13 and the treatment of the same is discussed subsequently in this Tariff Order in the Chapter on Review for FY 2015-16.

5. Provisional True-up for FY 2014-15

5.1.Applicable Provisions of JERC Tariff Regulations 2009

The True-up of FY 2014-15 is to be carried out as per the following provisions of Regulation 8 of JERC Tariff Regulations 2009:

Quote

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

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

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

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

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

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

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

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

Unquote

5.2.Provisional True-up for FY 2014-15

The Petitioner has submitted the Provisional True-up for FY 2014-15 along with the MYT Tariff Petition. The Petitioner has submitted that the accounts for the year have been finalized however the audit of the same is still in progress and therefore the Provisional True-up has been filed before the Commission.

The Commission has observed that the True-up for FY 2014-15 is not supported by the audited accounts. In accordance with the JERC Tariff Regulations 2009, in the absence of audited accounts, the Commission is not in a position to approve the ARR & revenue gap for FY 2014-15 based on actuals. The Commission, therefore, has kept the figures of income & expenditure and other constituents of the ARR unchanged i.e. at the same level as approved last time during the Review of FY 2014-15 as per the Tariff Order dated 10th April 2015. The same would be re-visited once the True-up Petition for FY 2014-15 is filed before the Commission along with the audited accounts.

The ARR and revenue gap for FY 2014-15 as per the Review for the year as per Tariff Order dated 10th April 2015 as considered in this Tariff Order is as below.

Table 5.1: ARR approved by the Commission in Review of FY 2014-15 (Rs. Crores)

Particulars	**Approved in Review of FY 2014-15 as per Tariff Order dt. 10th April 2015**
Cost of power purchase including RPO for the year	963.84
Employee Expenses	75.32
A&G Expenses	5.36
R&M Expenses	19.12
Depreciation	30.86
Interest & Finance Charges	19.38
Interest on Working Capital + Interest on Security Deposit	4.00
Provision for Bad Debts	-
Return on NFA	8.37
Total	**1126.25**
Less: Non-Tariff Income	4.88
Aggregate Revenue Requirement	**1121.37**

The revenue surplus as approved by the Commission for Review of FY 2014-15 was Rs. 21.33 Crores as shown below.

Table 5.2: Revenue Surplus approved by the Commission in Review of FY 2014-15 (Rs. Crores)

Particulars	**Approved in Review of FY 2014-15 as per Tariff Order dt. 10th April 2015**
Aggregate Revenue Requirement	1121.37
Revenue from Sale of Power (Excluding Surcharge)	1142.70
Revenue Gap/(Surplus)	**(21.33)**

The revenue from sale of power of Rs. 1142.70 Crores, includes revenue recovery from the consumers of Rs. 1107.87 Crores and FPPCA recovery of Rs. 34.83 Crores for the year. The additional revenue recovery on account of the applicable 10% surcharge for the year is Rs. 110.50 Crores. The additional revenue recovery on account of the surcharge has been adjusted against the regulatory asset (due to the revenue gap of FY 2009-10, FY 2010-11, FY 2011-12 and FY 2012-13) and the adjustment of the same has been explained in the subsequent chapters related to calculation of cumulative revenue gap.

The above revenue surplus of Rs. 21.33 Crores has been carried forward by the Commission in the Review of FY 2015-16 in this Tariff Order. The additional revenue recovery due to surcharge of Rs. 110.50 Crores for FY 2014-15 has been adjusted against the regulatory asset created in the Tariff Order dated 12th June 2012 due to revenue gap of FY 2009-10, FY 2010-11, FY 2011-12 and FY 2012-13 and subsequently revised in Tariff Orders dated 10th April 2013, 25th April 2014 and 10th April 2015. This regulatory asset had to be amortized over a period of three years starting from FY 2013-14. The status of the regulatory asset as at the end of FY 2015-16 has been explained later in Chapter 6 – Review for FY 2015-16 in this Tariff Order.

6. Annual Performance Review (APR) for FY 2015-16

6.1.Applicable Provisions of JERC Tariff Regulations 2009

The Annual Performance Review (APR) for FY 2015-16 is to be carried out as per the following provision of Regulation 8 of JERC Tariff Regulations 2009:

Quote

''8. Review and Truing-up

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

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

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

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

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

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

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

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

Unquote

6.2.Background and Approach for Review of FY 2015-16

The Commission had determined the ARR for FY 2015-16 vide its Order dated 10th April 2015. This time the Petitioner has submitted the Review for FY 2015-16 based on the actual data/information for the first 6 months of FY 2015-16 and as per the performance of EDP and estimation/projections for remaining 6 months (second half – H2), wherever applicable. The projections for the second 6 months have been arrived at based on the performance over the first half data/information by the Petitioner.

The Commission has noted the submission of the Petitioner and has analyzed all the elements of actual revenue and expenses for H1 of FY 2015-16 based on the actuals submitted by the Petitioner, and has carried out projections for the year after due prudence check and has permitted necessary adjustments in cases where variations are for justifiable reasons.

6.3.Consumers, Connected Load and Energy Sales

Petitioner Submission:

The Petitioner has submitted the number of consumers for FY 2015-16 as 441,922 based on the number of consumers added during the first half of the year as against 441,910 approved earlier by the Commission vide its Tariff Order dated 10th April 2015.

The connected load for the agriculture category is submitted as 44654 HP and for the HT categories taken together is 368,464 kVA.

The Petitioner has submitted revised energy sales for FY 2015-16 as 2473.07 MU as against 2700 MU approved earlier by the Commission.

The Petitioner has submitted that based on actual H1 sales, the energy sales projected for FY 2015-16 is considered two times considering the average sales growth. It is further submitted that sales in the industrial sector are not expected to grow as envisaged by the Commission and therefore, the envisaged sales are lower than that approved in the last Tariff Order for the year.

The H1 sales for FY 2015-16 as submitted are 1236.54 MU and the Commission is requested to approve the sales of 2473.07 MU for FY 2015-16.

Commission Analysis:

<u>Consumers</u>

The Commission has analyzed the past trends of the consumer base. The Commission has observed that the Petitioner has revised the number of consumers slightly upwards based on H1 actuals as compared to the figure approved earlier for the year as per Tariff Order dated 10th April 2015. The Commission considers the number of consumers as submitted by the Petitioner to be reasonable and approves it. The Commission, therefore, approves the number of consumers as 441,922 for the 'Review' of FY 2015-16. The same would be re-visited during the True-up of the year based on actuals. The consumer category-wise details are as follows:

Table 6.1: Consumers approved by the Commission for Review of FY 2015-16

Consumer Category	Estimates submitted in FY 15-16 Petition	Approved in Tariff Order dt. 10th April 2015	Submitted in APR	Approved in this Tariff Order
Domestic	294202	294202	294202	294202
OHOB	35539	35539	35539	35539
Commercial	48173	48173	48173	48173
Agriculture	6836	6836	6849	6849
Street Lighting	50055	50055	50055	50055
LT Industrial	6617	6617	6617	6617
HT Industrial & Commercial	428	428	427	427
HT State and Central Government Establishments	53	53	53	53
HT Industrial Extra High Tension	7	7	7	7
TOTAL	**441910**	**441910**	**441922**	**441922**

<u>Connected Load</u>

The connected load as submitted by the Petitioner for Review of FY 2015-16 is considered reasonable and thereby approved. The consumer category-wise details are as follows:

Table 6.2: Connected Load approved by the Commission for Review of FY 2015-16 (kW/kVA)

Consumer Category	Estimates submitted in FY 15-16 Petition	Approved in Tariff Order dt. 10th April 2015	Submitted in APR	Approved in this Tariff Order
Domestic	Not Available	Not Available	-	-
OHOB			-	-
Commercial			-	-
Agriculture (kW)*			44654	44654
Street Lighting			-	-
LT Industrial			-	-
HT Industrial & Commercial (kVA)			2,63,217	2,63,217
HT State and Central Government Establishments (kVA)			19,570	19,570
HT Industrial Extra High Tension (kVA)			85,677	85,677

Note: *The connected load for the Agriculture category is 44654 kW; applying the appropriate conversion factor, the connected load is 59538 HP.

Energy Sales

The Petitioner has submitted the actual energy sales for H1 of FY 2015-16 and the same has been considered by the Commission to be reasonable other than for the unmetered categories - OHOB and agriculture category which have been approved on normative basis.

The norm for consideration of the OHOB sales has been considered as 2 fluorescent tube lights each of 40 W running 10 hours per day for each OHOB consumer, as approved in the Tariff Order for FY 2014-15 dated 25th April 2014. Approved consumer base of 35539 has been considered for arriving at the sales of 10.38 MU for FY 2015-16. The Commission notes that the projected sales as submitted by the Petitioner is 9.18 MU for FY 2015-16. The Commission, for the purposes of Review for FY 2015-16, limits the approval of the sales for the OHOB category at 9.18 MU as submitted by the Petitioner to be reasonable.

For the agriculture category, the consumption norm of 951.1units/HP/year is considered reasonable as per the approach followed by the Commission in the Tariff Order dated 25th April 2014. The connected load for the agriculture category has been given in 'kW' units. Applying the conversion factor, the connected load for the 'Agriculture' category is 59538 HP. Based on this, the sales approved for the agriculture category are 56.63 MU for 'Review' of FY 2015-16.

In view of the H1 actual sales already achieved by the Petitioner, sales for the metered categories for the year have been considered as submitted by the Petitioner to be reasonable and thereby approved.

The sales approved for the respective consumer categories are as follows:

Table 6.3: Energy Sales approved by the Commission for Review of FY 2015-16 (MU)

Consumer Category	Estimates submitted in FY 15-16 Petition	Approved in Tariff Order dt. 10th April 2015	FY 2015-16 (H1 Actual)	Submitted in APR	Approved in this Tariff Order
Domestic	652.84	697.00	339.92	679.85	679.85
OHOB	10.00		4.59	9.18	9.18
Commercial	193.70	211.00	96.52	193.04	193.04
Agriculture	56.63	57.00	28.64	57.28	56.63
Public Lighting	30.61	29.00	13.62	27.24	27.24
LT Industrial (including Water Tanks)	289.53	279.00	102.46	204.92	204.92
Temporary Supply	21.00	-	4.00	8.00	8.00
HT Industrial	994.33	1005.00	457.27	914.54	914.54
HT state and Central Government Establishments	53.00	55.00	29.29	58.58	58.58
HT Industrial Extra High Tension	366.30	367.00	160.22	320.44	320.44
TOTAL	**2667.94**	**2700.00**	**1236.54**	**2473.07**	**2472.42**

Therefore, the energy sales approved during 'Review' of FY 2015-16 are 2472.42 MU. The energy sales would be further revisited during the True-up of the year based on actuals.

6.4. Intra-State Transmission and Distribution Losses

Petitioner Submission:

The Petitioner has submitted revised estimate of 11.95% as the energy loss for FY 2015-16. The Commission had approved energy loss of 11.75% for FY 2015-16 in the Tariff Order dated 10th April 2015.

At Puducherry, pockets of Tamil Nadu region are being fed by Puducherry 110kV sub-station at 22kV level feeders. These feeders are metered at the sub-station end. Normally, Puducherry region draws certain power from TANGEDCO 110kV feeder and they bill EDP after deducting energy consumption by their 22kV feeders. During FY 2015-16, due to surplus power available with Puducherry from CGS, EDP has not drawn any power from 110kV TANGEDCO feeders. The matter has been taken up with TANGEDCO at Chennai to deduct their 22kV feeder consumption at Puducherry region from the TANGEDCO sale of power at Karaikal region. The above adjustment is yet to be made by TANGEDCO.

The Petitioner has submitted that in comparison with the approved figures, actual T&D losses are marginally higher and therefore requests the Commission to approve the T&D loss of 11.95% for FY 2015-16.

Commission Analysis:

The Commission observes that the Petitioner has not been able to perform within the T&D loss level set by the Commission for FY 2015-16 as per the Tariff Order dated 10th April 2015.

Regulation 9 of JERC Tariff Regulations 2009, deals with excess or under-recovery with respect to norms and targets.

Regulation 9 (2) of the said JERC Tariff Regulations 2009 provides as follows:

Quote *"The generating company or the licensee, as the case may be, shall bear the entire loss on account of its failure to achieve the norms laid down by the Commission or targets set by the Commission from time to time."* **Unquote**

The Commission has analyzed the past trends of the T&D loss levels and retains the T&D loss for FY 2015-16 as approved in the Tariff Order dated 10th April 2015 as reasonable. The Commission desires the Petitioner to be more efficient in the reduction of T&D losses and take adequate steps to ensure the achievement of the T&D target set for the utility. The sharing of gain/loss on account of over-achievement/under-achievement of the target specified by the Commission will be dealt in the True-up of FY 2015-16 on the basis of actual T&D losses and audited figures of quantum of power purchase and sales for FY 2015-16.

The comparison of the T&D losses as submitted and approved by the Commission is as follows:

Table 6.4: T&D Losses approved by the Commission for Review of FY 2015-16 (%age)

Particulars	Estimates submitted in FY 15-16 Petition	Approved in Tariff Order dt. 10th April 2015	Submitted in APR	Approved in this Tariff Order
T&D Losses	11.75%	11.75%	11.95%	11.75%

The Commission, therefore, considers the T&D loss of 11.75% as reasonable for the 'Review' of FY 2015-16 and thereby approved. The same would be re-visited during the True-up of the year based on actuals.

6.5.Energy Balance

Petitioner Submission:

Based on the actual sales, T&D losses and surplus energy sale/UI sales, the energy requirement at the periphery of 2852.50 MU has been calculated. The energy availability has been estimated based on the gross energy purchase and external losses incurred. The Petitioner has submitted net energy availability of 2852.50 MU for FY 2015-16.

Commission Analysis:

Based on the approved sales of 2472.42 MU and approved losses of 11.75%, the energy requirement at the periphery for the territory is approved at 2801.61 MU.

The Commission has allowed the sales outside the state/UI sales at 24.56 MU (as per the actual H1 of FY 2015-16 and verified from the UI bills submitted). The sales outside the state have been allowed corresponding to the H1 actual for FY 2015-16. Merit order principles have been adopted for estimating the energy requirement for H2 of FY 2015-16 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 2015-16.

The Commission, notes the energy drawal by TANGEDCO of 16.93 MU. Considering the same as sale at the periphery, T&D losses have not been considered on the same.

Considering the UI under-drawal of 24.56 MU and energy drawal by TANGEDCO of 16.93 MU, energy requirement at the periphery of 2843.10 MU is approved.

The Commission has considered the gross power purchase of 2936.75 MU as per the analysis of the Commission. The detailed analysis of the power purchase from the different sources has been discussed in the next paragraph of this Order. The external losses have been approved at 93.65 MU, resulting in the net energy availability of 2843.10 MU. The actual power purchase has been considered for H1 of FY 2015-16 and merit order principles have been adopted for approving the gross power purchase for H2 of FY 2015-16 based on the approved energy requirement at the periphery for FY 2015-16.

The following Table captures the values as submitted by the Petitioner and those approved for FY 2015-16.

Table 6.5: Energy Balance approved by the Commission for Review of FY 2015-16 (MU)

Particulars	Estimates submitted in FY 15-16 Petition	Approved in Tariff Order dt. 10th April 2015	Submitted in APR	Approved in this Tariff Order
ENERGY REQUIREMENT				
Energy sales in the UT	2,667.91	2700.00	2473.07	2472.42
Energy drawal by TANGEDCO	-	-	16.93	-
T&D Losses (%age)	11.75%	11.75%	11.95%	11.75%
Energy required for the Territory (MU)	3,023.13	3059.00	2827.94	2801.61
Add: Sales to common pool consumers/ UI	-	-	24.56	24.56
Energy drawal by TANGEDCO			-	16.93
Energy Requirement @ periphery	**3,023.13**	**3059.00**	**2852.50**	**2843.10**
ENERGY AVAILABILITY				
Gross Energy Purchase	3,164.80	3202.00	2986.43	2936.75
External losses (MU)	141.67	143.00	133.94	93.65
Net Energy Availability	**3,023.13**	**3059.00**	**2852.49**	**2843.10**

6.6.Power Purchase Quantum & Cost for FY 2015-16

Petitioner Submission:

The Petitioner has submitted that it meets its total energy requirement from its allocation from the Central Generating Stations (CGS) and state utilities like TANGEDCO, KSEB and PPCL. PPCL is a generating company within the UT of Puducherry catering to the requirement of Karaikal region. KSEB supplies for the Mahe region under the UT of Puducherry. Also from FY 2013-14, supply from Kudunkulam Nuclear Plant and Vallur Thermal Plant has been started resulting in additional power allocation to the Union Territory, Puducherry to meet the demand.

The summary of the power purchase quantum and cost submitted by the Petitioner for H1 of FY 2015-16 is as below.

Table 6.6: Power Purchase submitted by the Petitioner for H1 of FY 2015-16

S. No.	Particulars	H1 FY 2015-16		
		Purchase (MUs)	Cost (Rs. Cr.)	Rate (Rs./unit)
1	NTPC	555.54	156.07	2.81
2	NLC	451.07	141.30	3.13
3	NPCIL	205.17	63.40	3.09
4	KSEB	21.40	12.45	5.82
5	TANGEDCO	118.77	41.21	3.47
6	PPCL	56.62	26.32	4.65
7	Vallur	57.81	21.55	3.73
8	Over drawal	28.99	3.68	1.27
9	Transmission Charges		31.83	
10	Rebate		(8.82)	
11	RPO Obligations		26.25	
12	**Total**	**1495.37**	**515.25**	**3.45**

The Petitioner has further submitted that for FY 2015-16, it has projected the power purchase by considering the actual power purchase for the 1st half of the year FY 2015-16 (i.e. Apr 15 – Sep 15) and considering power purchase under the principle of Merit Order Dispatch (MOD) for H2 of FY 2015-16. The key assumptions for power purchase cost are as under:

a. MOD for H2 FY 15-16: The power purchase for the second half has been considered under the principle of MOD. The must run stations have been identified as all the NPCIL plants, KSEB, TANGEDCO and PPCL. The remaining amount of power is envisaged to be purchased from the remaining available sources.

b. The fixed charges for all the generating stations have been taken same as incurred in H1 for FY 2015-16.

c. The variable cost for FY 2015-16 has been computed considering actual average variable cost of each source for the first six months period of April-September 2015. It is submitted that no escalation of cost has been considered.

d. The other costs which include ED, cess, incentive etc. and supplementary charges are considered on actual basis paid in the first six months period of April - September 2015 and have not been assumed for H2 at present and may be considered at the time of True-up.

e. The power purchase cost for power over-drawal from the grid is considered on actual basis paid in the first six months period of April - September 2015 only. For H2 over-drawal is not assumed under the principle of MOD

f. The Petitioner has submitted that it is obliged to comply with the Renewable Purchase Obligation of 3%. The RPO compliance cost is also included in the power purchase cost which was arrived upon as follows.

Table 6.7: RPO compliance cost submitted by the Petitioner for FY 2015-16

Year	Sales	Solar Obligation	Non-solar obligation	Solar PO	Non-solar PO	Solar REC Cost	Non-solar REC cost	Total Cost
	(MUs)	%	%	(MUs)	(MUs)	(Rs./REC)	(Rs./REC)	(Rs. Crs.)
FY 2015-16	2473.07	0.85%	2.70%	21.02	66.77	3500	1500	17.37
Obligation met including pending obligations of previous years								
				69		3500	1500	24.15
					14	3500	1500	2.1
Obligation to be met by purchase of REC's								
					47.66	3500	1500	7.149
Total RPO Compliance Cost for FY 2015-16 (Rs. Crs.)								**33.40**

g. As outlined in the above Table, the estimated cost towards RPO compliance is Rs. 33.40 Crores against which EDP has already incurred Rs. 26.25 Crores in the current year and the balance is to be met in the remaining months of the current year. With this, the Petitioner will meet the entire RPO till the end of FY 2015-16.

h. The Transmission Charges for FY 2015-16 are considered as per POC computation, i.e. Part A - Transmission charge for withdrawal of power and Part B - Transmission charges of generators. However, for H2 calculation, a similar amount as charged in H1 of FY 2015-16 has been considered for calculation of the total transmission charges.

The estimated power purchase cost summary for FY 2015-16 is as below:

Table 6.8: Power Purchase Quantum and Cost for FY 2015-16 as submitted by the Petitioner

S. No.	Particulars	FY 2015-16		
		Purchase (MUs)	Cost (Rs. Cr.)	Rate (Rs./unit)
1	NTPC	1058.99	306.25	2.89
2	NLC	1006.26	307.46	3.06
3	NPCIL	329.02	105.49	3.21
4	KSEB	42.79	24.91	5.82
5	TANGEDCO	237.54	82.43	3.47
6	PPCL	175.38	80.88	4.61
7	Vallur	107.46	41.50	3.86
8	Over drawal	28.99	3.68	1.27
9	Transmission Charges		60.74	
10	Rebate		(8.82)	
11	RPO Obligations		33.40	
12	**Total**	**2986.43**	**1037.92**	**3.48**

The Commission is requested to approve Rs. 1037.92 Crores (inclusive of rebate) as power purchase cost for FY 2015-16.

Commission Analysis:

The power purchase quantum approved by the Commission in the last Tariff Order dated 10th April 2015 for FY 2015-16 was 3202 MU at an approved power purchase cost of Rs. 1035.63 Crores including transmission charges. The Commission during the Review exercise for the year has considered power purchase quantum and cost for H1 of FY 2015-16 based on actuals and for H2 based on MOD. The same is discussed in detail in the following paragraphs.

<u>Power Purchase Quantum and Cost for H1 of FY 2015-16</u>

The Commission has considered the submission of the Petitioner for actuals of H1 for FY 2015-16.

The Commission notes that the Petitioner has submitted 1495.37 MU at a cost of Rs. 515.25 Crores for H1 of FY 2015-16. The Commission, as part of its prudence check, has verified the monthly summary sheets of power purchase submitted by the Petitioner from the station-wise power purchase bills on random basis for the first six months of FY 2015-16. The Commission found the same to be in order. However, the Commission noticed totaling errors in the six-monthly compilation of the summary sheets. The Commission also, noticed that the submission of the Petitioner had not accounted for the supplementary charges reflected in the monthly summary sheets. The Commission, has allowed the supplementary charges and also corrected minor errors in the totaling of the six-monthly compilation of the summary sheets.

The Commission, on this basis approves 1495.36 MU at a cost of Rs. 521.68 Crores for H1 of FY 2015-16.

The Commission has considered the actual rebate of Rs. 8.82 Crores availed by the Petitioner on power purchase bills of the first six months. The Commission has considered the power purchase cost after consideration of the rebate amount for all the stations.

Further, the Commission has considered the UI over-drawal of 28.99 MU at a cost of Rs. 3.68 Crores as per its prudence check from the summary sheets/bills of UI on the SRPC website for H1 of FY 2015-16.

The Commission, also, notes that the Petitioner incurred Rs. 26.25 Crores during H1 of FY 2015-16 towards fulfillment of the RPO on purchase of REC, including partial pending obligation of the previous years. The Commission has verified the same from the RECs submitted alongside and allowed the same.

The verified quantum and cost including transmission charges for the first six months of FY 2015-16 is as follows:

Table 6.9: Power Purchase (MU) and Cost (Rs. Crores) as analyzed by the Commission for H1 of FY 2015-16

S. No.	Source	Purchase (MU)	VC (Ps/ Unit)	FC (Rs. Crores)	VC (Rs. Crores)	Others (Rs. Crores)	Supplementary (Rs. Crores)	Total (Rs. Crores)
A	**Central Sector Power Stations**							
I	**NTPC**	**555.54**		**44.32**	**111.33**	**0.42**	**2.43**	**158.51**
	RSTPS Stage I & II	248.96	246.15	15.86	61.28	0.03	0.76	77.93
	RSTPS Stage -III	41.51	246.37	4.64	10.23	0.01	1.23	16.11
	Talcher Stage- II	242.13	140.22	17.85	33.95	0.37	0.49	52.66
	Simhadri Stage- II	22.94	256.12	5.97	5.88	0.00	(0.05)	11.80
II	**NLC**	**451.07**		**36.66**	**104.41**	**0.23**	**1.94**	**143.24**
	NLC TPS II Stage I	273.26	233.57	17.16	63.83	0.12	1.52	82.63
	NLC TPS II Stage II	93.86	233.58	6.35	21.92	0.00	0.00	28.28
	NLC TPS I (Expn)	68.38	220.29	9.04	15.06	0.08	0.41	24.60
	NLC TPS II (Expn)	11.26	218.29	2.90	2.46	0.01	-	5.37
	NTPL	4.32	264.01	1.22	1.14	0.00	-	2.36
III	**NPCIL**	**205.17**		**-**	**61.22**	**2.17**	**2.01**	**65.41**
	MAPS	26.83	202.69	-	5.44	0.09	0.04	5.56
	KAPS Stage I	136.48	298.37	-	40.72	0.62	1.36	42.71
	KKNP	41.86	359.88	-	15.07	1.46	0.62	17.14
IV	**Others**	**197.97**		**11.38**	**63.77**	**0.07**	**0.05**	**75.26**
	TANGEDCO (Pondy)	-		-	-	-	-	-
	TANGEDCO (Karaikal)	118.77	347.00	-	41.21	0.00	-	41.21
	Vallur	57.81	201.41	9.89	11.64	0.01	0.05	21.60
	KSEB	21.40	510.00	1.49	10.91	0.05	-	12.45
V	**OVER-DRAWAL**	**28.99**	126.94	**-**	**3.68**	**-**	**-**	**3.68**
B	**Within State Generations**							
I	**PPCL**	**56.62**	350.51	**6.47**	**19.85**	**-**		**26.32**
C	**OTHER CHARGES**	**-**	**-**	**-**	**-**	**28.91**	**2.93**	**31.83**
	PGCIL Transmission Charges, Wheeling & Other Charges	-	-	-	-	28.43	2.75	31.18
	POSOCO	-	-	-	-	0.39		0.39
	PCKL	-	-	-	-	0.09	0.17	0.27
D	**Rebate**	**-**	**-**	**-**	**-**	**(8.82)**		**(8.82)**
E	**RPO**					**26.25**		**26.25**
	Total	**1,495.36**		**98.83**	**364.26**	**49.22**	**9.36**	**521.68**

Thus, the overall quantum of power purchase has been considered as 1495.36 MU at a cost of Rs. 521.68 Crores for H1 of FY 2015-16.

Power Purchase Quantum and Cost for H2 of FY 2015-16

For estimating the energy requirement for H2 of FY 2015-16, merit order principles have been considered. The Petitioner meets its total energy requirement from its allocation from the Central Generating Stations (CGS) and state utilities like TANGEDCO, KSEB and PPCL. PPCL is a generating company within the UT of Puducherry catering to the requirement of Karaikal region. KSEB supplies for the Mahe region under EDP. Also from FY 2013-14, supply from Kudunkulam Nuclear Plant and Vallur Thermal Plant has also been started resulting in additional power allocation to the Union Territory, Puducherry to meet the demand.

The Commission has considered the nuclear plants as 'must-run' and not subject them to MOD principles. TANGEDCO (Karaikal), KSEB and PPCL have also been considered as 'must-run' plants and not subject to MOD principles. The must-run stations have been assumed at the top of the merit order. Fixed charges from all the generating stations (irrespective of the merit order) have been considered for arriving at the power purchase cost. Variable charges have only been considered from the plants at the top of the merit order, required for meeting the energy requirement within the state.

The Commission has considered the following assumptions to arrive at the energy availability from the above stations:

- **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/2015 dated 04.11.2015, effective from 00:00 Hrs. of 06.11.2015.
- **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 2012-13, FY 2013-14 and FY 2014-15). 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, 2014.
- **Energy Available to the Petitioner:** The effective share from the stations is applied on the energy sent out to arrive at the energy available to the Petitioner from the respective stations.

The Commission has considered the following assumptions to arrive at the power purchase cost for the remaining six months of FY 2015-16:

- **Fixed Charges:** The fixed charges are considered based on the formula specified for the stations in the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009. The Annual Fixed Charges for each station have been taken as per the latest Tariff Orders for the respective stations as available. In the absence of the Tariff Orders, the Commission has considered the fixed charges as submitted by the Petitioner to be reasonable.

- **Variable Charges:** The Commission has considered the average variable cost for the period April 2015 to September 2015 (as per actuals) verified by the Commission from the power purchase bills submitted by the Petitioner for consideration of the per unit variable charges for H2 of FY 2015-16 for the various plants.
  - i. For nuclear plants, Madras APS and Kaiga the unit rate of Rs 2.03/unit and Rs 2.98/unit has been considered. For Kudankulam, the unit rate of Rs. 3.60/unit has been considered
  - ii. For TANGEDCO (Karaikal), the revised rate of Rs 3.47/unit has been considered. For KSEB, the average variable cost for H1 period has been considered at Rs. 5.10/unit. For NTECL Vallur, the average rate as considered by the Petitioner has been considered to be reasonable at Rs. 2.01/unit. For PPCL, the average variable cost of the H1 period has been considered at Rs. 3.51/unit.
  - iii. For NTPC and NLC plants, average variable cost for the first six months has been considered
  - iv. No escalation in the variable charge rates have been considered as these will be taken care of in the Fuel and Power Purchase Adjustment formula
- **UI over-drawal/under-drawal:** As per the MOD principles adopted by the Commission for estimating the energy requirement for H2 of FY 2015-16, no surplus sale of power has been considered for H2 of FY 2015-16 and only 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 2015-16. Further, the UI over-drawal/under-drawal quantum and amount would be considered at the time of True-up based on the actual performance during the year based on the UI bills.
- **Inter-state losses:** PGCIL losses have been assumed at 4.97% and at 4% for TANGEDCO to be reasonable (based on the SRPC website). For PPCL and KSEB, being within the periphery of the utility area, external losses have been considered as NIL.

Transmission Charges

The transmission charges for FY 2015-16 for the remaining six months have been considered same as considered for H1 of FY 2015-16.

Accordingly, the transmission charges for usage of the PGCIL network are approved at Rs. 31.18 Crores for H2 of FY 2015-16.

The Commission has considered the POSOCO and PCKL charges of Rs. 0.38 Crores and Rs. 0.09 Crores as estimated by the Petitioner to be reasonable and approved the same for H2 of FY 2015-16.

Other Charges

The Commission has noted that the Petitioner has claimed 'other charges' for H2 of FY 2015-16 which includes ED, cess, incentive etc. The 'other charges' have been considered equal to H1 by the Petitioner. In the absence of any basis for projection, the Commission has not considered the 'other charges' for H2 of FY 2015-16. The Commission has also not projected any supplementary charges for H2 of FY 2015-16. Other charges, including supplementary charges would be considered based on actuals during the True-up of FY 2015-16.

Renewable Purchase Obligations

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

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

Further, the Commission has notified the amendment to the JERC (Procurement of Renewable Energy) Regulations, 2010 on 19th February 2014. As per the amendment issued, the Petitioner has to purchase 3.55% of energy sales from renewable energy sources for FY 2015-16 including 0.85% for Solar and 2.70% for Non-Solar.

The Commission has considered the REC quantum as per the submission made by the Petitioner. The Commission has approved the cost of purchase of RECs (both solar and non-solar) at the floor price approved by the CERC (http://www.cercind.gov.in/2014/Regulation/ord16.pdf).

The Commission notes that as per the RPO, the Petitioner was required to purchase 21.02 MU from solar and 66.76 MU from non-solar for FY 2015-16. The Petitioner has submitted that it has already purchased RECs for 69 MU solar and 14 MU non-solar. The cost of the same at the solar price of Rs. 3500/certificate and non-solar at Rs. 1500/certificate amounting to Rs. 26.25 Crores has already been incurred during H1 of FY 2015-16. The same has been allowed by the Commission for H1 of FY 2015-16.

Further, the Petitioner has stated that it would purchase non-solar REC amounting to 47.66 MU during the remaining months of FY 2015-16. The cost of the same i.e. Rs. 7.15 Crores has been considered in the power purchase cost of H2 of FY 2015-16. The same is allowed by the Commission in the power purchase cost for H2 of FY 2015-16.

The Commission notes that with these REC purchases, it would also meet some of its pending obligation of the earlier years. The cumulative adjustment of the pending RPO from FY 2010-11 to FY 2015-16 has been discussed separately in the next section of this Chapter.

Table 6.10: RPO quantum (MU) and cost (Rs. Crores) approved by the Commission for FY 2015-16

S. No.	Source	Equivalent Purchase through RECs (MU)	Price/Certificate (Rs.)	Total Cost (Rs Crores)
	H1 of FY 2015-16 (Actuals)			
i	Non Solar	14.00	1500	2.10
ii	Solar	69.00	3500	24.15
	RPO cost for H1 of FY 2015-16			**26.25**
	H2 of FY 2015-16			
i	Non Solar	47.66	1500	7.15
ii	Solar	-	3500	-
	RPO cost for H2 of FY 2015-16			**7.15**
	Total RPO cost for FY 2015-16			**33.40**

Note - No physical purchase towards fulfillment of RPO has been considered by the Petitioner and the same has accordingly been taken note by the Commission for the RPO calculations.

The RPO cost, therefore, allowed for FY 2015-16 is Rs. 33.40 Crores and has accordingly been considered by the Commission.

The Commission notes that as per the Business Plan Order dated 4th December 2015, the Petitioner is required to fulfill all its pending RPO from FY 2010-11 to FY 2015-16 by 31st March 2016 and no backlog would be allowed to be carried forward to the Control Period FY 2016-17 to FY 2018-19. The Commission, accordingly, has not considered any provision to meet the backlog of RPOs during the Control Period.

Based on the above, the total power purchase quantum and cost from the various sources as approved for H2 of FY 2015-16 is as follows:

Table 6.11: Power purchase quantum (MU) and cost (Rs. Crores) approved by the Commission for H2 of FY 2015-16

S. No.	Source	Purchase (MUs)	Inter-state Loss %	Energy Available at Periphery (MUs)	Fixed Charges (Rs. Crores)	Variable Charges (Rs/kWh) - Average of H1 15-16/as contracted	Variable Charges (Rs. Crores)	Total Cost (Rs. Crores)
A	**NPCIL**							
	MAPS	18.88	*4.97%*	17.94	-	2.03	3.83	3.83
	Kaiga APS Stage 1 U1&2	50.92	*4.97%*	48.38	-	2.98	15.19	15.19
	Kaiga APS Stage 1 U3&4	43.87	*4.97%*	41.69	-	2.98	13.09	13.09
	KKNP Unit1	88.48	*4.97%*	84.08	-	3.60	31.85	31.85
B	**TANGEDCO (Karaikal)**	118.77	*4.00%*	114.02	-	3.47	41.21	41.21
	KSEB	21.39	*0.00%*	21.39	1.49	5.10	10.91	12.40
	PPCL	116.31	*0.00%*	116.31	12.94	3.51	40.82	53.76
C	Talcher STPS Stage II	213.70	*4.97%*	203.08	9.47	1.40	29.96	39.44
	NTECL unit 1&2, Vallur	51.87	*4.97%*	49.29	9.89	2.01	10.45	20.34
	NLC TS II Expn	67.50	*4.97%*	64.14	2.90	2.18	14.73	17.63
	NLC TS I Expn	59.94	*4.97%*	56.96	7.83	2.20	13.20	21.03
	NLC TS II Stage I	236.67	*4.97%*	224.90	15.49	2.34	55.28	70.77
	NLC TS II Stage II	93.08	*4.97%*	88.46	5.51	2.34	21.74	27.26
	Ramagundam STPS Stage I & II	260.04	*4.97%*	247.12	19.16	2.46	64.01	83.16
	Ramagundam STPS Stage III	-	*4.97%*	-	7.40	2.46	-	7.40
	Simhadri Stage II	-	*4.97%*	-	9.27	2.56	-	9.27
	NTPL	-	*4.97%*	-	1.22	2.64	-	1.22
D	**Others**							
	POSOCO							0.38
	PCKL							0.09
	Inter-state losses							**31.18**
E	**RPO Compliance Cost**							**7.15**
F	**TOTAL PPC for H2 FY 15-16**	**1,441.39**	**63.64**	**1,377.75**	**102.57**		**366.28**	**507.65**

Accordingly, the Commission approves power purchase quantum of 1441.39 MU and cost of Rs. 507.65 Crores for H2 of FY 2015-16, including the transmission charges of Rs. 31.18 Crores.

Considering the quantum of 1495.36 MU and cost of Rs. 521.68 Crores approved for H1 of FY 2015-16, the Commission, therefore, allows **the total power purchase quantum and cost of 2936.75 MU and Rs. 1029.33 Crores for FY 2015-16.**

The summary of the power purchase quantum and cost approved by the Commission for Review of FY 2015-16 is as follows:

Table 6.12: Power purchase quantum and cost approved by the Commission for Review of FY 2015-16

Particulars	Estimates submitted in FY 15-16 Petition	Approved in Tariff Order dt. 10th April 2015	Submitted in APR	Approved in this Tariff Order
Power Purchase Quantum (MU)	3164.80	3202.00	2986.43	2936.75
Power Purchase Cost (Rs. Crores)	1108.87	1035.63	1037.92	1029.33

The Commission, therefore, considers the power purchase cost of Rs. 1029.33 Crores for procurement of 2936.75 MU of energy for FY 2015-16 as reasonable and approves the same for Review of FY 2015-16.

6.7. Cumulative RPO pending compliance by the Petitioner

Petitioner Submission:

The Petitioner has submitted that based on the REC purchases made by the Petitioner from FY 2012-13 to FY 2014-15 and estimated to be made during FY 2015-16, there would be no pending RPO (from FY 2010-11 till FY 2015-16) to be met during the Control Period. The Petitioner has submitted that based on the REC purchases made by the Department, it would meet its entire RPO till FY 2015-16. The cumulative RPO pending till FY 2015-16 as submitted by the Petitioner is as follows:

Table 6.13: Cumulative RPO pending till FY 2015-16 as submitted by the Petitioner

S. No	Description	Unit	Previous Year (Audit)			Previous Year (Audit)	Previous Year (Provisional)	Current Year (Revised Estimate)
			FY 2010-11	FY 2011-12	FY 2012-13	FY 2013-14	FY 2014-15	FY 2015-16
1	Sales Within State	MUs	2,182.48	2,321.29	2,474.98	2,365.72	2,366.31	2,473.07
2	RPO	%	**1.00%**	**2.00%**	**3.00%**	**3.00%**	**3.30%**	**3.55%**
	- Solar	%	0.25%	0.30%	0.40%	0.40%	0.60%	0.85%
	- Non Solar	%	0.75%	1.70%	2.60%	2.60%	2.70%	2.70%
3	RPO	MUs	**21.82**	**46.43**	**74.25**	**70.97**	**78.09**	**87.79**
	- Solar	MUs	5.46	6.96	9.90	9.46	14.20	21.02
	- Non Solar	MUs	16.37	39.46	64.35	61.51	63.89	66.77
4	Physical RPO Purchase	MUs						
	- Solar	MUs	-	-	-	-	-	-
	- Non Solar	MUs	-	-	-	-	-	-
5	RPO Purchase through RECs	MUs						
	- Solar REC	MUs	-	-	-	-	-	69.00
	- Non Solar REC	MUs	-	-	48.00	112.00	90.69	61.66
6	**Cumulative RPO Pending**							
	- Solar	MUs	5.46	12.42	22.32	31.78	45.98	(2.00)
	- Non Solar	MUs	16.37	55.83	72.18	21.69	(5.11)	0.00

The Petitioner, therefore, has not claimed any additional amount towards meeting the pending RPO during the control period. The cost towards REC purchases estimated to be made during FY 2015-16 of Rs. 33.40 Crores has been considered in the power purchase cost for FY 2015-16.

Commission Analysis:

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

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

Further, the Commission has notified the amendment to the JERC (Procurement of Renewable Energy) Regulations, 2010 on 19th February 2014. As per the amendment issued, the Petitioner had to purchase 3.55% of total energy purchase from renewable sources including 0.85% for Solar and 2.70% for Non-Solar for FY 2015-16.

The Commission has verified the REC purchases made by the Petitioner during the period FY 2012-13 to FY 2015-16 from the RECs submitted by the Petitioner and found the same to be in order. The quantum considered against the REC purchase is found to be in order.

Further, the Commission has considered the RPO compliance for FY 2015-16 in the power purchase cost of FY 2015-16. For FY 2015-16, the Commission has noted the submission of the Petitioner that it has already incurred Rs. 26.25 Crores in FY 2015-16 and an estimated amount of Rs. 7.15 Crores would be spent on purchase of 47.66 MU non-solar REC during the remaining months of the year.

The cumulative RPO pending from FY 2010-11 till FY 2015-16 as analyzed by the Commission at the end of FY 2015-16 is as shown in the Table below. The Commission has considered the True-up sales figures from FY 2010-11 to FY 2013-14. Sales for FY 2014-15 have been considered as per the Review for the year as per the Tariff Order dated 10th April 2015. Sales for FY 2015-16 have been considered as approved in the Review for the year in this Tariff Order.

Table 6.14: Cumulative RPO pending till FY 2015-16 as analyzed by the Commission

S. No	Description	Unit	True-up years			True-up (in this Tariff Order)	Review as per Tariff Order dt. 10th April 2015	Review in this Tariff Order
			FY 2010-11	FY 2011-12	FY 2012-13	FY 2013-14	FY 2014-15	FY 2015-16
1	Sales Within State	MUs	2,182.48	2,321.29	2,474.98	2,363.64	2,480.78	2,472.42
2	RPO	%	**1.00%**	**2.00%**	**3.00%**	**3.00%**	**3.30%**	**3.55%**
	- Solar	%	0.25%	0.30%	0.40%	0.40%	0.60%	0.85%
	- Non Solar	%	0.75%	1.70%	2.60%	2.60%	2.70%	2.70%
3	RPO	MUs	**21.82**	**46.43**	**74.25**	**70.91**	**81.87**	**87.77**
	- Solar	MUs	5.46	6.96	9.90	9.45	14.88	21.02
	- Non Solar	MUs	16.37	39.46	64.35	61.45	66.98	66.76
4	Physical RPO Purchase	MUs						
	- Solar	MUs	-	-	-	-	-	-
	- Non Solar	MUs	-	-	-	-	-	-
5	RPO Purchase Through RECs	MUs						
	- Solar REC	MUs	-	-	-	-	-	69.00
	- Non Solar REC*	MUs	-	-	48.00	112.00	90.69	61.66
6	**Cumulative RPO Pending**							
	- Solar	MUs	5.46	12.42	22.32	31.77	46.66	(1.33)
	- Non Solar	MUs	16.37	55.83	72.18	21.63	(2.07)	3.02

Note - * Taken from the additional submission of the Petitioner

As can be seen from the above Table, based on the REC purchases already made and estimated to be made by the Petitioner during the remaining months of FY 2015-16, the cumulative RPO pending for solar is negative and thereby NIL. The cumulative obligation pending for non-solar is 3.02 MU and thereby negligible. The same would be accounted for during the True-up of FY 2015-16 based on the actual fulfillment of RPO from FY 2010-11 to FY 2015-16.

The Commission, therefore, has not considered any amount towards provisioning the pending RPO of the Petitioner.

The Commission in its Business Plan Order 181/2015 dated 4th December 2015 has directed that all pending RPO up-to FY 2015-16 must be fulfilled by the Petitioner by 31st March 2016 and no backlog would be allowed to be carried forward to the Control Period FY 2016-17 to FY 2018-19. The Commission accordingly reiterates that the Petitioner must comply with the above directive. The pending compliance towards the RPO – both quantum and cost would, therefore, be re-visited during the True-up of FY 2015-16.

6.8.Operation and Maintenance (O&M) Expenses

The O&M Expenses consists of three elements i.e. employee expenses, A&G expense and R&M expense.

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

<u>Employee Expenses</u>

Petitioner Submission:

The Petitioner has submitted the employee expenses for FY 2015-16 based on the escalation in proportion to average WPI (last three years) considering base period as the actual audited expenses of FY 2013-14. The Petitioner has submitted employee cost of Rs. 80.32 Crores for FY 2015-16.

The Petitioner has submitted that the employee cost capitalized is also taken into consideration after considering the employee cost linked to accounts with capital nature. Accordingly, the Petitioner has revised the employee cost for the current year to Rs. 80.32 Crores and requests the Commission to approve the same.

Commission Analysis:

The Commission notes that the Petitioner has submitted employee expenses of Rs. 80.32 Crores for the Review of FY 2015-16 as against Rs. 78.22 Crores approved earlier by the Commission vide Tariff Order dated 10th April 2015. The Commission notes that the True-up of FY 2014-15 has not been carried out in this Order in the absence of actual audited data. The figures for FY 2014-15 in this Tariff Order have been retained as in the Review for the year as per the Tariff Order dated 10th April 2015. The Commission in the absence of actual audited data for FY 2014-15, considers it prudent to maintain the employee expenses of FY 2015-16 for Review purposes at Rs. 78.22 Crores as approved in the Tariff Order dated 10th April 2015. The same would be revisited at the time of True-up for FY 2015-16 based on the actual audited data for the year.

The employee expenses as submitted and approved by the Commission for Review of FY 2015-16 are as follows:

Table 6.15: Employee expenses approved by the Commission for Review of FY 2015-16 (Rs. Crores)

Particulars	Estimates submitted in FY 15-16 Petition	Approved in Tariff Order dt. 10th April 2015	Submitted in APR	Approved in this Tariff Order
Employee Expenses	80.91	78.22	80.32	78.22

The Commission considers the employee expenses of Rs.78.22 Crores as reasonable and approves the same for Review of FY 2015-16; subject to final adjustment at the time of True-up based on the audited accounts.

<u>**Administrative and General (A&G) Expenses**</u>

Petitioner Submission:

The administrative expenses mainly comprise of rents, professional charges, office expenses, etc. The Petitioner has submitted A&G expenses of Rs. 11.50 Crores for FY 2015-16 based on the half yearly estimates. The Petitioner has submitted that the increase in A&G expenses for FY 2015-16 is mainly due to the increased incentive payment to the consumers.

The Petitioner has requested the Commission to approve Rs. 11.50 Crores as A&G expenses for FY 2015-16 based on the revised estimates.

Commission Analysis:

The Commission notes that the Petitioner has submitted A&G expenses of Rs. 11.50 Crores for the Review of FY 2015-16 as against Rs. 5.68 Crores approved earlier by the Commission vide Tariff Order dated 10th April 2015. The Commission notes that the True-up of FY 2014-15 has not been carried out in this Order in the absence of actual audited data. The figures for FY 2014-15 have been retained as in the Review for the year as per the Tariff Order dated 10th April 2015. The Commission in the absence of actual audited data for FY 2014-15, considers it prudent to maintain the A&G expenses at Rs. 5.68 Crores as approved last time during the ARR estimation for purposes of the Review exercise for FY 2015-16. The same would be revisited at the time of True-up based on the actual audited data for the year.

The Commission has also noted that the actual A&G expenses for FY 2013-14 based on audited accounts are Rs. 7.25 Crores; however the Commission would like to satisfy itself with the actual audited data for FY 2015-16 to ensure that the higher figure for A&G being reported on account of the payment of incentive amount to the consumers is not a one-time expenditure but a recurring expenditure from FY 2013-14 onwards.

The A&G expenses as submitted and approved by the Commission for Review of FY 2015-16 are as follows:

Table 6.16: A&G Expenses approved by the Commission for Review of FY 2015-16 (Rs. Crores)

Particulars	Estimates submitted in FY 15-16 Petition	Approved in Tariff Order dt. 10th April 2015	Submitted in APR	Approved in this Tariff Order
A&G Expenses	5.76	5.68	11.50	5.68

The Commission considers the A&G expenses of Rs. 5.68 Crores as reasonable and approves the same for Review of FY 2015-16; subject to final adjustment at the time of the True-up based on the audited accounts.

Repairs and Maintenance (R&M) Expenses

Petitioner Submission:

The Petitioner had originally submitted Rs. 16.99 Crores as the R&M expenses for FY 2015-16. However, due to error in calculation as pointed out by the Commission, the Petitioner subsequently in response to the data gaps revised its submission to Rs. 15.12 Crores vide its letter dated 25th January 2016.

The Petitioner has submitted that adequate R&M expenses are necessary for maintenance of infrastructure and for ensuring proper Standard of Performance of the utility. The revised R&M expenses considering WPI inflation of 2.00% over revised estimates of FY 2014-15 results in Rs. 7.87 Crores. This amount is very low compared to the previous years, unrealistic and therefore in the interest of the utility to ensure quality and reliable power to the consumers, the Petitioner is considering FY 2013-14 as the base for projecting the R&M expenses for FY 2015-16.

The increase in WPI has been considered from FY 2012-13 to FY 2013-14 to arrive at the increase in WPI of 5.98%; however WPI inflationary increase for FY 2013-14 to FY 2014-15 is only 2% which again will result in lower R&M expenses. The R&M expenses estimated for

FY 2015-16 based on higher inflationary increase of 5.98% over FY 2013-14 expenses (Rs. 13.46 Crores) are Rs. 15.12 Crores.

The Petitioner has therefore requested the Commission to approve Rs. 15.12 Crores as R&M expenses for FY 2015-16.

Commission Analysis:

The Commission notes that the Petitioner has submitted R&M expenses of Rs. 15.12 Crores for the Review of FY 2015-16 as against Rs. 18.35 Crores approved earlier by the Commission vide Tariff Order dated 10th April 2015. The Commission notes that the True-up of FY 2014-15 has not been carried out in this Order in the absence of actual audited data. The figures for FY 2014-15 have been retained as in the Review for the year as per Tariff Order dated 10th April 2015. The Commission in the absence of actual audited data for FY 2014-15, considers it prudent to maintain the R&M expenses at Rs. 18.35 Crores as approved last time during the ARR estimation for purposes of the Review exercise for FY 2015-16. The same would be revisited at the time of True-up based on the actual audited data for the year.

The R&M expenses as submitted and approved by the Commission for Review of FY 2015-16 are as follows:

Table 6.17: R&M expenses approved by the Commission for Review of FY 2015-16 (Rs. Crores)

Particulars	Estimates submitted in FY 15-16 Petition	Approved in Tariff Order dt. 10th April 2015	Submitted in APR	Approved in this Tariff Order
R&M Expenses	18.35	18.35	15.12	18.35

The Commission considers the R&M expense of Rs. 18.35 Crores as reasonable and approves the same for Review of FY 2015-16; subject to final adjustment at the time of True-up based on the audited accounts.

<u>Summary of O&M Expenses approved for Review of FY 2015-16</u>

The O&M expenses as submitted and approved for FY 2015-16 are as follows:

Table 6.18: O&M expenses approved by the Commission for Review of FY 2015-16 (Rs. Crores)

Particulars	Estimates submitted in FY 15-16 Petition	Approved in Tariff Order dt. 10th April 2015	Submitted in APR	Approved in this Tariff Order
O&M Expenses	105.02	102.25	106.94	102.25

6.9.Capitalization, GFA & Depreciation

Petitioner Submission:

The Petitioner has submitted the opening GFA of Rs. 633.98 Crores, addition in GFA of Rs. 63.29 Crores and closing GFA of Rs. 697.28 Crores for FY 2015-16.

The Petitioner has further submitted that depreciation for the assets has been calculated annually at the rates specified by the CERC from time to time. The same have been applied on different asset categories. The approved depreciation rates specified for different asset classes have been applied on the different asset categories. The Petitioner has requested the Commission to approve Rs. 27.80 Crores as depreciation for FY 2015-16, on the average GFA of Rs. 665.63 Crores.

Commission Analysis:

GFA and Capitalization

The Commission has retained the figures for FY 2014-15 at the levels approved in the 'Review' for the year as per Tariff Order dated 10th April 2015. Accordingly, the opening GFA for FY 2015-16 is considered at the same level as approved earlier as closing GFA for FY 2014-15 i.e. Rs. 611.59 Crores.

The Commission observes that the capital expenditure and the capitalization submitted by the Petitioner for FY 2015-16 is required to maintain reliable supply for the consumers of UT of ED-Puducherry. The Commission considering the reasonableness of the expenditure approves the capitalization of Rs. 63.29 Crores for FY 2015-16. This expenditure is being permitted to ensure the creation of infrastructure for adherence to Standards of Performance and Supply Code Regulations.

The Commission also notes with deep concern that as against capitalization of Rs. 118.45 Crores approved earlier by the Commission for the year vide Tariff Order dated 10th April 2015, the Petitioner has revised its estimate downwards to Rs. 63.29 Crores. **The Commission provisionally approves the capitalization of Rs 63.29 Crores proposed by the Petitioner for Review of ARR for FY 2015-16. A detailed statement of the capital expenditure incurred quarterly, the assets capitalized and added in the gross fixed assets up to 31.03.2016 on different dates during the year may be provided for True-up for FY 2015-16.**

Table 6.19: GFA approved by the Commission for Review of FY 2015-16 (Rs. Crores)

Particulars	Estimates submitted in FY 15-16 Petition	Approved in Tariff Order dt. 10th April 2015	Submitted in APR	Approved in this Tariff Order
Opening value of GFA at beginning of the year	611.59	611.59	633.98	611.59
Additions during the year	118.45	118.45	63.29	63.29
Closing value of GFA at end of the year	**730.04**	**730.04**	**697.28**	**674.88**

Depreciation

As per Regulation 26 of JERC Tariff Regulations 2009, depreciation for the assets shall be calculated annually at the rates specified by the CERC from time to time. The same have been applied on the different asset categories.

The computation of the depreciation for the year is as shown below:

Table 6.20: Depreciation calculation by the Commission for Review of FY 2015-16 (Rs. Crores)

S. No.	Particulars	Opening GFA	Additions	Closing GFA	Average Assets	Rate of depreciation	Depreciation
1	Land and Land rights	7.09	0.90	7.99	7.54	0.00%	0.00
2	Building	16.76	-	16.76	16.76	3.34%	0.56
3	Plant & Machinery	328.58	15.17	343.75	336.16	5.28%	17.75
4	Lines and Cables Network	225.39	38.66	264.05	244.72	5.28%	12.92
5	Vehicles	1.87	-	1.87	1.87	9.50%	0.18
6	Furniture and Fixtures	0.15	-	0.15	0.15	6.33%	0.01
7	Office Equipment	0.81	-	0.81	0.81	6.33%	0.05
8	IT Equipment	1.93	4.80	6.73	4.33	15.00%	0.65
9	Testing & Measuring Equipment	3.20	3.76	6.96	5.08	5.28%	0.27
10	SCADA Centre	25.82	-	25.82	25.82	6.33%	1.63
11	**Total**	**611.59**	**63.29**	**674.88**	**643.24**		**34.02**

The Commission in the above Table has pro-rated the asset-wise breakup of approved GFA of Rs. 611.59 Crores in the same ratio of opening GFA as submitted by the Petitioner of Rs. 633.98 Crores for FY 2015-16.

The Commission, notes that the depreciation amount calculated on individual asset group basis is higher than that submitted by the Petitioner. The Commission notes that ED-

Puducherry has started maintaining full-fledged Fixed Asset Registers along with the audited accounts for the year. Some of the assets have already attained the 90% depreciation limit and they are to be excluded in the calculation of the depreciation as per CERC Regulations. The Commission, therefore, has not applied the applicable CERC rates on the group-wise assets in place while approving the depreciation for the year, 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 on the average depreciation rate to be reasonable and considers the same for the Review of ARR for FY 2015-16. The Commission has applied the average depreciation rate i.e. 4.18% as submitted by the Petitioner, on the average assets approved by the Commission i.e. Rs. 643.24 Crores to arrive at the depreciation of Rs. 26.89 Crores for the Review of FY 2015-16.

The Commission expects that during the next filing for the True-up of the year, audited Fixed Asset Register (FAR) along with the audited accounts of the year must be duly submitted before the Commission for validation exercise of the Commission.

The Table below captures the depreciation as submitted by the Petitioner and that approved by the Commission for FY 2015-16.

Table 6.21: Depreciation approved by the Commission for Review of FY 2015-16 (Rs. Crores)

Particulars	Estimates submitted in FY 15-16 Petition	Approved in Tariff Order dt. 10th April 2015	Submitted in APR	Approved in this Tariff Order
Depreciation	35.21	35.23	27.80	26.89

The Commission considers the depreciation of Rs. 26.89 Crores as reasonable and approves the same for Review of FY 2015-16. The same would be subject to revision during the True-up exercise based on the audited accounts and Fixed Asset Register for the year.

6.10. Interest and Finance Charges

Petitioner Submission:

The Petitioner has submitted that the majority of capital assets are created out of the equity contribution from the Government of Puducherry and the actual borrowing of loan is only to the extent of the R-APDRP schemes. However, the Department has been claiming interest charges based on normative loan calculation. The Interest and Finance Charges have been arrived at based on the normative loan considered to the extent of capitalization during the year.

The Petitioner has considered an addition of Rs. 63.29 Crores in the Gross Fixed Assets for FY 2015-16, which are considered funded through normative debt to the tune of 70% in line with the Tariff Regulations. The rate of interest considered is the prevailing Prime Lending Rate of the State Bank of India as on 1st April of the relevant year.

Along with the normative interest claimed, it is submitted that certain financial charges are also incurred by the Department which are related to charges claimed by banks, finance charges, L/C., etc. which are claimed along with the interest. Other finance charges of Rs. 2.06 Crores have been claimed for FY 2015-16.

The Commission is requested to approve the Interest & Finance Charges at Rs. 24.12 Crores for FY 2015-16.

Commission Analysis:

As per Regulation 25 of JERC 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 2009 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) 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 2009. 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 normative interest under the JERC Tariff Regulations 2009 has therefore been considered on the assets created during the year FY 2009-10 onwards excluding the opening capital base for FY 2009-10 as per the audited accounts for the year and the Commission has accordingly allowed interest on normative loan for the respective years.

The Commission has considered an addition of Rs. 63.29 Crores in the Gross Fixed Assets for FY 2015-16 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. 44.31 Crores for the FY 2015-16 and the closing normative loan of Rs. 118.44 Crores as approved by the Commission in the Review for FY 2014-15 (as per Tariff Order dated 10th April 2015) as opening loan for FY 2015-16. 10% of the opening loans have been considered as the repayment during the year. Further, the Commission has considered the weighted average interest rate (SBI PLR) for FY 2015-16 (https://www.sbi.co.in/portal/web/interest-rates/benchmark-prime-lending-rate historical-data).

The calculation of the interest on the normative loan is as follows:

Table 6.22: Normative Interest on Loan for FY 2015-16 approved by the Commission (Rs. Crores)

Sr. No.	Particulars	Submitted (FY 2015-16)	Approved (FY 2015-16)
1	Opening Normative Loan	134.12	118.44
2	Add: Normative Loan during the year	44.31	44.31
3	Less: Normative Repayment	13.41	11.84
4	Closing Normative Loan	165.01	150.91
5	**Average Normative Loan**	**149.57**	**134.68**
6	**Rate of Interest**	**14.75%**	**14.29%**
7	**Interest on Normative Loan**	**22.06**	**19.25**

The Commission has also analyzed the nature of finance charges as submitted by the Petitioner. The Commission has observed that the Petitioner has submitted additional finance charges of Rs 2.06 Crores for FY 2015-16. The Commission considering the reasonableness of the expenditure submitted by the Petitioner as finance charges allows Rs 2.06 Crores additionally besides the interest on normative loan amount.

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

Table 6.23: Interest and Finance charges approved by the Commission for Review of FY 2015-16

(Rs. Crores)

Particulars	Estimates submitted in FY 15-16 Petition	Approved in Tariff Order dt. 10th April 2015	Submitted in APR	Approved in this Tariff Order
Interest & Finance Charges	24.87	24.87	24.12	21.31

The Commission considers interest and finance charges of Rs. 21.31 Crores as reasonable and approves the same for Review of ARR for FY 2015-16.

6.11. Interest on Working Capital

Petitioner Submission:

The interest on working capital has been claimed in accordance with the Regulation no. 29 of the JERC Tariff Regulations 2009. The Petitioner has submitted that it has adopted the same methodology as adopted by the Commission in its Tariff Order for FY 2015-16 for arriving at the working capital requirement whereby it has excluded the available security deposits available with it from the working capital requirement though the same has not been specified in the Regulations.

The Interest on Working Capital approved by the Commission earlier and now claimed for FY 2015-16 is NIL since the opening security deposit is higher than the working capital requirement.

Commission Analysis:

As per Regulation 29 of JERC Tariff Regulations 2009 –

Quote

'' 29. WORKING CAPITAL AND INTEREST RATE ON WORKING CAPITAL

3) *Subject to prudence check, the working capital for integrated utility shall be the sum of one month requirement for meeting :*
    f. *Power purchase cost*
    g. *Employees cost*
    h. *Administration & general expenses*
    i. *Repair & Maintenance expenses.*
    j. *Sum of two month requirement for meeting Fuel cost.*
4) *The rate of interest on working capital shall be equal to the short term Prime Lending Rate of State Bank of India on the 1st April of the relevant financial year. The interest on working capital shall be payable on normative basis notwithstanding that the generating company / licensee has not taken working capital loan from any outside agency or has exceeded the working capital loan amount worked out on the normative figures.''*

Unquote

The Commission has considered the calculation of the different components of the working capital on the basis of the above-stipulated norms. The Commission also notes that the amount collected from the consumers as security deposit has not been invested and hence, available with the Petitioner. 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*. As the Commission is separately approving the interest paid on consumer security deposit, the Commission considers the security deposit as fund available with the Petitioner to meet the working capital requirement for FY 2015-16.

The Commission finds that by utilizing such security deposit to meet the working capital, the interest on working capital is reduced resulting in lower tariff determination which benefits the consumers. Hence, the Commission has deducted this amount from the working capital requirement considered for Review of ARR for FY 2015-16.

The Commission has considered the average security deposit amount as submitted by the Petitioner to be reasonable for the purpose of calculation of the interest on working capital. Further, the Commission has considered the interest rate (SBI PLR) of 14.75% as on 01st April 2015 (https://www.sbi.co.in/portal/web/interest-rates/benchmark-prime-lending-rate-historical-data).

The detailed calculation of the interest on working capital is as follows:

Table 6.24: Interest on Working Capital approved by Commission for Review of FY 2015-16

(Rs. Crores)

Particulars	Estimates submitted in FY 15-16 Petition	Approved in Tariff Order dt. 10th April 2015	Submitted in APR	Approved in this Tariff Order
Power Purchase Cost for one month	NIL	NIL	86.49	85.78
Employee Cost for one month			6.69	6.52
A&G Expenses for one month			0.96	0.47
R&M Expenses for one month			1.42	1.53
Total Working Capital for one month			**95.56**	**94.30**
Average Security Deposit (amount already with EDP)			144.79*	155.45
Total Working Capital considered for one month			**(49.23)**	**(61.15)**
SBI PLR Rate			**14.05%**	**14.75%**
Interest on Working Capital			**NIL**	**NIL**

Note - * opening security deposit amount has been considered by the Petitioner

As the working capital requirement due to deduction of security deposit amount is coming to be negative, the Commission approves NIL working capital requirement and NIL interest on working capital for Review of ARR for FY 2015-16.

The Commission considers the Interest on Working Capital as NIL as reasonable and approves the same for Review of ARR for FY 2015-16.

6.12. Interest on Security Deposit

Petitioner Submission:

Regulation 25 of JERC Tariff Regulations 2009 provides for Interest on Security Deposit, if any, made by the consumer with the licensee. The provision of interest on security deposits is to be made at the bank rate. The prevailing bank rate is considered at 8.50% as notified by the Reserve Bank of India with effect from 4th March 2015.

The Petitioner has submitted the interest on security deposit of Rs. 13.21 Crores based on the average security deposit of Rs. 155.45 Crores for the year at the bank rate of 8.50%.

The Petitioner has further submitted that even though the total interest on security deposit is Rs. 13.21 Crores, it is expected that EDP would be able to pay Rs. 2.50 Crores to the consumers and the balance is proposed to be paid during the MYT Control Period. The detailed provision of interest on security deposit to be made in MYT Control Period is highlighted separately in the section of ARR for the MYT Control Period. The Commission is requested to approve the Interest on Security Deposit of Rs. 2.50 Crores actually estimated to be paid to the consumers for the year.

Commission Analysis:

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

The Commission has considered the security deposit amounts as submitted by the Petitioner to be reasonable for the year. The Commission has considered the average security deposit amount outstanding for consideration of the payment of the interest on security deposit for FY 2015-16. The Commission has considered the RBI Bank Rate as on 01st April 2015 i.e. 8.50% for calculation of the interest on security deposit and the detailed calculation is as follows:

Table 6.25: Interest on Security Deposit as calculated by the Commission for Review of FY 2015-16

(Rs. Crores)

S. No.	Description	FY 2015-16 (Submitted)	FY 2015-16 (As analyzed by Commission)
1	Opening Security Deposit	144.79	144.79
2	Add: Deposits during the year	21.31	21.31
3	Closing Security Deposit	166.10	166.10
4	**Average Security Deposit**	**155.45**	**155.45**
5	**Bank Rate (%age)**	**8.50%**	**8.50%**
6	**Interest on Security Deposit**	**13.21**	**13.21**

The Commission notes the submission of the Petitioner that it would be able to pay only Rs. 2.50 Crores to the consumers in FY 2015-16 and the rest of the amount has been provisioned to be paid during the MYT Control Period. The Commission accepts the proposal of the Petitioner to allow Rs. 2.50 Crores in Review of ARR of FY 2015-16. The pending amount due to be paid to the consumers for the past years from FY 2009-10 to FY 2015-16 has been provisioned separately, to be paid during FY 2016-17. The pending amount for FY 2015-16 is Rs. (13.21-2.50) = 10.71 Crores.

The Table below encapsulates the interest on security deposit as approved by the Commission for FY 2015-16.

Table 6.26: Interest on Security Deposit approved by the Commission for Review of FY 2015-16

(Rs. Crores)

Particulars	Estimates submitted in FY 15-16 Petition	Approved in Tariff Order dt. 10th April 2015	Submitted in APR	Approved in this Tariff Order
Interest on Security Deposit	14.84	14.01	2.50	2.50

The Commission allows the interest on security deposit of Rs. 2.50 Crores to be recovered as part of the Review of ARR for FY 2015-16. This should be paid to the eligible consumers and actual expenditure be shown at the time of True-up for FY 2015-16.

The pending interest on security deposit liable to be paid to the consumers from FY 2009-10 to FY 2015-16 has been provisioned separately and the same is to be paid to

the consumers during FY 2016-17. The provision to meet arrears of interest on security deposit has been discussed separately.

6.13. Return on Capital Base

Petitioner Submission:

Regulation 23 (2) and Regulation 24 of JERC Tariff Regulations 2009 provide for entitlement for Returns on Capital Base/ Net Fixed Assets by utility/licensee. Thus, in line with the Regulations and the methodology adopted by the Commission in its previous Order, the Department has calculated the return on capital base at 3%.

The Commission is requested to allow the Return on Net Fixed Assets at Rs. 9.47 Crores for FY 2015-16.

Commission Analysis:

EDP is entitled to return on capital base as per Regulation 23 (2) and Regulation 24 of JERC Tariff Regulations 2009.

The opening accumulated depreciation for FY 2015-16 has been considered as the closing accumulated depreciation amount for FY 2014-15 (as per the Review of FY 2014-15 as per the Tariff Order dated 10th April 2015). The consumer contribution amount as submitted by the Petitioner has been considered to be reasonable for the year. The return at 3% on net block of approved assets as per the provisions of the Regulations is as below:

Table 6.27: Return on Capital Base calculated by the Commission for Review of FY 2015-16 (Rs. Crores)

Sr. No.	Particulars	Submitted (FY 2015-16)	Approved (FY 2015-16)
1	Gross block at beginning of the Year/Opening GFA	633.98	611.59
2	Less: opening accumulated depreciation	300.55	305.49
3	Less: opening accumulated consumer contribution	17.71	17.71
4	**Net fixed assets at beginning of the year**	**315.72**	**288.39**
5	**Reasonable return @3% of NFA**	**9.47**	**8.65**

The Return on Capital Base as claimed and approved for the year is as follows:

Table 6.28: Return on Capital Base approved by the Commission for Review of FY 2015-16 (Rs. Crores)

Particulars	Estimates submitted in FY 15-16 Petition	Approved in Tariff Order dt. 10th April 2015	Submitted in APR	Approved in this Tariff Order
Return on Capital Base	16.21	8.89	9.47	8.65

The Commission considers the Return on Capital Base of Rs. 8.65 Crores as reasonable and approves the same for Review of ARR for FY 2015-16.

6.14. Provision for Bad and Doubtful Debts

Petitioner Submission:

The provision for bad debts has not been claimed by the Petitioner and it may be considered during the True-up of FY 2015-16 based on the audited financial statements.

Commission Analysis:

As specified in Regulation 28 of JERC Tariff Regulations 2009 (to be read with the format):

Quote *''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.	*Amount of receivable bad and doubtful debts (audited)*	
2.	*Provision made for debts in ARR*	

Unquote

JERC Tariff Regulations 2009 allow a provision for bad and doubtful debts up to 1% of receivables in the revenue requirement. It is seen that the licensee has not claimed any provision for bad and doubtful debts during Review of ARR for FY 2015-16. The Commission, has accordingly, not considered any bad and doubtful debts for Review of ARR for FY 2015-16 and will consider the same during True-up of FY 2015-16 based on the actual write-off of bad & doubtful debts in the audited financial statements for the year.

Table 6.29: Provision for Bad & Doubtful Debts approved by the Commission for Review of FY 2015-16 (Rs. Crores)

Particulars	Estimates submitted in FY 15-16 Petition	Approved in Tariff Order dt. 10th April 2015	Submitted in APR	Approved in this Tariff Order
Provision for Bad & Doubtful Debts	NIL	NIL	NIL	NIL

The Commission, therefore, considers NIL expenses on account of bad & doubtful debts for Review of ARR for FY 2015-16.

6.15. Revenue from Outside Sales/UI sales

Petitioner Submission:

The Petitioner has submitted that UI Sales was done to the extent of 24.56 MU that fetched an income of Rs. 1.17 Crores. The UI sales in the second half is considered to be NIL as the projections are made on MOD principle that considers no surplus and no deficit of power. The Petitioner has considered the same under the head of 'non-tariff income' and accordingly considered the same.

Commission Analysis:

The Petitioner has submitted UI under-drawal of 24.56 MU and revenue of Rs. 1.17 Crores as per actual for the first six months of FY 2015-16. The Commission has considered the submission of the Petitioner to be reasonable as regards the H1 UI sales and corresponding revenue from sale of power.

The Commission has applied merit order principles to project the energy requirement for H2 of FY 2015-16 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 for H2 of FY 2015-16.

Thus, the Commission considers the under-drawal for sale of 24.56 MU at Rs. 1.17 Crores as reasonable and approves the same for Review of ARR for FY 2015-16; subject to final adjustment at the time of True-up based on the audited accounts.

6.16. Non-Tariff Income

Petitioner Submission:

The Non-Tariff Income comprises metering, late payment charges, interest on staff loans, and income from trading, reconnection fee, and UI sales/Sales to Exchanges and miscellaneous income among others. The Non-Tariff Income approved by the Commission in the ARR for FY 2015-16 was Rs. 3.79 Crores.

In view of the UI sales being the major income which is Non-Tariff in nature as mentioned above, the Commission is requested to kindly allow Non-Tariff Income of Rs. 3.83 Crores for Review of FY 2015-16.

Commission Analysis:

The Commission has found the submission of the Petitioner under the head of 'Other Income' as reasonable and approves the same at Rs 2.66 Crores. This together with the 'Revenue earned from outside sales' approved above gives total approved sum of Rs. 3.83 Crores under the head of 'Non-Tariff Income'.

Table 6.30: Non-Tariff Income approved by the Commission for Review of FY 2015-16 (Rs. Crores)

Particulars	Estimates submitted in FY 15-16 Petition	Approved in Tariff Order dt. 10th April 2015	Submitted in APR	Approved in this Tariff Order
Non-Tariff Income (including revenue from outside sales)	3.79	3.79	3.83	3.83

The Commission considers the Non-Tariff Income of Rs. 3.83 Crores as reasonable and approves the same for Review of ARR for FY 2015-16.

6.17. Revenue at approved retail tariff for FY 2015-16

Petitioner Submission:

The Revenue from Tariff for FY 2015-16 approved by the Commission was Rs. 1,263.51 Crores as per Tariff Order dated 10th April 2015. The Revenue from Tariff for FY 2015-16 as per the revised estimates comes to Rs. 1,194.18 Crores (including FPPCA of Rs. 20.86 Crores and Rs. 30.11 Crores as 2.64% additional surcharge).

The Commission is requested to allow Revenue of Rs. 1194.18 Crores (including FPPCA of Rs. 20.86 Crores and Rs. 30.11 Crores as 2.64% additional surcharge).

Commission Analysis:

The Commission has considered the revenue for the year based on approved sales, connected load and number of consumers for FY 2015-16. The Commission has pro-rated the approved consumers, sales and connected load figures slab-wise in the same ratio as the slab-wise consumers, sales and connected load as submitted by the Petitioner. Based on this, the Commission has arrived at the revenue from tariff of Rs. 1143.26 Crores for Review of ARR for FY 2015-16.

The Commission has accepted the submission of the Petitioner for recovery of FPPCA charges of Rs. 20.86 Crores and has accordingly considered the same in the revenue stream.

Also, the Commission approves recovery from additional surcharge at 2.64% as Rs. 30.10 Crores towards the recovery of the past regulatory asset. The adjustment of the same towards the liquidation of the past regulatory asset has been discussed subsequently in this Tariff Order. The Commission, therefore, approves the revenue from existing tariff at Rs. 1194.23 Crores for FY 2015-16. The consumer-wise slab-wise revenue from existing tariff as approved by the Commission for FY 2015-16 is as follows:

Table 6.31: Revenue at Existing Tariff approved by the Commission for Review of FY 2015-16

(Rs. Crores)

S. No.	Category/ Consumption Slab	Energy Sales (MU)	Existing Tariff – FY 16		Revenue from Tariff	Surcharge @ 2.64%	Total
			Fixed Charges	Variable Charges			
1	**Domestic**						
	0 - 100	203.71	4.52	22.41	26.93	0.71	27.64
	101 - 200	149.39	2.49	24.65	27.13	0.72	27.85
	201 - 300	101.85	2.03	33.10	35.14	0.93	36.06
	>300	224.08	2.26	95.23	97.49	2.57	100.07
	OHOB	10.00	1.15	-	1.15	0.00	1.15
	Total	**689.02**	**12.45**	**175.39**	**187.84**	**4.93**	**192.77**
2	**Commercial**						
	0 - 100	28.96	0.69	12.31	13.00	0.34	13.34
	101 - 250	27.03	0.65	13.11	13.76	0.36	14.12
	> 250	137.06	2.99	71.96	74.95	1.98	76.93
	Total	**193.04**	**4.34**	**97.37**	**101.71**	**2.69**	**104.39**
3	**Agriculture#**						
	Small farmers	7.95	0.06	0.00	0.06	0.00	0.06
	Other farmers	48.68	1.75	0.00	1.75	0.00	1.75
	Total	**56.63**	**1.81**	**0.00**	**1.81**	**0.00**	**1.81**
4	**Public Lighting**						
	Total	**27.24**	**3.24**	**14.71**	**17.95**	**0.47**	**18.43**
5	**LT Industrial**						
	LT Industrial	169.01	0.67	86.20	86.87	2.29	89.16
	Water Tank	35.90	0.01	18.31	18.32	0.48	18.81
	Total	**204.92**	**0.68**	**104.51**	**105.19**	**2.78**	**107.97**
6	**Temporary supply – LT & HT**						
	Total	**8.00**	**0.00**	**7.56**	**7.56**	**0.20**	**7.76**
7	**HT 1 Industrial**						
	HT 1(a)	841.42	68.14	399.68	467.82	12.35	480.17
	HT 1(b)	73.12	6.09	34.73	40.82	1.08	41.90
	Total	**914.54**	**74.23**	**434.41**	**508.64**	**13.43**	**522.06**
8	**HT 2 - Government & water tank**						
	Total	**58.58**	**5.52**	**32.22**	**37.74**	**1.00**	**38.73**
9	**HT 3 - EHT**						
	Total	**320.44**	**22.62**	**152.21**	**174.83**	**4.62**	**179.44**
	Total of all categories	**2472.42**	**124.89**	**1018.38**	**1143.26**	**30.10**	**1173.37***

Note - * Including the FPPCA charges of Rs. 20.86 Crores for FY 2015-16, the total revenue from existing tariff is Rs. 1194.23 Crores for FY 2015-16

- The connected load for the agriculture category has been taken as 59538 HP and accordingly the revenue from this category is coming at Rs. 1.81 Crores as against Rs. 1.49 Crores submitted by the Petitioner

The Commission, therefore, considers the revenue from sale of retail power including FPPCA charges at Rs. 1194.23 Crores for FY 2015-16. The same would be subject to True-up based on the audited accounts for FY 2015-16.

6.18. Aggregate Revenue Requirement (ARR) for Review of FY 2015-16

Petitioner Submission:

The Aggregate Revenue Requirement (ARR) as approved by the Commission in the Tariff Order for FY 2015-16 was Rs. 1253.05 Crores. The Petitioner based on the revised estimates for FY 2015-16 requests the Commission to approve revised ARR of Rs. 1204.92 Crores for FY 2015-16. Consequent to the change of R&M expenses to Rs. 15.12 Crores from Rs. 16.99 Crores originally submitted in the Petition, the ARR has been changed to Rs. 1204.92 Crores from Rs. 1206.80 Crores originally submitted in the Petition.

Commission Analysis:

The Commission has considered and approved the Review of ARR for FY 2015-16 based on the items of expenditure discussed in the preceding sections and the same has been summarized in the following Table. The Commission approves the ARR at Rs. 1187.10 Crores for Review of ARR for FY 2015-16.

Table 6.32: ARR approved by the Commission for Review of FY 2015-16 (Rs. Crores)

Particulars	Estimates submitted in FY 15-16 Petition	Approved in Tariff Order dt. 10th April 2015	Submitted in APR	Approved in this Tariff Order
Cost of Power Purchase	1108.87	1035.63	1037.92	1029.33
Employee Expenses	80.91	78.22	80.32	78.22
A&G Expenses	5.76	5.68	11.50	5.68
R&M Expenses	18.35	18.35	15.12*	18.35
Depreciation	35.21	35.21	27.80	26.89
Interest & Finance Charges	24.87	24.87	24.12	21.31
Interest on Working Capital	-	-	-	-
Interest on CSD	14.84	22.36	2.50	2.50
Provision for Bad Debts	-	-	-	-
Return on NFA @ 3% of NFA	16.21	8.89	9.47	8.65
Provision to meet arrears of interest on SD	-	27.63	-	-
Total	**1305.02**	**1256.84**	**1208.75**	**1190.93**
Less: Non-Tariff Income (including revenue from outside sales/UI sales)	3.79	3.79	3.83	3.83
Aggregate Revenue Requirement (ARR)	**1301.23**	**1253.05**	**1204.92****	**1187.10**

Note - * R&M expenses revised downwards to Rs. 15.12 Crores from Rs. 16.99 Crores originally submitted in the Petition.

** Consequent to the change of R&M expenses to Rs. 15.12 Crores, the ARR has been changed to Rs. 1204.92 Crores from Rs. 1206.80 Crores originally submitted in the MYT Petition.

6.19. Revenue Gap/ (Surplus) for Review of FY 2015-16

Petitioner Submission:

The revenue gap calculated by the Petitioner on the basis of revised estimates for FY 2015-16 is Rs. 40.85 Crores. The above gap has been calculated without considering the 2.64% surcharge amount levied to consumers in FY 2015-16 as directed in the last Tariff Order. The Petitioner has submitted that the surcharge has been adjusted against the Regulatory Assets as per the previous Tariff Order. The Commission is requested to approve the above revenue gap for Review of FY 2015-16.

Commission Analysis:

The revenue gap approved for the year is Rs. 22.98 Crores on the basis of the approved ARR of Rs. 1187.10 Crores and revenue from existing tariff of Rs. 1164.12 Crores for FY 2015-16 (excluding surcharge of Rs. 30.10 Crores but including FPPCA charges of Rs. 20.86 Crores).

Table 6.33: Revenue Gap approved by the Commission for Review of FY 2015-16 (Rs. Crores)

Particulars	Estimates submitted in FY 15-16 Petition	Approved in Tariff Order dt. 10th April 2015	Submitted in APR	Approved in this Tariff Order
Aggregate Revenue Requirement	1301.23	1253.05	1204.92**	1187.10
Revenue from Sale of Power (Exc. Surcharge)	1213.10	1263.51	1164.07	1164.12
Revenue Gap/(Surplus)	**88.13**	**(10.46)**	**40.85**	**22.98**

** Consequent to the change of R&M expenses to Rs. 15.12 Crores, the ARR has been changed to Rs. 1204.92 Crores from Rs. 1206.80 Crores originally submitted in the Petition.

The revenue gap of Rs. 22.98 Crores (not considering the previous year(s) gap) has been considered approved for Review of FY 2015-16.

This gap has been carried forward to the next year i.e. FY 2016-17. This revenue gap is subject to further adjustment at the time of True-up based on the audited accounts.

The Commission, notes that the carrying cost as applicable upto FY 2015-16, would be assessed once all audited accounts for the pending years (upto FY 2015-16) are submitted before the Commission.

6.20. Regulatory Asset from FY 2009-10 to FY 2012-13 outstanding at the end of FY 2015-16

The Commission in the Tariff Order dated 12th June 2012, had created a regulatory asset for the period from FY 2009-10 to FY 2012-13 of Rs. 320.56 Crores in view of the accumulation of revenue gap due to load growth, increase in power purchase costs, and increase in other costs and no tariff revision since FY 2009-10. This regulatory asset had to be amortized over a period of three years starting from FY 2013-14.

Subsequently, the revenue gap was revised to Rs. 680.84 Crores in the Tariff Order dated 10th April 2013 (due to the True-up of FY 2009-10, True-up of FY 2010-11, Provisional True-up of FY 2011-12 and Review of FY 2012-13). The Commission while retaining the regulatory asset of Rs. 320.56 Crores as created in the Tariff Order dated 12th June 2012, advised the Petitioner to approach the Government of Puducherry to avail one-time support for the balance figure of Rs. 360.28 Crores. The Commission also approved a surcharge of 10% on the billed amount to all consumers over and above the tariff excluding OHOB and agriculture consumers. The surcharge was to be levied over a period of three years to liquidate the regulatory asset.

The regulatory asset amount was further revised to Rs. 608.46 Crores in the Tariff Order dated 10th April 2015, due to the final True-up of FY 2011-12 and FY 2012-13. The estimated recovery outstanding at the end of FY 2015-16 as analyzed in the Tariff Order dated 10th April 2015 led to a surcharge of 2.64% in FY 2015-16.

The recovery of the regulatory asset from the applicable surcharge has been shown separately and the same has not been adjusted in the revenue gap of the relevant year. The 10% surcharge collected from the consumers in FY 2013-14 and FY 2014-15 has been adjusted against the regulatory asset amount. Further, based on the 2.64% surcharge in FY 2015-16, the regulatory asset outstanding at the end of FY 2015-16 is as follows:

Table 6.34: Regulatory Asset amount outstanding at the end of FY 2015-16 (Rs. Crores)

Particulars	Approved in Tariff Order dt. 10th April 2015	Submitted in this Petition	Approved in this Tariff Order
FY 2009-10 (True-up)	58.02	58.02	58.02
FY 2010-11 (True-up)	93.94	93.94	93.94
FY 2011-12 (True-up)	348.96	348.96	348.96
FY 2012-13 (True-up)	107.54	107.54	107.54
Total Revenue Gap	**608.46**	**608.46**	**608.46**
Less: Government Support	360.28	360.28	360.28
Regulatory Asset	**248.18**	**248.18**	**248.18**
Recovery of Regulatory Asset from Consumers through Surcharge			
FY 2013-14 (True-up)	104.36	101.46	101.47
FY 2014-15	110.50	103.94	110.50*
Expected Recovery in FY 2015-16	33.32	30.11	30.10
Total Expected Regulatory Asset recovered at the end of FY 2015-16	248.18	235.51	242.07
Balance Regulatory Asset at the end of FY 2015-16	**-**	**12.67**	**6.11**

Note - * - The expected recovery for FY 2014-15 has been maintained as per the Review for the year as per Tariff Order dated 10th April 2015

As can be seen from the above Table, against actual regulatory asset of Rs. 248.18 Crores (based on the audited accounts), actual recovery in FY 2013-14 is Rs. 101.47 Crores and expected recovery in FY 2014-15 and FY 2015-16 as approved by the Commission is Rs. 110.50 Crores and Rs. 30.10 Crores respectively. Therefore, at the end of FY 2015-16 Rs. 6.12 Crores is pending recovery. The balance regulatory asset amount of Rs. 6.11 Crores has been carried forward and the same would be recovered during the ensuing year i.e. FY 2016-17. The final adjustment of the regulatory asset outstanding would be done based on the final True-ups of FY 2014-15 and FY 2015-16.

7. Annual Revenue Requirement (ARR) for MYT Control Period FY 2016-17 to FY 2018-19

7.1. Applicable Provisions of MYT Regulations 2014

The ARR components for the MYT Control Period FY 2016-17 to FY 2018-19 are to be projected as per the following provisions of Regulation 6 of JERC (Multi Year Distribution Tariff) Regulations 2014:

Quote

6. ARR Forecast

6.1 "The Applicant shall, based on Business Plan as approved by the Commission by Order, submit the forecast of Aggregate Revenue Requirement and expected revenue from tariff, for the Control Period by a Petition in accordance with the JERC (Terms and Condition for determination of tariff), Regulations 2009 by 30th November of the year prior to the commencement of the Control Period and accompanied by such fees payable, as specified in JERC (Conduct of Business) Regulations, 2009.

6.2 The forecast of Aggregate Revenue Requirement shall be developed using the assumptions relating to the behavior of individual variables that comprise the Aggregate Revenue Requirement during the Control Period.

6.3 The forecast of expected revenue from tariff and charges shall be developed based on the following:

a) Estimates of quantum of electricity to be supplied to consumers and wheeled on behalf of Distribution system users for each financial year within the Control Period, and;
b) Prevailing tariff at the date of making Regulations;"

Unquote

7.2. Approach for approval of Aggregate Revenue Requirement (ARR) for MYT Control Period

This Chapter discusses in detail the individual elements constituting the Aggregate Revenue Requirement for MYT Control Period from FY 2016-17 to FY 2018-19. The following sections explain in detail the various elements from FY 2016-17 to FY 2018-19:

- Determination of Aggregate Revenue Requirement by taking the approved figures in the Business Plan Order in Petition No. 181/2015 dated 4th December 2015 the following:
  i. Energy Sales
  ii. Distribution Loss and Energy Requirement

iii. AT&C Losses
iv. Power Purchase Sources

- Determination of Aggregate Revenue Requirement by forecasting the following costs, other income & returns:
  i. Power Purchase Cost
  ii. Employee Cost
  iii. Repairs & Maintenance Cost
  iv. Administrative & General Expenses
  v. Depreciation
  vi. Interest on Normative Loan
  vii. Interest on Working Capital
  viii. Interest on Security Deposit
  ix. Provision for Bad Debts
  x. Return on Equity
  xi. Non-Tariff Income

The Commission has already issued the Business Plan Order for the 1st MYT Control Period on 4th December 2015. The Commission accordingly has appropriately considered the various components approved in the Business Plan while finalizing various components of the ARR in this Order.

7.3. Consumers and Energy Sales

Petitioner Submission:

The Petitioner has submitted that the Commission had projected the sales for the Control Period considering FY 2014-15 as the base year as against the FY 2015-16 as per the MYT regulations in the Business Plan Order approved by the Commission for the MYT period. The Commission had considered 2479.38 MU as the provisional actual sales for FY 2014-15 whereas the provisional actual sales are 2366.31 MU. This has resulted in approving higher sales during the Control Period by the Commission. The Petitioner has requested the Commission to re-consider the sales for the Control Period by considering the base year as FY 2014-15.

Likewise, the Petitioner has requested the Commission to re-consider the approval of the number of consumers for the Control Period considering the base year as FY 2014-15.

Commission Analysis:

The Commission has carried out detailed analysis of the consumer category-wise energy sales and consumers for each year of the Control Period in the Business Plan Order dated 4th December 2015.

The Commission notes the submission of the Petitioner as regards the change in provisional sales and consumer figures for FY 2014-15 and the claim of the Petitioner to revise the sales and consumers for the Control Period based on the changed figures of FY 2014-15. The Commission, in this regard, notes that the audit of FY 2014-15 has still not been completed and the data being reported is provisional. The Commission, during the approval of the Business Plan Order, in the interest of all stakeholders, had taken the best available actual data (though not audited) of FY 2014-15 as submitted by the Petitioner for approval of sales for the Control Period FY 2016-17 to FY 2018-19. The Commission had accepted the submission of the Petitioner for provisional actual sales and consumers for FY 2014-15 at the time of Business Plan filing to arrive at the trajectory for the Control Period (other than unmetered categories which were approved on normative basis). The Commission, therefore, does not see any reason to revise the trajectory of the energy sales and consumers for the Control Period.

The Commission, directs the Petitioner to improve data quality reporting and not change its submission during the short intervening period between Business Plan approval and MYT Order. The Commission, therefore, maintains the trajectory of the energy sales and consumers for the Control Period as approved in the Business Plan Order dated 4th December 2015.

The category-wise energy sales for each year of the Control Period as approved in the Business Plan Order dated 4th December 2015 is as below.

Table 7.1: Energy Sales approved by the Commission for the Control Period in Business Plan Order (MU)

S. No	Consumer Category	FY 14-15	FY 2016-17		FY 2017-18		FY 2018-19	
		As considered	Submitted	Approved	Submitted	Approved	Submitted	Approved
1	Domestic	692.00	722.80	819.46	763.70	891.74	807.00	970.39
2	Hut services	10.38	13.80	10.38	13.80	10.38	13.80	10.38
3	Commercial	188.00	221.70	207.32	232.80	217.71	244.50	228.62
4	Agriculture	57.00	57.00	57.00	57.00	57.00	57.00	57.00
5	Public lighting	26.00	29.80	28.17	31.10	29.32	32.30	30.51
6	LT Industrial	162.00	238.70	184.77	264.90	197.32	294.00	210.73
7	Water Tanks	37.00	65.50	39.25	67.40	40.43	69.50	41.64
8	Temporary Supply	14.00	-	-	-	-	-	-
9	HT Industrial (HT 1)	898.00	1065.50	1008.99	1129.50	1069.53	1197.20	1133.70
10	HT Govt. Establishment (HT 2)	60.00	58.10	65.33	61.60	68.18	65.30	71.14
11	HT EHT Industrial (HT 3)	335.00	389.00	376.41	412.40	398.99	437.10	422.93
	Total	**2479.38**	**2861.90**	**2797.07**	**3034.20**	**2980.60**	**3217.70**	**3177.04**

The category-wise consumers approved by the Commission for each year of the Control Period as per the Business Plan Order dated 4th December 2015 is as below.

Table 7.2: Consumers as approved by the Commission for the Control Period in Business Plan Order

S. No.	Consumer Category	FY 14-15	FY 2016-17		FY 2017-18		FY 2018-19	
		As considered	Submitted	Approved	Submitted	Approved	Submitted	Approved
1	Domestic	281766	308151	307421	322762	321112	338065	335412
2	Hut services	35539	35539	35539	35539	35539	35539	35539
3	Commercial	46511	49997	49754	51890	51460	53854	53224
4	Agriculture	6836	6836	6836	6836	6836	6836	6836
5	Public Lighting	49891	50521	50824	50991	51297	51465	51774
6	LT Industrial	6314	6632	6566	6763	6695	6897	6827
7	Water Tanks	110	117	117	121	120	125	124
8	Temporary Supply	-	-	-	-	-	-	-
9	HT Industrial (HT 1)	415	442	443	456	457	471	472
10	HT Govt. Establishment (HT 2)	51	56	56	60	60	63	63
11	HT EHT Industrial (HT 3)	7	7	7	8	8	8	8
	Total	**427440**	**458298**	**457562**	**475426**	**473584**	**493323**	**490279**

7.4.Connected Load

Petitioner Submission:

The Petitioner has made the same submission as in the Business Plan Petition for the connected load for each consumer category in the MYT Petition.

Commission Analysis:

The detailed analysis of the consumer-wise connected load has been carried out in the Business Plan Order dated 4th December 2015. The connected load for each consumer category as per the Business Plan Order dated 4th December 2015 is as follows:

Table 7.3: Connected load approved by the Commission for Control Period in Business Plan Order (kW)

S. No.	Consumer Category	FY 14-15	FY 2016-17		FY 2017-18		FY 2018-19	
		As considered	Submitted	Approved	Submitted	Approved	Submitted	Approved
1	Domestic	4,64,613	5,06,829	5,06,829	5,30,206	5,30,206	5,54,691	554691
2	Hut services	2,843	2,843	2,843	2,843	2,843	2,843	2843
3	Commercial	97,345	1,09,627	1,09,627	1,19,092	1,19,092	1,30,876	130876
4	Agriculture	44,654	44,654	44,654	44,654	44,654	44,654	44654
5	Public lighting	5,971	6,058	6,058	6,119	6,119	6,181	6181
6	LT Industrial & Water Tanks	1,16,954	1,22,804	1,22,804	1,25,234	1,25,234	1,27,718	127718
7	HT Industrial (HT 1)	3,12,731	3,33,098	3,33,098	3,44,093	3,44,093	3,61,298	361298
8	HT Govt. Establishment (HT 2)	22,918	27,731	27,731	30,504	30,504	32,029	32029
9	HT EHT Industrial (HT 3)	1,04,483	1,15,167	1,15,167	1,20,912	1,20,912	1,26,958	126958
	Total	**11,72,512**	**12,68,811**	**12,68,811**	**13,23,657**	**13,23,657**	**13,87,248**	**13,87,248**

7.5.Intra-State Transmission and Distribution Losses

Petitioner Submission:

The Petitioner has submitted that the utility has been achieving a significant reduction in distribution losses, during recent years. These efforts shall be continued and enhanced. However, the loss reduction is a slow process; as the loss levels come down further reduction in loss becomes difficult to a large extent. Since the utility has achieved a distribution loss of 11.95%, loss reduction trajectory cannot be considered at the same rate considered previously. The Petitioner has submitted that the Commission has taken note of the difficulties mentioned by the Petitioner in the Business Plan and has considered loss reduction of 0.25% every year during the Control Period. The Petitioner had submitted T&D loss of 11.50% for FY 2016-17, 11.25% for FY 2017-18 and 11.00% for FY 2018-19 in the Business Plan Petition and has retained its submission in the MYT Petition.

Commission Analysis:

The Commission has taken note of the difficulties expressed by the Petitioner and considered a reduction of 0.25% for the T&D loss trajectory for the Control Period to be reasonable over the losses approved for FY 2015-16 as per the Tariff Order dated 10th April 2015.

As noted in the Business Plan Order dated 4th December 2015-

Quote

'' In the absence of energy audit as specified in Regulation 15 of Tariff Regulations, 2009, the Commission for the purpose of determination of ARR for FY 2015-16 in the Order dated April 10th 2015, had approved the T&D loss level at 11.75% for FY 2015-16, with 0.25% reduction over the approved estimated losses for FY 2014-15. The Commission has taken note of the difficulties expressed by the Petitioner and considered a reduction of 0.25% for the T&D loss trajectory for the Control Period to be reasonable.

The Commission, has further taken note of the submission of the Petitioner while detailing the benefits of the proposed capex for transmission strengthening schemes under the JICA loan that transmission loss would be reduced from 2.58% in FY 2016-17 to 2.01% in FY 2020-21. The Commission has also noted that the Petitioner has proposed system improvement schemes (under distribution schemes) for reduction of T&D losses, besides other distribution schemes. The Commission expects that with such huge capex being undertaken, the Petitioner should be able to achieve the T&D loss trajectory as set out in this Business Plan Order for the Control Period FY 2016-17 to FY 2018-19.''

Unquote

In view of the above, the Commission has approved the below mentioned T&D loss trajectory for the Control Period:

Table 7.4: T&D Loss Trajectory approved by the Commission as per the Business Plan Order (%)

Particulars	FY 15-16	FY 2016-17		FY 2017-18		FY 2018-19	
	Approved	Submitted	Approved	Submitted	Approved	Submitted	Approved
T&D Loss	11.75%	11.50%	11.50%	11.25%	11.25%	11.00%	11.00%

The gain/loss would be computed as per the approved trajectory of the T&D losses to be done in accordance with the Regulation 10 and 11 of the MYT Regulations 2014.

7.6.Energy Efficiency

Petitioner Submission:

The Petitioner in the Business Plan Petition, had submitted that it is implementing DSM based efficient lighting programme (DELP) under demand side management programme in the UT of Puducherry along with Energy Efficiency Services Limited (EESL). The Commission has approved the implementation of the scheme vide Petition no. 128/2014, Order dated 25th April 2014. Bureau of Energy Efficiency (BEE) has carried out Monitoring and Verification of DELP scheme by appointing Energo Engineering Projects Limited (EEPL) and the final report has been submitted to BEE. Based on the report, energy savings of 40.11 MUs annually were considered as energy savings during the Control Period. The Commission had considered the submission of the Petitioner to be reasonable and approved the same at the time of approval of the Business Plan Order.

Commission Analysis:

The Commission at the time of approval of the Business Plan Order dated 4th December 2015, had made note of the submission of the Petitioner and had considered the same to be reasonable. Accordingly, the Commission has approved energy savings of 40.11 MU annually for the Control Period to be reasonable. Same has been considered by the Commission while arriving at the energy requirement at the periphery of ED-Puducherry.

7.7. Aggregate Technical and Commercial (AT&C) Loss

Petitioner Submission:

The Petitioner has noted that the Commission as per its Business Plan Order dated 4th December 2015 had approved 100% collection efficiency by the end of the Control Period. The Petitioner has submitted that the trajectory approved by the Commission seems to be on the higher side and stringent in nature. The Petitioner has requested the Commission to increase the collection efficiency gradually and allow achievement of 97% collection efficiency by the end of the Control Period instead of 100%. It is submitted that many risks are associated with the retail supply business whereby different categories of consumers are involved. Therefore, achieving 100% collection efficiency becomes difficult considering that there are different consumers with different social status and should be targeted gradually. Therefore, the Petitioner has requested the Commission to consider the revised collection efficiency and AT&C loss for the Control Period. The collection efficiency now proposed by the Petitioner is 95% for FY 2016-17, 96% for FY 2017-18 and 97% for FY 2018-19.

The Commission in the Business Plan Order had approved AT&C loss of 13.27% for FY 2016-17, 12.14% for FY 2017-18 and 11.00% for FY 2018-19. The revised AT&C loss now proposed by the Petitioner is 15.93% for FY 2016-17, 14.80% for FY 2017-18 and 13.67% for FY 2018-19.

Commission Analysis:

The Commission retains its approval as in the Business Plan Order dated 4th December 2015.

The relevant extract of the Business Plan Order is reproduced below:

Quote

'' The Commission has noted the submission of the Petitioner and is extremely concerned about the very low levels of collection efficiency being reported and thereby very high AT&C losses.

The Commission has noted that the Petitioner has considered collection efficiency of 92.65% for FY 2016-17, 92.96% for FY 2017-18 and 93.26% for FY 2018-19. The Commission does not find such low levels of collection efficiency acceptable and directs the Petitioner to significantly improve its collection efficiency figures.

The Commission, while fixing the collection efficiency for the Control Period, expects the Petitioner to achieve 100% collection efficiency by the end of the Control Period i.e. FY 2018-19.

Based on the approved T&D loss levels, Commission approves AT&C loss of 13.27% for FY 2016-17 (collection efficiency of 98.00%), AT&C loss of 12.14% for FY 2017-18 (collection efficiency of 99.00%) and AT&C loss of 11.00% for FY 2018-19 (collection efficiency of 100%).

The Petitioner is expected to initiate efforts to improve collection efficiency and submit quarterly status report in this regard before the Commission."

Unquote

Table 7.5: AT&C Losses approved by the Commission for the Control Period (%)

S. No.	Particulars	FY 2016-17		FY 2017-18		FY 2018-19	
		Submitted	Approved	Submitted	Approved	Submitted	Approved
1	T&D Losses (%)	11.50%	11.50%	11.25%	11.25%	11.00%	11.00%
2	**Collection Efficiency (%)**	**95.00%**	**98.00%**	**96.00%**	**99.00%**	**97.00%**	**100.00%**
3	**AT&C Losses (%)**	**15.93%**	**13.27%**	**14.80%**	**12.14%**	**13.67%**	**11.00%**

The Commission, notes, that the computation of the gain/loss as per Regulation 10 and 11 of the MYT Regulations 2014 would be done on the approved trajectory of T&D losses.

7.8.Energy Balance

Petitioner Submission:

The Petitioner has submitted that while calculating energy balance of the utility, the UI sale has not been projected for the Control Period. The sales to its own consumers and the estimated distribution loss envisaged during the MYT Control Period is considered to determine the power requirement to meet the demand of its own consumers.

Based on the approved sales and T&D losses during the MYT Control Period, the energy requirement at the periphery has been drawn. The energy availability has been drawn based on the gross energy purchase and external losses incurred. The Petitioner, now at the time of MYT filing has submitted net energy availability of 3115.22 MU for FY 2016-17, 3313.23 MU for FY 2017-18 and 3524.64 MU for FY 2018-19 based on the sales, T&D losses and energy savings approved by the Commission in the Business Plan Order dated 4th December 2015. The Commission had approved the same energy availability at the time of issuance of the Business Plan Order.

Commission Analysis:

Based on the approved sales, T&D losses and energy savings approved by the Commission in the Business Plan Order dated 4th December 2015, the energy requirement at the periphery has been estimated.

Merit order principles have been adopted for estimating the energy requirement for each year of the Control Period 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 each year of the Control Period.

The Commission has considered the gross power purchase as per the analysis of the Commission. The detailed analysis of the power purchase from the different sources has been discussed in the next paragraph of this Order. The external losses have been approved as mentioned in the next section of this Order. The availability has been approved corresponding to meet the requirement within the territory.

The energy balance, therefore, approved by the Commission for the MYT Control Period FY 2016-17 to FY 2018-19 is as below.

Table 7.6: Energy Balance approved by the Commission for the Control Period

S. No.	Particulars	FY 2016-17		FY 2017-18		FY 2018-19	
		Submitted	Approved	Submitted	Approved	Submitted	Approved
	ENERGY REQUIREMENT						
1	Sales within UT (MU)	2797.07	2797.07	2980.60	2980.60	3177.04	3177.04
2	Savings under DELP (MU)	40.11	40.11	40.11	40.11	40.11	40.11
3	**Total Sales (MU)**	**2756.97**	**2756.97**	**2,940.49**	**2,940.49**	**3,136.93**	**3,136.93**
4	**Loss (%)**	**11.50%**	**11.50%**	**11.25%**	**11.25%**	**11.00%**	**11.00%**
	Loss (MU)	358.25	358.25	372.74	372.74	387.71	387.71
5	Sales to common pool consumers/UI	-	-	-	-	-	-
6	**Energy Requirement at periphery (MU)**	**3115.22**	**3115.22**	**3313.23**	**3313.23**	**3524.64**	**3524.64**
	ENERGY AVAILABILITY						
1	Gross Energy Purchase (MU)	3260.70	3260.60	3468.91	3468.78	3691.23	3691.08
2	External Losses (MU)	145.48	145.38	155.68	155.55	166.58	166.44
3	**Net Energy Availability (MU)**	**3115.22**	**3115.22**	**3313.23**	**3313.23**	**3524.64**	**3524.64**

7.9.Power Purchase Quantum & Cost

Petitioner Submission:

The Petitioner has submitted that it meets its total energy requirement from allocation from the Central Generating Stations (CGS) and state utilities like TANGEDCO, KSEB and PPCL. PPCL is a generating company within the UT of Puducherry catering to the requirement of Karaikal region. KSEB supplies for Mahe region under the UT of Puducherry.

For estimating the power purchase cost for the Control Period, MOD principles have been considered. While full fixed (capacity) charges have been considered for all the plants, the variable charges corresponding to the cheaper sources of power have been considered. Variable charges have not been considered in respect of energy not scheduled for power purchase.

The Commission in the Business Plan Order dated 4th December 2015, had not approved the power purchase cost for the Control Period and approved only the sources of power purchase for the utility.

The Commission has also considered following plants which became operational in FY 2015-16 for projection during the Control Period.

i. Kudankulam Nuclear Power Plant (2000 MW)
ii. NLC Tuticorin project/ NTPL (1000MW)
iii. NLC TPS II Expansion (500MW)

Following assumptions have been considered for projecting the quantum and cost of power purchase:

- ***Share Allocation:*** The Petitioner 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/2015 dated 24.02.2015, effective from 00:00 Hrs of 26-02-2015.
- ***Fixed Charges:*** The Tariff Regulations for the tariff period FY 2014-19 have recently been notified by CERC. However, CERC has not issued the Tariff Orders for the respective period for many of the central generating stations based on the new regulations. In absence of the Tariff Orders, EDP has considered the Annual Fixed Charges of FY 2015-16 (H1 actuals) as base year for each generating station for the purpose of estimation of the fixed charges and the same has not been escalated for projections of Fixed Cost for the Control Period.
- ***Variable Charges:*** EDP has considered the actual average variable cost of H1 of FY 2015-16 for consideration of per unit variable charges for various plants and has not escalated the cost for projections during the Control Period.
- No other costs such as ED, cess, Incentive etc .and supplementary charges are considered during MYT Control Period and may be considered at the time of True-up
- EDP has considered the nuclear plants, as 'must run' and has not subjected them to merit Order dispatch. Also, TANGEDCO (Karaikal), KSEB and PPCL have been considered as must run and not subject to MOD principles.
- For determining the power purchase cost, MOD 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 UT has been calculated from the plants at the top of the merit Order.

- Fixed Charges from all the generating stations (irrespective of the merit Order) have been considered for arriving at the power purchase cost.
- ***UI Over-drawal/ Under-drawal:*** As per the MOD principles adopted for estimating the energy requirement for the Control Period, no surplus sale of power has been considered for the Control Period and the corresponding power purchase to meet the requirement. The UI over-drawal has not been considered for the Control Period. Further, the UI over-drawal/ under-drawal quantum and amount would be submitted at the time of True-up based on the actual performance during the year based on the actual UI bills.
- ***Inter-state losses:*** PGCIL losses have been assumed at 5% and at 4% for TNEB. For PPCL and KSEB the external losses have been considered as nil as they are within the periphery of the licensee area.
- ***Transmission Charges:*** The Petitioner has considered the transmission charges for FY 2015-16 as a base rate and has accordingly calculated the transmission charges per unit for PGCIL and has escalated the same by 5% y-o-y. For POSOCO and PCKL charges, the charges for FY 2015-16 have been escalated by 5% y-o-y for the Control Period.
- ***RPO Cost for the Control Period:***
    - As per Joint Electricity Regulatory Commission for State of Goa & Union Territories (Procurement of Renewable Energy) Regulations, 2010 and as amended on 19th February 2013, quantum of Renewable Purchase Obligations has been specified for each year whereby each distribution licensee needs to purchase electricity (in kWh) from renewable energy sources, at a defined minimum percentage of the total consumption of all the consumers in its area during a year.
    - The Petitioner has submitted that it is obliged to comply with the Renewable Purchase Obligation and therefore has projected the RPO cost for MYT Control Period.
    - The Petitioner has further submitted that the RPO can be met either through the purchase of energy from renewable sources or through REC. However, considering the availability of the Renewable Power, EDP has proposed to procure REC against the RPO.
- The RPO cost for the Control Period based on the percentage of solar and non-solar RPO specified by JERC is tabulated below considering the floor price of solar and non-solar RECs. Prevailing floor price of solar RECs is Rs. 3500/REC and for

non-solar Rs. 1500/REC.

Table 7.7: RPO Cost for the Control Period submitted by the Petitioner

Year	Sales	Solar Obligation	Non-solar obligation	Solar PO	Non-solar PO	Adjustments against excess compliance of solar RPO till FY 2015-16 end	Solar REC Cost	Non-solar REC cost	Total Cost
	(MUs)	%	%	(MUs)	(MUs)	(MUs)	(Rs./REC)	(Rs./REC)	(Rs. Crs.)
FY 2016-17	2,797.08	1.15%	2.80%	32.17	78.32	(2.00)	3500	1500	22.31
FY 2017-18	2,980.60	1.50%	2.80%	44.71	83.46	-	3500	1500	28.17
FY 2018-19	3,177.04	1.85%	2.80%	58.78	88.96	-	3500	1500	33.91

The Petitioner has further submitted that in line with the suggestion of the Commission, it is making arrangements to purchase physical solar power instead of REC to meet its solar obligations. The purchase of power from those plants will be included in the ARRs of the subsequent years, once the plants are commissioned and they start supplying power to the utility.

The details of the power purchase available vis-à-vis power procured under MOD principle in the MYT Control Period as well as the power procurement cost including the transmission charges, RPO Charges and rebate is as follows:

Table 7.8: Power Available and Power Procurement (MOD) for the Control Period submitted by the Petitioner

S. No.	Source	Capacity (MW)	Firm allocation to Licensee		Avail. / PLF (in %)	Gross Generation (MU)	Aux consumption (%)	Net Generation (MU)	External losses (%)	Energy recd. by Licensee (MU)	Power Available			Power Procurement (MoD)		
											Net MUs at distribution periphery					
			%	MW							2016-17	2017-18	2018-19	2016-17	2017-18	2018-19
A	**Central Sector Power Stations**															
I	**NTPC**	-		-	-			-	5%	**1,306.39**	**1,306.39**	**1,306.39**	**1,306.39**	**984.06**	**1,181.75**	**1,374.77**
	RSTPS Stage I & II	*2,100*	*4.23*	*88.83*	*90.36*	*16,622.63*	*6.50*	*15,542.15*	5%	624.73	624.73	624.73	624.73	544.49	657.43	657.43
	RSTPS Stage -III	*500*	*4.50*	*22.50*	*90.54*	*3,965.65*	*6.50*	*3,707.88*	5%	158.56	158.56	158.56	158.56	(0.00)	84.73	166.85
	Talcher Stage- II	*2,000*	*3.28*	*65.60*	*85.47*	*14,974.34*	*10.50*	*13,402.04*	5%	417.72	417.72	417.72	417.72	439.59	439.59	439.59
	Simhadri Stage- II	*1,000*	*1.63*	*16.30*	*82.62*	*7,237.51*	*6.00*	*6,803.26*	5%	105.38	105.38	105.38	105.38	(0.00)	(0.00)	110.89
II	***NLC***					-		-	5%	**1,022.41**	**1,022.41**	**1,022.41**	**1,022.41**	**1,001.94**	**1,001.94**	**1,020.40**
	NLC TPS II Stage I	*630*	*13.07*	*82.34*	*86.77*	*4,788.66*	*12.00*	*4,214.02*	5%	523.38	523.38	523.38	523.38	550.77	550.77	550.77
	NLC TPS II Stage II	*840*	*3.69*	*31.00*	*86.59*	*6,371.64*	*10.00*	*5,734.47*	5%	201.08	201.08	201.08	201.08	211.60	211.60	211.60
	NLC TPS I (Expn)	*420*	*4.07*	*17.09*	*88.52*	*3,256.83*	*8.50*	*2,980.00*	5%	115.25	115.25	115.25	115.25	121.29	121.29	121.29
	NLC TPS II (Expn)	*500*	*3.53*	*17.65*	*85.00*	*3,723.00*	*10.00*	*3,350.70*	5%	112.40	112.40	112.40	112.40	118.28	118.28	118.28
	NTPL	*1,000*	*1.08*	*10.80*	*85.00*	*7,446.00*	*8.00*	*6,850.32*	5%	70.30	70.30	70.30	70.30	0.00	0.00	18.46
III	***NPCIL***					-		-	5%	**553.59**	**553.59**	**553.59**	**553.59**	**582.57**	**582.57**	**582.57**
	MAPS	*440*	*1.79*	*7.88*	*63.70*	*2,455.25*	*10.00*	*2,209.73*	5%	37.59	37.59	37.59	37.59	39.55	39.55	39.55
	KAPS Stage I U1&2	*440*	*4.20*	*18.48*	*75.24*	*2,900.05*	*10.00*	*2,610.05*	5%	104.17	104.17	104.17	104.17	109.62	109.62	109.62
	KAPS Stage I U3&4	*440*	*3.75*	*16.50*	*73.28*	*2,824.50*	*10.00*	*2,542.05*	5%	90.59	90.59	90.59	90.59	95.33	95.33	95.33
	Kudankulam	*2,000*	*3.35*	*67.00*	*64.00*	*11,212.80*	*10.00*	*10,091.52*	5%	321.25	321.25	321.25	321.25	338.07	338.07	338.07
IV	***Others***					-		-		**440.56**	**440.56**	**450.71**	**461.17**	**458.28**	**468.80**	**479.64**
	TNEB (Pondy)					-		-	4%	-						
	TNEB (Karaikal)					-		-	4%	296.96	296.96	305.86	315.04	309.33	318.61	328.17
	Vallur Thermal Project	*1,000*	*1.64*	*16*	*80.00*	*7,008.00*	*6.50*	*6,552.48*	5%	102.12	102.12	102.12	102.12	107.46	107.46	107.46
	KSEB								0%	41.49	41.49	42.73	44.02	41.49	42.73	44.02
B	**Within State Generations**									-						
I	**PPCL**	33	*100*	*33*	86.46	*246.15*	*5.00*	*233.84*	0%	233.84	233.84	233.84	233.84	233.84	233.84	233.84
E	**Total**	-	-		-			-		**3,556.79**	**3,556.79**	**3,566.95**	**3,577.40**	**3,260.70**	**3,468.91**	**3,691.23**

The power procurement cost for the Control Period is as follows:

Table 7.9: Power Procurement Cost (MOD) for the Control Period submitted by the Petitioner

S. No.	Source	Purchase (MU)			VC (Ps./kWh)			VC (Rs.Cr.)			FC (Rs.Cr.)			TC (Rs.Cr.)		
		2016-17	2017-18	2018-19	2016-17	2017-18	2018-19	2016-17	2017-18	2018-19	2016-17	2017-18	2018-19	2016-17	2017-18	2018-19
A	**Central Sector Power Stations**															
I	**NTPC**	**984.06**	**1,181.75**	**1,374.77**	**198.83**	**206.76**	**213.11**	**195.66**	**244.34**	**292.98**	**88.65**	**88.65**	**88.65**	**284.31**	**332.99**	**381.62**
	RSTPS Stage I & II	544.49	657.43	657.43	246.15	246.15	246.15	134	162	162	32	32	32	166	194	194
	RSTPS Stage -III	(0.00)	84.73	166.85	246.37	246.37	246.37	(0)	21	41	9	9	9	9	30	50
	Talcher Stage- II	439.59	439.59	439.59	140.22	140.22	140.22	62	62	62	36	36	36	97	97	97
	Simhadri Stage- II	(0.00)	(0.00)	110.89	256.12	256.12	256.12	(0)	(0)	28	12	12	12	12	12	40
II	***NLC***	**1,001.94**	**1,001.94**	**1,020.40**	**230.16**	**230.16**	**230.77**	**230.61**	**230.61**	**235.48**	**73.32**	**73.32**	**73.32**	**303.93**	**303.93**	**308.80**
	NLC TPS II Stage I	550.77	550.77	550.77	233.57	233.57	233.57	129	129	129	34	34	34	163	163	163
	NLC TPS II Stage II	211.60	211.60	211.60	233.58	233.58	233.58	49	49	49	13	13	13	62	62	62
	NLC TPS I (Expn)	121.29	121.29	121.29	220.29	220.29	220.29	27	27	27	18	18	18	45	45	45
	NLC TPS II (Expn)	118.28	118.28	118.28	218.29	218.29	218.29	26	26	26	6	6	6	32	32	32
	NTPL	0.00	0.00	18.46	264.01	264.01	264.01	0	0	5	2	2	2	2	2	7
III	***NPCIL***	**582.57**	**582.57**	**582.57**	**324.43**	**324.43**	**324.43**	**189.01**	**189.01**	**189.01**	**-**	**-**	**-**	**189.01**	**189.01**	**189.01**
	MAPS	39.55	39.55	39.55	202.69	202.69	202.69	8	8	8				8	8	8
	KAPS Stage I U1&2	109.62	109.62	109.62	298.37	298.37	298.37	33	33	33				33	33	33
	KAPS Stage I U3&4	95.33	95.33	95.33	298.37	298.37	298.37	28	28	28				28	28	28
	Kudankulam	338.07	338.07	338.07	354.48	354.48	354.48	120	120	120				120	120	120
IV	***Others***	**458.28**	**468.80**	**479.64**	**327.62**	**328.49**	**329.34**	**150.14**	**154.00**	**157.97**	**22.76**	**22.76**	**22.76**	**172.90**	**176.75**	**180.72**
	TNEB (Pondy)				-	-	-									
	TNEB (Karaikal)	309.33	318.61	328.17	347.00	347.00	347.00	107	111	114	-	-	-	107	111	114
	Vallur Thermal Project	107.46	107.46	107.46	201.41	201.41	201.41	22	22	22	20	20	20	41	41	41
	KSEB	41.49	42.73	44.02	510.00	510.00	510.00	21	22	22	3	3	3	24	25	25
B	**Within State Generations**															
I	**PPCL**	233.84	233.84	233.84	350.51	350.51	350.51	82	82	82	19	19	19	101	101	101
C	**OTHER CHARGES**													**67.78**	**71.38**	**75.17**
I	PGCIL Transmission Charges, Wheeling & Other Charges													66.59	70.13	73.87
	POSOCO													0.81	0.85	0.89
	PCKL													0.38	0.40	0.42
D	RPO Compliance Cost													22.31	28.17	33.91
E	Rebate													(17.03)	(18.12)	(19.28)
F	**Total**	**3,260.70**	**3,468.91**	**3,691.23**	**259.88**	**259.42**	**259.37**	**847.38**	**899.91**	**957.39**	**204.14**	**204.14**	**204.14**	**1,124.57**	**1,185.47**	**1,251.34**

The Petitioner has requested the Commission to approve the total quantum and cost of power purchase for the Control Period based on MOD principles as shown in the Tables above.

Commission Analysis:

The Petitioner meets its total energy requirement from its allocation from the Central Generating Stations (CGS) and state utilities like TANGEDCO, KSEB and PPCL. PPCL is a generating company within the UT of Puducherry catering to the requirement of Karaikal region. KSEB supplies for Mahe region under the UT of Puducherry. Also, supply from

Kudankulam Nuclear Plant and Vallur Thermal Plant has also been started resulting in additional power allocation to the Union Territory, Puducherry to meet the demand.

For estimating the energy requirement for each year of the Control Period FY 2016-17 to FY 2018-19, MOD principles have been considered. While full fixed (capacity) charges have been considered but variable charges corresponding to the costliest source of power have not been considered in respect of energy not considered for purchase.

The Commission has considered the nuclear plants, TANGEDCO (Karaikal), KSEB and PPCL as 'must-run' plants and has not subjected them to MOD principles. The must-run stations have been assumed at the top of the merit order. Fixed charges from all the generating stations (irrespective of the merit order) have been considered for arriving at the power purchase cost. Variable charges have only been considered from the plants at the top of the merit order, required for meeting the energy requirement within the state.

The Commission in the Business Plan Order dated 4th December 2015 has approved the sources of power purchase for EDP. The same have accordingly been considered here. As noted in the Business Plan Order, the following new plants have been considered for projection during each year of the Control Period.

- Kudankulam Nuclear Power Plant (2000 MW)
- NLC Tuticorin project – NTPL (1000 MW)
- NLC TPS II Expansion (500 MW)

The Commission has considered the following assumptions for arriving at the energy availability from the above stations:

- **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/2015 dated 04.11.2015, effective from 00:00 Hrs. of 06.11.2015.
- **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 2012-13, FY 2013-14 and FY 2014-15). 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, 2014.
- **Energy Available to the Petitioner:** The effective share from the stations is applied on the energy sent out to arrive at the energy available to the Petitioner from the respective stations.

The Commission has considered the following assumptions to arrive at the power purchase cost for the Control Period:

- **Fixed Charges:** The fixed charges are considered based on the formula specified for the stations in the Central Electricity Regulatory Commission (Terms and

Conditions of Tariff) Regulations, 2009. The Annual Fixed Charges for each station have been taken as per the latest Tariff Orders for the respective stations as available. In the absence of the Tariff Orders, the Commission has considered the fixed charges as submitted by the Petitioner to be reasonable. The Commission in line with the claim of the Petitioner has not escalated the fixed cost for projections during the Control Period.

- **Variable Charges:** The Commission has considered the average variable cost for the period from April 2015 to September 2015 (as per actuals) verified by the Commission from the power purchase bills submitted by the Petitioner for consideration of the per unit variable charges of the various plants for each year of the Control Period.
    i. For nuclear plants, Madras APS and Kaiga the unit rate of Rs 2.03/unit and Rs 2.98/unit has been considered. For Kudankulam, the unit rate of Rs. 3.60/unit has been considered
    ii. For TANGEDCO (Karaikal), the revised rate of Rs 3.47/unit has been considered. For KSEB, the average variable cost for H1 period has been considered at Rs. 5.10/unit. For NTECL Vallur, the average rate as considered by the Petitioner has been considered to be reasonable at Rs. 2.01/unit. For PPCL, the average variable cost of the H1 period has been considered at Rs. 3.51/unit.
    iii. For NTPC and NLC plants, the average variable cost for the first six months has been considered
    iv. No escalation in the variable charge rates have been considered as these will be taken care of in the Fuel and Power Purchase Cost Adjustment formula
- **UI over-drawal/under-drawal:** As per the merit order principles adopted by the Commission for estimating the energy requirement, no surplus sale of power has been considered and only power purchase corresponding to meet the requirement within the territory has been estimated. The UI over-drawal has not been considered for each year of the Control Period in accordance with MOD principles. Further, the UI over-drawal/under-drawal quantum and amount would be considered at the time of True-up based on the actual performance during the year based on the UI bills.
- **Inter-state Losses:** PGCIL losses have been assumed at 4.97% and at 4% for TNEB to be reasonable (based on the SRPC website). For PPCL and KSEB, being within the periphery of the utility area external losses have been considered as NIL.
- **Rebate:** The Commission notes that the rebate amount has been claimed by the Petitioner for each year of the control period. The same has been considered by the Commission as submitted by the Petitioner to be reasonable and thereby allowed.

Transmission Charges

The transmission charges for each year of the Control Period have been considered as submitted by the Petitioner to be reasonable and thereby approved.

Accordingly, the transmission charges for usage of the PGCIL network are approved at Rs. 66.59 Crores, Rs. 70.13 Crores and Rs. 73.87 Crores for FY 2016-17, FY 2017-18 and FY 2018-19 respectively.

The Commission has considered the POSOCO and PCKL charges as estimated by the Petitioner to be reasonable and thereby approved for each year of the Control Period.

Other Charges

The Commission notes that the Petitioner has not claimed other charges such as ED, cess, incentive, supplementary charges etc. during the Control Period and may consider the same at the time of True-up.

In the absence of any basis for projection, the Commission has not considered the 'other charges' for each year of the Control Period. The Commission has also not projected any supplementary charges. Other charges, including supplementary charges would be considered based on actual during the True-up of each year of the Control Period.

Renewable Purchase Obligations

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

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

Further, the Commission has notified the amendment to the JERC (Procurement of Renewable Energy) Regulations, 2010 on 19th February 2014. The RPO target is 3.95% for FY 2016-17, 4.30% for FY 2017-18 and 4.65% for FY 2018-19 as per the Regulations.

The Commission has considered the submission of the Petitioner that considering the availability of renewable power, it has been assumed that the Petitioner would fulfill its RPO through the purchase of REC. The Commission has approved the cost of purchase of REC (both solar and non-solar) at the floor price approved by the CERC (http://www.cercind.gov.in/2014/Regulation/ord16.pdf). The cost of the solar REC has been considered as Rs. 3500/certificate and non-solar REC at Rs. 1500/certificate.

The Commission, as also stated in the Chapter 6 – Review of FY 2015-16, has considered the fulfillment of pending RPO from FY 2010-11 to FY 2015-16 at the end of FY 2015-16 (as per the directive in the Business Plan Order) and has not considered any carry-over of pending RPO at the end of FY 2015-16 to FY 2016-17. Surplus RPO, if assessed at the end of FY 2015-16 would be adjusted in FY 2016-17 based on the True-up of FY 2015-16.

The Commission, for the purposes of this Tariff Order, is considering fulfillment of RPO through the purchase of REC; however, **as directed in the Business Plan Order expects**

that the Petitioner would give priority to obtaining physical solar and non-solar power.

The RPO and cost considered for each year of the Control Period is as follows:

Table 7.10: RPO quantum (MU) and cost (Rs. Crores) approved by the Commission for Control Period

S. No.	Particulars	FY 2016-17	FY 2017-18	FY 2018-19
		Approved	Approved	Approved
1	**Sales (MU)**	**2797.07**	**2980.60**	**3177.06**
2	**Percentage (%)**	**3.95%**	**4.30%**	**4.65%**
	Solar	1.15%	1.50%	1.85%
	Non-Solar	2.80%	2.80%	2.80%
3	**Million Units (MU)**	**110.48**	**128.17**	**147.73**
	Solar	32.17	44.71	58.78
	Non-solar	78.32	83.46	88.96
4	**Cost of REC (Rs./REC)**			
	Solar	3500	3500	3500
	Non-solar	1500	1500	1500
5	**RPO Cost (Rs. Crores)**			
	Solar	11.26	15.65	20.57
	Non-solar	11.75	12.52	13.34
	Total RPO Cost (Rs. Crores)	**23.01**	**28.17**	**33.92**

Total Power Purchase Quantum and Cost

Based on the above, the total power purchase quantum and cost from the various sources as approved for each year of the Control Period is as follows:

Table 7.11: Power purchase quantum (MU) and cost (Rs. Crores) approved by the Commission for FY 2016-17

Sr. No.	Source	Purchase (MUs)	Inter-state Transmission Loss %	Energy Available at Periphery (MUs)	Fixed Charges (Rs. Crores)	Variable Charges (Rs/kWh) - Average of H1 15-16/as contracted	Variable Charges (Rs. Crores)	Total Cost (Rs. Crores)
A	**NPCIL**							
	MAPS	44.45	*4.97%*	42.24	-	2.03	9.02	9.02
	Kaiga APS Stage 1 U1&2	101.51	*4.97%*	96.47	-	2.98	30.25	30.25
	Kaiga APS Stage 1 U3&4	89.80	*4.97%*	85.34	-	2.98	26.76	26.76
	KKNP Unit1	338.07	*4.97%*	321.26	-	3.60	121.70	121.70
B	**TANGEDCO (Karaikal)**	309.33	*4.00%*	296.96	-	3.47	107.34	107.34
	KSEB	41.00	*0.00%*	41.00	2.98	5.10	20.91	23.89
	PPCL	234.07	*0.00%*	234.07	24.26	3.51	82.16	106.42
C	Talcher STPS Stage II	450.18	*4.97%*	427.81	18.62	1.40	63.03	81.64
	NTECL unit 1&2, Vallur	109.84	*4.97%*	104.38	19.78	2.01	22.08	41.86
	NLC TS II Expn	138.17	*4.97%*	131.31	5.79	2.18	30.12	35.91
	NLC TS I Expn	119.87	*4.97%*	113.92	15.63	2.20	26.37	42.01
	NLC TS II Stage I	497.40	*4.97%*	472.67	30.82	2.34	116.18	146.99
	NLC TS II Stage II	186.94	*4.97%*	177.65	11.00	2.34	43.67	54.67
	Ramagundam STPS Stage I & II	599.97	*4.97%*	570.15	37.86	2.46	147.59	185.46
	Ramagundam STPS Stage III	-	*4.97%*	-	14.52	2.46	-	14.52
	Simhadri Stage II	-	*4.97%*	-	17.16	2.56	-	17.16
	NTPL	-	*4.97%*	-	2.44	2.64	-	2.44
D	**Other Charges**							
	POSOCO							0.81
	PCKL							0.38
	PGCIL							**66.59**
E	**RPO compliance cost**							**23.01**
F	**Rebate**							**(17.03)**
G	**TOTAL PPC for FY 16-17**	**3,260.60**	145.38	**3,115.22**	**200.86**		**847.18**	**1,121.79**

Note: Total power purchase quantum is as per the 'Energy Requirement/Availability' figures as shown in Table 7.6. The individual plant-purchase is based on the latest allocation notification issued by SRPC dated 04.11.2015. Inter-state Losses have been taken from the SRPC website (latest).

Fixed Charges have been considered as per the latest Tariff Orders of the generating stations. In absence of the Tariff Orders, fixed charges have been taken as submitted by the Petitioner.

Table 7.12: Power purchase quantum (MU) and cost (Rs. Crores) approved by the Commission for FY 2017-18

Sr. No.	Source	Purchase (MUs)	Inter-state Transmission Loss %	Energy Available at Periphery (MUs)	Fixed Charges (Rs Crores)	Variable Charges (Rs/kWh) - Average of H1 15-16/as contracted	Variable Charges (Rs. Crores)	Total Cost (Rs. Crores)
A	**NPCIL**							
	MAPS	44.45	*4.97%*	42.24	-	2.03	9.02	9.02
	Kaiga APS Stage 1 U1&2	101.51	*4.97%*	96.47	-	2.98	30.25	30.25
	Kaiga APS Stage 1 U3&4	89.80	*4.97%*	85.34	-	2.98	26.76	26.76
	KKNP Unit1	338.07	*4.97%*	321.26	-	3.60	121.70	121.70
B	**TANGEDCO (Karaikal)**	318.61	*4.00%*	305.87	-	3.47	110.56	110.56
	KSEB	42.73	*0.00%*	42.73	2.98	5.10	21.79	24.77
	PPCL	234.07	*0.00%*	234.07	24.26	3.51	82.16	106.42
C	Talcher STPS Stage II	450.18	*4.97%*	427.81	18.62	1.40	63.03	81.64
	NTECL unit 1&2, Vallur	109.84	*4.97%*	104.38	19.78	2.01	22.08	41.86
	NLC TS II Expn	138.17	*4.97%*	131.31	5.79	2.18	30.12	35.91
	NLC TS I Expn	119.87	*4.97%*	113.92	15.63	2.20	26.37	42.01
	NLC TS II Stage I	497.40	*4.97%*	472.67	30.82	2.34	116.18	146.99
	NLC TS II Stage II	186.94	*4.97%*	177.65	11.00	2.34	43.67	54.67
	Ramagundam STPS Stage I & II	621.95	*4.97%*	591.03	37.86	2.46	153.00	190.86
	Ramagundam STPS Stage III	155.82	*4.97%*	148.07	14.52	2.46	38.33	52.85
	Simhadri Stage II	19.38	*4.97%*	18.42	17.16	2.56	4.96	22.12
	NTPL	-	*4.97%*	-	2.44	2.64	-	2.44
D	**Other Charges**							
	POSOCO							0.85
	PCKL							0.40
	PGCIL							**70.13**
E	**RPO compliance cost**							**28.17**
F	**Rebate**							**(18.12)**
G	**TOTAL PPC for FY 17-18**	**3,468.78**	155.55	**3,313.23**	**200.86**		**899.98**	**1,182.27**

Table 7.13: Power purchase quantum (MU) and cost (Rs. Crores) approved by the Commission for FY 2018-19

Sr. No.	Source	Purchase (MUs)	Inter-state Transmission Loss %	Energy Available at Periphery (MUs)	Fixed Charges (Rs Crores)	Variable Charges (Rs/kWh) - Average of H1 15-16/as contracted	Variable Charges (Rs. Crores)	Total Cost (Rs. Crores)
A	**NPCIL**							
	MAPS	44.45	*4.97%*	42.24	-	2.03	9.02	9.02
	Kaiga APS Stage 1 U1&2	101.51	*4.97%*	96.47	-	2.98	30.25	30.25
	Kaiga APS Stage 1 U3&4	89.80	*4.97%*	85.34	-	2.98	26.76	26.76
	KKNP Unit1	338.07	*4.97%*	321.26	-	3.60	121.70	121.70
B	**TANGEDCO (Karaikal)**	328.17	*4.00%*	315.04	-	3.47	113.87	113.87
	KSEB	44.02	*0.00%*	44.02	2.98	5.10	22.45	25.43
	PPCL	234.07	*0.00%*	234.07	24.26	3.51	82.16	106.42
C	Talcher STPS Stage II	450.18	*4.97%*	427.81	18.62	1.40	63.03	81.64
	NTECL unit 1&2, Vallur	109.84	*4.97%*	104.38	19.78	2.01	22.08	41.86
	NLC TS II Expn	138.17	*4.97%*	131.31	5.79	2.18	30.12	35.91
	NLC TS I Expn	119.87	*4.97%*	113.92	15.63	2.20	26.37	42.01
	NLC TS II Stage I	497.40	*4.97%*	472.67	30.82	2.34	116.18	146.99
	NLC TS II Stage II	186.94	*4.97%*	177.65	11.00	2.34	43.67	54.67
	Ramagundam STPS Stage I & II	621.95	*4.97%*	591.03	37.86	2.46	153.00	190.86
	Ramagundam STPS Stage III	155.82	*4.97%*	148.07	14.52	2.46	38.33	52.85
	Simhadri Stage II	107.41	*4.97%*	102.07	17.16	2.56	27.50	44.65
	NTPL	123.43	*4.97%*	117.29	2.44	2.64	32.54	34.98
D	**Other Charges**							
	POSOCO							0.89
	PCKL							0.42
	PGCIL							**73.87**
E	**RPO compliance cost**							**33.92**
F	**Rebate**							**(19.28)**
G	**TOTAL PPC for FY 18-19**	**3,691.08**	166.44	**3,524.64**	**200.86**		**959.02**	**1,249.70**

Accordingly, the Commission approves power purchase quantum of 3260.60 MU, 3468.78 MU and 3691.08 MU at a cost of Rs. 1121.79 Crores, Rs. 1182.27 Crores and Rs. 1249.70 Crores (including transmission charges and RPO) for the period FY 2016-17 to FY 2018-19 respectively.

The summary of the power purchase quantum and cost approved by the Commission for each year of the Control Period is as below.

Table 7.14: Power purchase quantum and cost approved by the Commission for the Control Period

Particulars	FY 2016-17		FY 2017-18		FY 2018-19	
	Submitted	Approved	Submitted	Approved	Submitted	Approved
Power Purchase Quantum (MU)	3260.70	3,260.60	3468.91	3,468.78	3691.23	3,691.08
Power Purchase Cost (Rs. Crores)	1124.57	1,121.79	1185.47	1,182.27	1251.34	1,249.70

Further, any variation on account of Fuel and Power Purchase cost shall be calculated as per the formula specified by the Commission separately and any impact shall be passed directly to the consumers.

The licensee shall compute fuel and power procurement cost variations on quarterly basis and adjustment shall be made in consumer bills starting after a month following the end of the quarter based on the Fuel & Power Purchase Cost Adjustment (FPPCA) formula notified separately by the Commission as per the Regulation. **For the purpose of calculation using FPPCA formula notified by the Commission, the approved per unit cost of power purchase (R approved) for use in the FPPCA formula is 382 paise per unit for FY 2016-17.** The approved per unit cost of power purchase for FY 2016-17 to be considered in the FPPCA formula excludes transmission charges of PGCIL, SLDC charges, RLDC charges and charges for reactive energy.

7.10. Operation and Maintenance Expenses

The O&M Expenses consists of three elements i.e. employee expenses, A&G expense and R&M expense.

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

Employee Expenses

Petitioner Submission:

The Petitioner has submitted that as per the provision 21 (b) of the MYT Regulations 2014, norm for employee expenses shall be defined in terms of combination of number of personnel per 1000 consumers and number of personnel per substation along with annual expenses per personnel.

Based on the analysis and average norm submitted by EDP, the Commission has approved the norm of 4.52 employees per '000 consumers for the Control Period FY 2016-17 to FY 2018-19 in the Business Plan Order dated 4th December 2015.

The Commission had approved employee expense of Rs. 312,825 per personnel as reasonable for the Control Period FY 2016-17 to FY 2018-19, based on the average of actual data for FY 2012-13 and FY 2013-14 (as at end of FY 2013-14).

The Petitioner has submitted that the employee expense approved per personnel of Rs. 312,825 is lower than that in FY 2013-14 of Rs. 335,412 and therefore, the inflation factor has been ignored by the Commission. This may lead to approval of lower employee expenses for the Control Period.

Based on the MYT Regulations and the Business Plan Order, the employee cost has been projected for the Control Period. The average WPI Index of last three years i.e. 5.11% has been considered for escalating employee expense per employee of FY 2013-14 (base year) for the Control Period.

The employee expense based on approved norms for the MYT Control Period is as follows:

Table 7.15: Employee cost for the Control Period submitted by the Petitioner

S. No.	Particulars	FY 2013-14	FY 2016-17	FY 2017-18	FY 2018-19
1	Employee Expense per Employee (Rs)	312825	363273	381837	401348
2	Number of employees per ‘000 consumers		4.52	4.52	4.52
3	Number of consumers (‘000)		458	474	490
4	Number of employees		2068	2141	2216
5	**Projected employee Cost (Rs. Crs.)**		**75.12**	**81.75**	**88.94**

The impact of 7th pay Commission is not considered while projecting the expenses for the Control Period. However, in case the same is implemented by the Central Government, EDP would be submitting the impact of the same at the time of filing the True-up Petition.

The Petitioner has requested the Commission to approve the employee expenses as projected for the Control Period based on the approved norms and also to reconsider the norms based on the approach specified in the Regulations.

Commission Analysis:

As per the Regulation 21.1 of the MYT Regulations 2014 for Employee Cost-

Quote

‘’Employee cost shall be computed as per the approved norm escalated by wholesale price index (WPI), adjusted by provisions for expenses beyond the control of the Distribution Licensee and one time expected expenses, such as recovery/adjustment of terminal benefits, implications of pay commission, arrears and Interim Relief, governed by the following formula:

$EMP_n = (EMP_b * \text{WPI inflation}) + \text{Provision}$

where:

EMP_n: Employee expense for the year n

EMP_b; including yearly increments of employees, bonus, promotion. VRS. Employee expense as per the norm

WPI inflation: is the average increase in the Wholesale Price Index (WPI) for immediately preceding three years

Provision: Provision for expenses as necessitated by the licensee due to expansion of the consumer base, yearly increments of Employees, and any expected one-time expenses as specified above.’’

Unquote

As per the Business Plan Order , the Commission, has considered the norm of 4.52 employees per ‘000 consumers as reasonable for the Control Period FY 2016-17 to FY 2018-19, based on the average norm submitted by the Petitioner for the Control Period.

Further, the Commission, had considered the expense of Rs. 312,825 per employee as reasonable for the Control Period FY 2016-17 to FY 2018-19, based on the average of actual data for FY 2012-13 and FY 2013-14 (as on end of FY 2013-14).

The same has been considered as the base employee expense i.e. Rs. 312,825 per employee (as at end of FY 2013-14) suitably escalated by the Wholesale Price Index (WPI) for immediately preceding three years, as per the Regulation 21.1 of the MYT Regulations 2014 to arrive at the employee expenses for the Control Period.

The Commission has noted the submission of the Petitioner to reconsider the base employee expenses as equal to the figures for FY 2013-14. However, the Commission at the time of approval of the Business Plan Order in accordance with the MYT Regulations 2014 had suitably considered the average of actual data for FY 2012-13 and FY 2013-14 to arrive at the base employee expenses as on end of FY 2013-14. The baseline so determined considers the averaging effect to avoid any aberrations in the base value to arrive at the trajectory for the Control Period. The Commission, therefore, does not see any reason to revise the base employee expenses.

The average WPI increase of last 3 years is summarized in the Table below:

Table 7.16: Average WPI increase in past 3 years

Particulars	FY 2011-12	FY 2012-13	FY2013- 14	FY 2014-15
April	152	164	171	181
May	152	164	171	182
June	153	165	173	183
July	154	166	176	185
August	155	167	179	186
September	156	169	181	185
October	157	169	181	184
November	157	169	182	181
December	157	169	180	179
January	159	170	179	177
February	159	171	180	176
March	161	170	180	176
Average	**156**	**168**	**178**	**181**
% increase		**7.35%**	**5.98%**	**2.00%**
Average Increase				**5.11%**

The Commission has accordingly considered the average WPI increase of 5.11% for the MYT Control Period.

Accordingly, the Commission has computed the Employee Expenses for the MYT Control Period as shown in the following Table:

Table 7.17: Computation of Employee Expenses for the Control Period

Particulars	FY 2013-14	FY 2016-17	FY 2017-18	FY 2018-19
Approved annual employee expenses per personnel (as on end of FY 13-14) In Rs	312,825			
Projected Employee Expenses per personnel (Considering WPI Escalation)		363,273	381,837	401,348
Approved No. of Employees per 1000 consumers		4.52	4.52	4.52
Approved No. of Consumers (In '000)		458	474	490
No. of Employees as per the above norm		**2068**	**2141**	**2216**
Total No. of Employees projected by the Petitioner		2068	2141	2216
Total No. of Employees finally considered by the Commission		**2068**	**2141**	**2216**
Employee Cost approved as per norms (Rs. Crores)		75.13	81.74	88.94
Provision (Rs. Crores)		0.00	0.00	0.00
Total Employee Expenses Approved (Rs. Crores)		**75.13**	**81.74**	**88.94**

The employee expenses as projected by the Petitioner and approved by the Commission are as below.

Table 7.18: Employee Expenses for the Control Period approved by the Commission (Rs. Crores)

S. No.	Particulars	FY 2016-17		FY 2017-18		FY 2018-19	
		Submitted	Approved	Submitted	Approved	Submitted	Approved
1	Employee Expenses	75.12	75.13	81.75	81.74	88.94	88.94

The Commission thus approves employee expenses of Rs. 75.13 Crores, Rs. 81.74 Crores and Rs. 88.94 Crores for the MYT Control Period from FY 2016-17 to FY 2018-19 respectively and the treatment of the employee expenses during the True-up would be in accordance with the provisions of Regulation 9.2, 10 and 11 of the MYT Regulations 2014.

<u>Administrative and General (A&G) Expenses</u>

Petitioner Submission:

The Petitioner has submitted that as per the provision 21 (b) of the MYT Regulations 2014, norm for A&G Expenses shall be defined in terms of combination of A&G expense per personnel and A&G expense per 1000 consumers.

The Commission in the Business Plan Order dated 4th December 2015 had stated as follows: **Quote** ''*The Commission has noted that the sudden increase in miscellaneous expenses for FY 2013-14 is due to increase in payment of consultancy fees, legal fees and clearing backlog of* *license fees. The Commission has, therefore, not considered FY 2013-14. The Commission has considered the average of FY 2011-12 and FY 2012-13 for arriving at the norms for the Control Period. The Commission reiterates that as per the regulations, provisions for one-time expenses are there and same shall be allowed on 'as and when basis' after due prudence check by the Commission.*

Based on average A&G expenses per employee of FY 2011-12 and FY 2012-13, A&G expense per employee of Rs. 17592 (as on end of FY 2012-13) has been considered to be reasonable for the Control Period. Similarly, based on average of FY 2011-12 and FY 2012-13, A&G expense per '000 consumers of Rs. 103,436 (as on end of FY 2012-13) has been considered to be reasonable for the Control Period.

The Commission approves the weightage of these two factors in overall A&G computation as 50:50 and same should be considered by the Petitioner while arriving at the A&G expenses for the Control Period during the MYT filing.''

Unquote

The Petitioner has submitted that while determining the norms the Commission has not considered FY 2013-14 due to higher A&G expenses in the year on account of increase in payment of consultancy fees, legal fees and clearing backlog of license fees. This has led to approval of lower A&G expense per employee and A&G expense per '000 consumers. However, these expenses will be routine in nature and will be incurred every year (excluding backlog of license fees) and therefore is required to be considered for calculation of average A&G expenses or the same needs to be claimed separately in ARR as it has not been considered in A&G expenses. The Petitioner has submitted that the approach may lead to approval of lower A&G expenses for the Control Period and may kindly reconsider the norms.

Based on the MYT Regulations 2014 and the approved norms in the Business Plan Order, the A&G expenses have been projected for the Control Period based on average WPI Index of last three years i.e. 5.11% considering A&G norm of FY 2012-13 as the base.

Table 7.19: A&G Expenses for the Control Period submitted by the Petitioner

S. No.	Particulars	Weightage	FY 2012-13	FY 2016-17	FY 2017-18	FY 2018-19
1	Average A&G expense per employee (Rs.)		17592	21473	22570	23724
2	Average A&G expense per '000 consumers (Rs.)		103436	126255	132706	139488
3	Number of Employee			2068	2141	2216
4	Number of consumers ('000)			458	474	490
5	A&G expense per employee (Rs.Crs) - 50%	50%		2.22	2.42	2.63
6	A&G expense per '000 consumers (Rs.Crs) - 50%	50%		2.89	3.14	3.42
7	**Projected total A&G expense (Rs. Crs.)**			**5.11**	**5.56**	**6.05**

The Petitioner requests the Commission to approve the A&G expense projected for the MYT Control Period based on approved A&G norms.

Commission Analysis:

As per Regulation 21.3 of the MYT Regulations 2014-

Quote

''A&G expenses shall be computed as per the norm escalated by wholesale price index (WPI) and adjusted by provisions for confirmed initiatives (IT etc. initiatives as proposed by the Distribution Licensee and validated by the Commission) or other expected one-time expenses, and shall be governed by following formula:

$A\&G_n = (A\&G_b * \text{WPI inflation}) + \text{Provision}$

where:

$A\&G_n$: A&G expense for the year n $A\&G_b$: A&G expense as per the norm

WPI inflation: is the average increase in the Wholesale Price Index (WPI) for immediately preceding three years

Provision: Cost for initiatives or other one-time expenses as proposed by the Distribution Licensee and validated by the Commission.''

Unquote

The Commission has already approved the norms for A&G Expenses in the Business Plan Order. Based on average A&G expenses per employee of FY 2011-12 and FY 2012-13, A&G expense per employee of Rs. 17592 (as at end of FY 2012-13) had been considered to be reasonable for the Control Period. Similarly, based on average of FY 2011-12 and FY 2012-13, A&G expense per '000 consumers of Rs. 103,436 (as at end of FY 2012-13) had been considered to be reasonable for the Control Period as per the Business Plan Order.

The Commission has approved the weightage of these two factors in overall A&G computation as 50:50 and same is to be considered while arriving at the A&G expenses for the Control Period during the MYT filing.

The reason for excluding FY 2013-14 in the base year values has been clearly explained in the Business Plan Order and the Commission has not considered the higher expenses for the year due to sudden increase on account of increase in payment of consultancy fees, legal fees and clearing backlog of license fees. The Commission reiterates that as per the Regulations, provisions for one-time expenses are there and the same shall be allowed on 'as and when basis' after due prudence check by the Commission.

The A&G expenses for the Control Period have been determined in accordance with the Regulation 21.3 of the MYT Regulations 2014. The computation of the A&G expenses for the Control Period is as follows:

Table 7.20: Computation of A&G Expenses for the Control Period

Particulars	FY 2012-13	FY 2016-17	FY 2017-18	FY 2018-19
Approved A&G expense per personnel (end of FY 2012-13) (In Rs.)	17592			
Projected A&G expense per personnel (In Rs.) (Considering WPI Escalation)		21473	22570	23724
Total No. of Employees finally considered by the Commission		2068	2141	2216
A&G Expense as per norms of per personnel (50%) (Rs. Crores)		2.22	2.42	2.63
Approved A&G expense per 1000 consumers (end of FY 2012-13) (In Rs)	103,436			
Projected A&G expense per 1000 consumers (In Rs.) (Considering WPI Escalation)		126,255	132,706	139,488
Approved no. of Consumers (In '000)		458	474	490
A&G Expense as per norms of per '000 consumers (50%) (Rs. Crores)		2.89	3.15	3.42
Total A&G Expenses as per norms (In Rs. Crores)		**5.11**	**5.56**	**6.05**

The A&G expenses as projected by the Petitioner and approved by the Commission are as below.

Table 7.21: A&G expenses for the Control Period approved by the Commission (Rs. Crores)

S. No.	Particulars	FY 2016-17		FY 2017-18		FY 2018-19	
		Submitted	Approved	Submitted	Approved	Submitted	Approved
1	A&G Expenses	5.11	5.11	5.56	5.56	6.05	6.05

The Commission thus approves A&G expenses of Rs. 5.11 Crores, Rs. 5.56 Crores and Rs. 6.05 Crores for the MYT Control Period from FY 2016-17 to FY 2018-19 respectively and the treatment of the A&G expenses during the True-up would be in accordance with the provisions of Regulation 9.2, 10 and 11 of the MYT Regulations 2014.

Repairs and Maintenance (R&M) Expenses

Petitioner Submission:

The Petitioner has submitted that as per the Regulations, the norm for R&M Expenses shall be defined in terms of percentage of opening gross fixed assets for estimation of R&M expenses.

Based on the past trend of R&M expenses as a percentage of the GFA, and on the request of the Petitioner, the Commission has approved k-factor of 2.68% for the Control Period in the

Business Plan Order. The R&M expense for the Control Period based on opening GFA, k-factor and inflation index of 7.32% (60:40 of CPI:WPI) is as follows.

Table 7.22: R&M Expenses for the Control Period submitted by the Petitioner

S. No.	Particulars	FY 2016-17	FY 2017-18	FY 2018-19
1	Opening GFA (Rs. Crs)	697.28	787.81	943.95
4	K Factor - Approved by Commission	2.68%		
5	Inflation index (60:40=CPI:WPI)	7.32%		
6	**R&M Expenses (Rs. Crs.)**	**20.05**	**22.66**	**27.15**

The Petitioner has therefore requested the Commission to approve R&M expenses as projected for the Control Period based on approved norms.

Commission Analysis:

As per Regulation 21.2 of the MYT Regulations 2014-

Quote

''Repairs and Maintenance (R&M) expenses shall be calculated as percentage (as per the norm defined) of Opening Gross Fixed Assets for the year governed by following formula:

R&Mn = Kb GFAn* Inflation Index*

where:

R&Mn: Repairs & Maintenance expense for nth year

GFAn: Opening Gross Fixed Assets for nth year

Kb: Percentage point as per the norm

GFA: Gross Fixed Assets at the beginning of the Financial Year

Inflation Index is CPI: WPI:: 60 : 40''

Unquote

The average CPI increase of last 3 years is as summarized in Table below:

Table 7.23: Average CPI increase in past 3 years

Particulars	FY 2011-12	FY 2012-13	FY2013- 14	FY 2014-15
April	186	205	226	242
May	187	206	228	244
June	189	208	231	246
July	193	212	235	252
August	194	214	237	253
September	197	215	238	253
October	198	217	241	253
November	199	218	243	253
December	197	219	239	253
January	198	221	237	254

Particulars	FY 2011-12	FY 2012-13	FY2013- 14	FY 2014-15
February	199	223	238	253
March	201	224	239	254
Average	**195**	**215**	**236**	**251**
% increase		**10.44%**	**9.68%**	**6.29%**
Average CPI increase				**8.80%**

The Commission has accordingly considered the average CPI increase of 8.80% for the MYT Control Period.

The WPI index for the last three years as mentioned above in the section of employee expenses is 5.11%. Same has been considered here.

Accordingly, the inflation index of CPI: WPI:: 60:40 is 7.33%.

The Commission has already approved the norms for R&M Expenses in the Business Plan Order. The K-factor of 2.68% has been considered to be reasonable for the Control Period as per the Business Plan Order. Considering the norms approved in the Business Plan Order, the Commission hereby approves the R&M Expenses for the MYT Control Period as follows:

Table 7.24: R&M Expenses as calculated by the Commission (Rs. Crores)

Particulars	FY 2016-17	FY 2017-18	FY 2018-19
Approved Norm for R&M expense as percentage of gross fixed assets	2.68%	2.68%	2.68%
Opening GFA	674.88	765.41	921.55
R&M expense as per norm (Rs Crores)	18.09	20.51	24.70
R&M expense as per norms considering escalation (Rs Crores)	**19.41**	**22.02**	**26.51**

The R&M expenses as projected by the Petitioner and approved by the Commission are as follows:

Table 7.25: R&M expenses for the Control Period approved by the Commission (Rs. Crores)

S. No.	Particulars	FY 2016-17		FY 2017-18		FY 2018-19	
		Submitted	Approved	Submitted	Approved	Submitted	Approved
1	R&M Expenses	20.05	19.41	22.66	22.02	27.15	26.51

The Commission thus approves R&M expenses of Rs. 19.41 Crores, Rs. 22.02 Crores and Rs. 26.51 Crores for the MYT Control Period from FY 2016-17 to FY 2018-19 respectively and the treatment of the R&M expenses during the True-up would be in accordance with the provisions of Regulation 9.2, 10 and 11 of the MYT Regulations 2014.

Summary of O&M Expenses approved for FY 2016-17 to FY 2018-19

The O&M expenses as submitted and approved for the Control Period is as below:

Table 7.26: O&M expenses approved by the Commission for Control Period (Rs. Crores)

S. No.	Particulars	FY 2016-17		FY 2017-18		FY 2018-19	
		Submitted	Approved	Submitted	Approved	Submitted	Approved
1	O&M Expenses	100.29	99.65	109.97	109.32	122.14	121.50

7.11. Capitalization, GFA & Depreciation

Petitioner Submission:

The Petitioner has submitted that the Commission has analyzed the various transmission and distribution schemes proposed during the Control Period along with justification for each scheme.

The Commission has approved the various transmission schemes proposed by the Petitioner. However, the Commission while approving the various transmission schemes has noted that since the process of availing loan from JICA is still at a nascent stage the Commission in the interest of the Stakeholders has carried forward the capex under various JICA funded schemes from FY 2016-17 to FY 2017-18 and has accordingly considered the capex for FY 2016-17 and FY 2017-18.

The Commission has taken note of all the distribution schemes proposed by EDP and has approved the entire cost proposed over the Control Period.

For the 100% metering programme, EDP had proposed capex of Rs. 8.37 Crores during the Control Period spread over three years. However, in the interest of the stakeholders and as per the earlier directives in the Tariff Orders, the Commission had approved the entire capex of Rs. 8.37 Crores to be implemented in a two-year time frame during FY 2016-17 and FY 2017-18. The Commission has considered equal split of Rs. 4.19 Crores each over two years i.e. FY 2016-17 and FY 2017-18.

The total capital expenditure approved by the Commission for the Control Period FY 2016-17 to FY 2018-19 is as shown in the following Table:

Table 7.27: Capital Expenditure approved by the Commission for Control Period (Rs. Crores)

S.No.	Particulars	FY 2016-17		FY 2017-18		FY 2018-19	
		Submitted	Approved	Submitted	Approved	Submitted	Approved
A	**Transmission Schemes**						
1	Establishment of New Substations	23.60	-	47.60	71.20	43.47	43.47
2	Augmentation of System Capacity	5.95	-	9.53	15.48	3.96	3.96
3	Renovation and Mordenization Works of Existing Capacity	8.32	1.65	11.12	17.79	8.41	8.41
4	Replacement of Capacitor Banks	2.00	-	2.00	4.00	1.50	1.50
5	Erection/ establishment/ upgradation of 230kV and 110kV Substations	30.00	20.00	30.40	40.40	20.81	20.81
	Total Transmission	**69.87**	**21.65**	**100.65**	**148.87**	**78.15**	**78.15**
B	**Distribution Schemes**						
1	R-APDRP Part-A Works	1.72	1.72	-	-	-	-
2	R-APDRP Part-B Works	30.00	30.00	30.00	30.00	-	-
3	System Improvement Schemes	7.80	7.80	7.96	7.96	8.12	8.12
4	Development Schemes	10.35	10.35	10.56	10.56	10.77	10.77
5	Rural Electrification (BNP)	0.75	0.75	0.77	0.77	0.78	0.78
6	100% Metering Programme	2.75	4.19	2.81	4.19	2.81	
7	Conversion of HT Overhead lines into UG cables	4.10	4.10	4.18	4.18	4.27	4.27
	Total Distribution	**57.47**	**58.91**	**56.27**	**57.66**	**26.73**	**23.94**
	Total Capital Expenditure	**127.34**	**80.56**	**156.92**	**206.53**	**104.88**	**102.09**

The Petitioner has submitted that the majority of the capital expenditure is diverted towards establishment of new substations and system strengthening under R-APDRP works. Also significant amount of capital expenditure is towards renovation and modernization / augmentation of system capacity. The approved capital expenditure will definitely be helpful to achieve the loss targets set by EDP in its distribution loss trajectory and to meet any additional load surging due to increase in demand.

Capitalization

EDP had proposed capitalization of the assets during the Control Period in the ratio of 60:40 of the capital expenditure whereby 60% of the capitalization in the first year and 40% in the succeeding year of the Control Period in the Business Plan Petition. The Commission had considered the rationale submitted by EDP as reasonable for the capitalization ratio on an average basis and had approved the same in the Business Plan Order dated 4th December, 2015. However, the Commission had carried forward the capitalization for FY 2015-16 to FY 2016-17 which had not been accounted for by the Petitioner.

GFA and Depreciation

The Petitioner has submitted that the depreciation shall be calculated for each year of the Control Period on the original cost of the fixed assets of the corresponding year. The rate of depreciation considered is as per the CERC (Terms and Conditions of Tariff) Regulations, 2014. The GFA and depreciation as proposed by the Petitioner is as follows:

Table 7.28: GFA and Depreciation submitted by the Petitioner for Control Period (Rs. Crores)

S. No.	Particulars	FY 2016-17	FY 2017-18	FY 2018-19
1	Opening value of the assets at the beginning of the year	697.28	787.81	943.95
2	Additions during the year	90.53	156.14	143.86
3	**Gross Fixed Assets at the end of the year**	**787.81**	**943.95**	**1087.81**
4	**Net Depreciation for the year**	**32.24**	**38.93**	**46.86**
5	**Average Depreciation Rate**	**4.34%**	**4.50%**	**4.61%**

The Commission is requested to allow the depreciation charges as provided above for the Control Period.

Commission Analysis:

GFA and Capitalization

The Commission has approved closing GFA for FY 2015-16 in the Review of FY 2015-16 in this Tariff Order as Rs. 674.88 Crores and same is considered as opening GFA for FY 2016-17.

The Commission has already approved additions in GFA for the MYT Control Period in the Business Plan Order dated 4th December 2015 and same has been considered here. This capitalization is subject to True-up based on the audited accounts of the relevant year.

The Commission, accordingly, has considered the value of GFA for the MYT Control Period as given in the Table below:

Table 7.29: GFA and Capitalization details approved by the Commission for Control Period (Rs. Crores)

S. No.	Particulars	FY 2016-17		FY 2017-18		FY 2018-19	
		Submitted	Approved	Submitted	Approved	Submitted	Approved
1	Opening GFA	697.28	674.88	787.81	765.41	943.95	921.55
2	Addition during the year	90.53	90.53	156.14	156.14	143.86	143.86
3	Closing GFA	787.81	765.41	943.95	921.55	1087.81	1065.41

Depreciation

The Commission notes that ED-Puducherry has now started maintaining full-fledged Fixed Asset Registers along with the audited accounts for the respective year. The fixed asset register (FAR) and the audited accounts have been submitted for FY 2013-14. Some of the assets have already attained the 90% depreciation limit and they are to be excluded in the calculation of the depreciation. The Commission, therefore, has not applied the applicable CERC rates on the average assets in place while approving the depreciation for the year, 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 on the average depreciation rate to be reasonable for each year of the Control Period and considers the same for the MYT Control Period. The Commission has applied the average depreciation rate as submitted on the average assets approved by the Commission to arrive at the depreciation for each year of the Control Period.

The Commission expects that during the filing for the True-up of the respective year, audited Fixed Asset Register (FAR) along with the audited accounts of the year must be duly submitted before the Commission for validation exercise of the Commission.

As a standard practice, and as per the Regulation 23 of the MYT Regulations 2014,

Quote

''

a) Depreciation shall be calculated for each year of the Control Period on the original cost of the fixed assets of the corresponding year.

b) Depreciation shall not be allowed on assets funded by capital subsidies, consumer contributions or grants.

c) Depreciation shall be calculated annually as per straight-line method over the useful life of the asset at the rate of depreciation. The same shall be as specified in the Central Electricity Regulatory Commission (Terms & Conditions of Tariff) Regulations, 2014. (The same may vary as notified by CERC from time to time.)

d) The residual value of assets shall be considered as 10% and depreciation shall be allowed to a maximum of 90% of the original cost of the asset.
Provided that Land shall not be treated as a depreciable asset and its cost shall be excluded while computing 90% of the original cost of the asset.

e) Depreciation shall be charged from the first year of operation of the asset.
Provided that in case the operation of the asset is for a part of the year, depreciation shall be charged on proportionate basis.

f) A provision of replacement of assets shall be made in the capital investment plan.''

Unquote

The depreciation approved for the MYT Control Period is as summarized below:

Table 7.30: Depreciation approved by the Commission for the MYT Control Period (Rs. Crores)

S. No.	Particulars	FY 2016-17		FY 2017-18		FY 2018-19	
		Submitted	Approved	Submitted	Approved	Submitted	Approved
1	Opening GFA	697.28	674.88	787.81	765.41	943.95	921.55
2	Addition during the year	90.53	90.53	156.14	156.14	143.86	143.86
3	Closing GFA	787.81	765.41	943.95	921.55	1087.81	1065.41
4	Average GFA	742.55	720.15	865.88	843.48	1015.88	993.48

S. No.	Particulars	FY 2016-17		FY 2017-18		FY 2018-19	
		Submitted	Approved	Submitted	Approved	Submitted	Approved
5	Average Depreciation Rate	4.34%	4.34%	4.50%	4.50%	4.61%	4.61%
6	**Depreciation for the year**	**32.24**	**31.25**	**38.93**	**37.96**	**46.86**	**45.80**

The Commission thus approves a depreciation of Rs. 31.25 Crores, Rs. 37.96 Crores and Rs. 45.80 Crores respectively for the MYT Control Period from FY 2016-17 to FY 2018-19.

7.12. Interest and Finance Charges

Petitioner Submission:

The Petitioner has submitted that it plans on funding majority of its capital expenditure through loan from Japan International Co-operation Agency (JICA). The works carried out under R-APDRP (Part A&B) are funded by Power Finance Corporation (PFC).

The Commission has considered the PFC funding for R-APDRP schemes to be treated as 'loan' i.e. debt initially and later when PFC allows it as 'grant' based on the fulfilment of conditions by EDP, they shall treat it as 'grant'.

The funding pattern approved by the Commission in the Business Plan Order dated 4th December 2015 is as shown below.

Table 7.31: Funding approved by the Commission for the Control Period as per Business Plan Order (Rs. Crores)

S.No.	Particulars	Type	FY 2016-17		FY 2017-18		FY 2018-19	
			Submitted	Approved	Submitted	Approved	Submitted	Approved
1	JICA	Debt	49.87	-	80.25	128.47	57.34	57.34
2	Power Finance Corporation (PFC)	Debt	31.72	31.72	30	30	-	-
A	**Total Debt (1+2)**		**81.59**	**31.72**	**110.25**	**158.47**	**57.34**	**57.34**
3	EDP Funding from Budgetary Allocation	Equity	45.75	48.84	46.67	48.06	47.54	44.75
B	**Total Equity (3)**		**45.75**	**48.84**	**46.67**	**48.06**	**47.54**	**44.75**
C	**Total Capital Expenditure (A+B)**		**127.34**	**80.56**	**156.92**	**206.53**	**104.88**	**102.09**
D	**Debt : Equity Ratio**		**64:36**	**39:61**	**70:30**	**77:23**	**55:45**	**56:44**

* *PFC disbursement may be converted as grant on achieving the targets.*

Based on the above funding the average debt equity ratio is 64:36. However, the ratio may change based on the change in the debt component.

The Petitioner has submitted the interest on loan as per Regulation 24 (b) of the MYT Regulations 2014.

Quote

‘’ (b) If the equity deployed is more than 30% of the capital cost, equity in excess of 30% shall be treated as normative loan.

Provided that where equity actually deployed is less than 30% of the capital cost, the actual loan shall be considered for determination of interest on loans.

(e) The repayment for the Control Period shall be deemed to be equal to the depreciation allowed for the year.”

Unquote

The Petitioner has considered normative debt funding of 70% on capitalization of fixed assets during MYT Control Period. The rate of interest considered is prevailing Prime Lending Rate of the State Bank of India as on 1st April 2015.

Along with the normative interest claimed, it is submitted that certain financial charges are also incurred by the Department which are related to charges claimed by bank charges, finance charges, L/C., etc. which are claimed along with the interest.

The Commission is requested to approve the Interest & Finance Charges at Rs. 28.80 Crores for FY 2016-17, Rs. 36.40 Crores for FY 2017-18 and Rs. 45.67 Crores for FY 2018-19.

Commission Analysis:

As per Regulation 24 of the MYT Regulations 2014-

Quote

‘’

a) *The Distribution Licensee shall provide detailed loan-wise, project-wise and utilization-wise details of all of the pending loans.*
b) *If the equity actually deployed is more than 30% of the capital cost, equity in excess of 30% shall be treated as normative loan.*
   Provided that where equity actually deployed is less than 30% of the capital cost, the actual loan shall be considered for determination of interest on loans.
c) *Actual loan or normative loan, if any, shall be referred as gross normative loan in this Regulation.*
d) *The normative loan outstanding as of 1st April of Control Period shall be computed by deducting the cumulative repayment as approved by the Commission (basis as mentioned below) up to 31st March of current period (a year before Control Period) from the gross normative loan.*
e) *The repayment for the Control Period shall be deemed to be equal to the depreciation allowed for the year.*
f) *Notwithstanding any moratorium period availed by the Distribution Licensee, the repayment of the loan shall be considered from the first year of the Control Period as per annual depreciation allowed.*

g) *The rate of interest shall be the weighted average rate of interest calculated on the basis of actual loan portfolio at the beginning of each year of the Control Period, in accordance with terms and conditions of relevant loan agreements, or bonds or non-convertible debentures.*

Provided that if no actual loan is outstanding but normative loan is still outstanding, the last available weighted average rate of interest shall be applicable.

Provided further that the interest on loan shall be calculated on the normative average loan of the year by applying the weighted average rate of interest.

Provided also that exception shall be made for the existing loans which may have different terms as per the agreements already executed if the Commission is satisfied that the loan has been contracted for and applied to identifiable and approved projects.

h) *The Distribution Licensee shall make every effort to refinance the loan as long as it results in net benefit to the consumers.*

Provided that the cost associated with such refinancing shall be eligible to be passed through in tariffs and the benefit on account of refinancing of loan and interest on loan shall be shared in the ratio of 50:50 between the Distribution Licensee and the consumers.

Provided further that the Distribution Licensee shall submit the calculation of such benefit to the Commission for its approval.

i) *The Distribution Licensee shall enable tracking of the loans converted into grants under schemes like APDRP by providing information and data regularly to the Commission and for ensuring that the interest on these loans which has been passed on to the consumers inappropriately in the earlier years shall be recovered from the Distribution Licensee.''*

Unquote

As per Regulation 24 of the MYT Regulations 2014, if the equity actually deployed is more than 30% of capital cost, then equity in excess of 30% would be considered as normative loan. The Commission has considered normative closing loan for FY 2015-16 as approved in the Review for FY 2015-16 in this Tariff Order and same is considered as opening loan amount for FY 2016-17. Further, the Commission has considered the actual capitalization of assets as approved for the Control Period. The Commission for the purpose of funding of the capitalization has considered the normative debt equity ratio of 70:30. Repayment has been considered equal to the depreciation allowed during the respective year. Further, the Commission has considered the interest rate (SBI PLR) as for FY 2015-16 i.e. at start of the FY 2016-17 i.e. 14.05%. (https://www.sbi.co.in/portal/web/interest-rates/benchmark-prime-lending-rate historical-data)

The Commission has also analyzed the nature of other finance charges as submitted by the Petitioner. The Commission considering the reasonableness of finance charges submitted by the Petitioner allows the same in addition to the interest on normative loan amount.

The Commission has allowed the interest and finance charges for the MYT Control Period as given in the following Table:

Table 7.32: Interest and Finance charges approved by the Commission for Control Period

(Rs. Crores)

S. No.	Particulars	FY 2016-17		FY 2017-18		FY 2018-19	
		Submitted	Approved	Submitted	Approved	Submitted	Approved
1	Opening Normative Loan	165.01	150.91	196.15	183.03	266.52	254.37
2	Add: Normative loan during the year	63.37	63.37	109.30	109.30	100.70	100.70
3	Less: Normative Repayment	32.24	31.25	38.93	37.96	46.86	45.80
4	Closing Normative Loan	196.15	183.03	266.52	254.37	320.36	309.27
5	Average Normative Loan	180.58	166.97	231.34	218.70	293.44	281.82
6	Rate of Interest	14.75%	14.05%	14.75%	14.05%	14.75%	14.05%
7	**Interest on Normative Loan**	**26.64**	**23.46**	**34.12**	**30.73**	**43.28**	**39.60**
8	Other Finance Charges	2.17	2.17	2.27	2.27	2.39	2.39
9	**Total Interest & Finance Charges**	**28.80**	**25.63**	**36.40**	**33.00**	**45.67**	**41.99**

The Commission thus approves interest and finance charges of Rs. 25.63 Crores, Rs. 33.00 Crores and Rs. 41.99 Crores respectively for the MYT Control Period from FY 2016-17 to FY 2018-19.

7.13. Interest on Working Capital

Petitioner Submission:

The interest on working capital has been claimed in accordance with the Regulation 25 of the MYT Regulations 2014.

The Petitioner has submitted that as per the MYT Regulations, inventory for two months has been specified to be excluded from the Working Capital Requirement. However, the Petitioner has submitted that the inventory is the part of the assets whereby the working capital is blocked and hence may not be excluded/subtracted from the working capital requirement but need to be added in estimating the whole working capital requirement and therefore same has been added in the Petition formats. The interest on working capital considered is the base rate for SBI as on the 01st April, 2015.

The Interest on Working Capital claimed by the Petitioner for the Control Period is NIL.

Commission Analysis:

As per Regulation 25 of MYT Regulations 2014-

Quote

''Working capital for retail supply activity of the licensee shall consist of:

i. *Receivables of two months of billing*
ii. *Less power purchase cost of one month*
iii. *Less consumer security deposit but excluding Bank Guarantee/Fixed Deposit Receipt*
iv. *Inventory for two months based on annual requirement for previous year.*

The rate of interest on working capital shall be equal to the base rate for the 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 licensee has not taken working capital loan from any outside agency or has exceeded the working capital loan worked out on the normative figures.''

Unquote

The rate of interest considered is @ 9.30% (SBI Base rate) as on 05.10.2015 prevailing as on 1st April 2016 and accordingly, the Commission has considered this rate of interest for computation of the interest on working capital.

The Commission, based on the cost parameters approved for the Control Period has computed the interest on working capital as given in the Table below:

Table 7.33: Interest on working capital approved by Commission for Control Period (Rs. Crores)

S. No.	Particulars	FY 2016-17		FY 2017-18		FY 2018-19	
		Submitted	Approved	Submitted	Approved	Submitted	Approved
1	Receivables of 2 Months Billing	219.40	217.71	234.52	232.71	250.09	249.90
2	Less: Power Purchase Cost 1 Month	93.71	93.48	98.79	98.52	104.28	104.14
3	Less: Closing Consumer Security Deposit Excl. BG/FDR	187.41	187.41	208.72	208.72	230.04	230.04
4	Add: Inventory Based on Annual Requirement for Previous FY for 2 months	8.92	4.65	8.92	4.65	8.92	4.65
5	Total Working Capital Requirement	(52.81)	(58.54)	(64.07)	(69.89)	(75.30)	(79.64)
6	Rate (%)	9.30%	9.30%	9.30%	9.30%	9.30%	9.30%
7	**Interest on Working Capital**	0.00	0.00	0.00	0.00	0.00	0.00

The Commission has considered the change in inventory as per the unaudited accounts for FY 2014-15 i.e. Rs. 27.91 Crores for FY 2014-15 and the same has been considered for two months i.e. Rs. 4.65 Crores. The Commission thus approves an Interest on Working Capital as NIL for each year of the MYT Control Period from FY 2016-17 to FY 2018-19.

7.14. Interest on Security Deposit

Petitioner Submission:

The Petitioner has submitted that the MYT Regulations 2014 is silent for claiming of interest on security deposit. Therefore, EDP has claimed interest on security deposit in line with the Regulation 25 of JERC (for the State of Goa and Union Territories (Terms and Conditions for Determination of Tariff) Regulations, 2009. The provision of interest on security deposits is to be made at the bank rate and therefore the bank rate of 8.50% as on 01st April, 2015 is considered. Deposit during the year is considered equivalent to FY 2014-15 amount. The interest on security deposit for the MYT Control Period is as below.

Table 7.34: Interest on security deposit submitted by Petitioner for Control Period (Rs. Crores)

S. No.	Particulars	FY 2016-17	FY 2017-18	FY 2018-19
1	Opening Security Deposit	166.10	187.41	208.72
2	Add: Deposits during the year	21.31	21.31	21.31
3	Less: Deposits refunded			
4	Less: Deposits n the form of BG/FDR			
5	Closing Security Deposit	187.41	208.72	230.04
6	Bank Rate	8.50%	8.50%	8.50%
7	**Interest on Security Deposit**	**15.02**	**16.84**	**18.65**

The Commission is requested to approve the Interest on Security Deposit as proposed in the MYT Petition.

Commission Analysis:

As per the Regulation 6.10 (8) of Electricity Supply Code Regulations, 2010

Quote

"The distribution licensee shall pay interest, at the bank rate notified by the Reserve Bank of India from time to time on such security deposits taken from the consumer. In this regard it shall be the responsibility of the licensee to keep a watch on the bank rate from time to time. The interest amount of previous financial year shall be adjusted in the energy bill issued in May / June of each financial year depending on billing cycle." **Unquote**

The bank rate as on 06th March 2016 is 7.75%. The Commission has considered same rate for the MYT Control Period.

The Commission has considered closing security deposit at Rs. 166.10 Crores as approved in the Review of FY 2015-16 in this Tariff Order and the same is considered as opening security deposit for FY 2016-17. Addition to security deposit during MYT Control Period is considered as submitted by the Petitioner to be reasonable.

The Commission, accordingly, has computed the interest on consumer security deposit for the MYT Control Period as given in the Table below:

Table 7.35: Interest on Consumer Security Deposit approved by the Commission (Rs. Crores)

S. No.	Particulars	FY 2016-17		FY 2017-18		FY 2018-19	
		Submitted	Approved	Submitted	Approved	Submitted	Approved
1	Opening Security Deposit	166.10	166.10	187.41	187.41	208.72	208.72
2	Add: Deposit during the year	21.31	21.31	21.31	21.31	21.31	21.31
3	Closing Security Deposit	187.41	187.41	208.72	208.72	230.04	230.04
4	Average Security Deposit	176.76	176.76	198.07	198.07	219.38	219.38
5	RBI Bank Rate	8.50%	7.75%	8.50%	7.75%	8.50%	7.75%
6	**Interest on Security Deposit**	**15.02**	**13.70**	**16.84**	**15.35**	**18.65**	**17.00**

The Commission thus approves an Interest on Security Deposit of Rs. 13.70 Crores, Rs. 15.35 Crores and Rs. 17.00 Crores respectively for the MYT Control Period from FY 2016-17 to FY 2018-19.

7.15. Return on Equity

Petitioner Submission:

The Petitioner has submitted that the proviso of Regulation 27 of MYT Regulations 2014 provides for entitlement for Return on Equity. As per the regulations, RoE is allowed @16% on 30% of the capital base or actual equity, whichever is lower. However, assets funded by consumer contribution, capital subsidies/grants and corresponding depreciation shall not form part of the capital base.

The Petitioner has calculated the return on equity in line with the methodology proposed in the MYT Regulations 2014.

Quote *"The Petitioner has further submitted that the RoE claimed during each year of the Control Period is calculated on an average basis and therefore, the capital base of FY 2015-16. In view of the above, the Commission is requested to kindly allow the return on equity as submitted in the Petition for the MYT Control Period."* **Unquote**

Commission Analysis:

As per Regulation 27 of MYT Regulations 2014-

Quote

‘’

a. *Return on equity shall be computed on 30% of the capital base or actual equity, whichever is lower:*
   Provided that assets funded by consumer contribution, capital subsidies/grants and corresponding depreciation shall not form part of the capital base. Actual equity infused in the Distribution Licensee as per book value shall be considered as perpetual and shall be used for computation in this Regulation.
b. *The return on the equity invested in working capital shall be allowed from the date of start of commercial operation.*
c. *16% post-tax return on equity shall be considered irrespective of whether the Distribution Licensee has claimed return on equity in the ARR Petition.”*

Unquote

The Commission has noted that the majority of the capital assets are created out of the equity contribution from the Government of Puducherry and the actual borrowing of loan is only to the extent of the R-APDRP schemes. The Commission, has therefore, limited return on equity to 30% of the capital base.

Accordingly the Commission has considered 30% of the approved average capital base as the average equity amount for each year of the Control Period. The Commission has considered addition to equity at 30% of the capitalization. Post-tax return on equity of 16% has been considered on the average equity base of the year to arrive at the return on equity for each year of the Control Period.

The return on equity approved by the Commission for the MYT Control Period is as summarized in the Table below:

Table 7.36: Return on Equity approved by the Commission for the Control Period (Rs. Crores)

S. No.	Particulars	FY 2015-16		FY 2016-17		FY 2017-18		FY 2018-19	
		Submitted	Analyzed	Submitted	Approved	Submitted	Approved	Submitted	Approved
1	Gross block at the end of the year	697.28	674.88	787.81	765.41	943.95	921.55	1087.81	1065.41
2	Less: accumulated depreciation	328.35	332.38	360.59	363.63	399.52	401.59	446.38	447.39
3	Less: accumulated consumer contribution	17.71	17.71	17.71	17.71	17.71	17.71	17.71	17.71

S. No.	Particulars	FY 2015-16		FY 2016-17		FY 2017-18		FY 2018-19	
		Submitted	Analyzed	Submitted	Approved	Submitted	Approved	Submitted	Approved
4	Net Capital Base at end of the year	351.21	324.79	409.51	384.07	526.72	502.25	623.72	600.31
5	Average Capital Base for the year	-	-	380.36	354.43	468.12	443.16	575.22	551.28
6	**Average Equity for the year @30%**	**-**	**-**	**114.11**	**106.33**	**140.44**	**132.95**	**172.57**	**165.38**
7	**Return on Equity @16%**	**-**	**-**	**18.26**	**17.01**	**22.47**	**21.27**	**27.61**	**26.46**

The Commission thus approves Return on Equity of Rs. 17.01 Crores, Rs. 21.27 Crores and Rs. 26.46 Crores for the MYT Control Period from FY 2016-17 to FY 2018-19 respectively.

7.16. Provision for Bad and Doubtful Debts

Petitioner Submission:

The provision for bad debts has not been claimed by the Petitioner and may be claimed at the time of True-up based on the audited financial statements in case such cost is incurred.

Commission Analysis:

As per Regulation 32 of the MYT Regulations 2014-

Quote

''Bad and doubtful debt shall be limited to 1% of the receivables in the True-up, subject to the condition that amount of bad and doubtful debt is actually written-off in the licensee's books of accounts.''

Unquote

The above Regulation allows a provision for bad and doubtful debts up to 1% of receivables in the revenue requirement on the basis of audited accounts only. As the provision for bad and doubtful debts is to be reviewed at the True-up stage only, the Commission is not approving any provision for the same in the current Order for the MYT Control Period and will review the same at the time of True-up for each year of the Control Period only.

Table 7.37: Provision for Bad & Doubtful Debts approved by the Commission for Control Period

S. No.	Particulars	FY 2016-17		FY 2017-18		FY 2018-19	
		Submitted	Approved	Submitted	Approved	Submitted	Approved
1	Provision for bad & doubtful debts	NIL	NIL	NIL	NIL	NIL	NIL

Accordingly, NIL provision for bad & doubtful debts is approved for each year of the Control Period from FY 2016-17 to FY 2018-19.

7.17. Revenue from Sale of Surplus Power

Petitioner Submission:

The Petitioner has submitted that UI sales is considered to be NIL as the projections are made on MOD principle that considers no surplus and no deficit of power. The Petitioner has considered the same under the head of 'Non-Tariff Income' and accordingly considered it.

Commission Analysis:

The UI sales have not been considered during the Control Period in accordance with the MOD principles and accordingly there is NIL revenue from the sale of surplus power.

7.18. Non-Tariff Income

Petitioner Submission:

The Non-Tariff Income comprises metering, late payment charges, interest on staff loans, and income from trading, reconnection fee, and UI sales/sales to exchanges and miscellaneous income among others. However, sales from UI has not been considered in MYT Control Period and therefore income from the same is not highlighted and other component of Non-Tariff Income has been escalated by 5%. The Commission is requested to approve the Non-Tariff Income as submitted by the Petitioner for the Control Period.

Commission Analysis:

The Commission has escalated the 'other income' component of the Non-Tariff Income as approved for Review of FY 2015-16 in this Tariff Order i.e. Rs. 2.66 Crores by 5% to arrive at the Non-Tariff Income for FY 2016-17 i.e. Rs. 2.80 Crores. Same has been escalated by 5% thereafter to arrive at the Non-Tariff Income for FY 2017-18 and FY 2018-19.

The revenue from UI sales as discussed above has been considered as NIL during the Control Period and same has accordingly been considered here.

Table 7.38: Non-Tariff Income approved by the Commission for the Control Period

S. No.	Particulars	FY 2016-17		FY 2017-18		FY 2018-19	
		Submitted	Approved	Submitted	Approved	Submitted	Approved
1	Non-Tariff Income	2.80	2.80	2.93	2.93	3.08	3.08

The Commission considers Non-Tariff Income of Rs. 2.80 Crores, Rs. 2.93 Crores and Rs. 3.08 Crores as reasonable and approves the same for the MYT Control Period from FY 2016-17 to FY 2018-19 respectively.

7.19. Income Tax

Petitioner Submission:

The Petitioner has not submitted any details of Income Tax.

Commission Analysis:

As per Regulation 28 of the MYT Regulations 2014 –

Quote

''(a) Income Tax, if any, on the Licensed business of the Distribution Licensee shall be treated as expense and shall be recoverable from consumers through tariff. However, tax on any income other than that through its Licensed business shall not be a pass through, and it shall be payable by the Distribution Licensee itself.

(b) The income tax actually payable or paid shall be included in the ARR. The actual assessment of income tax should take into account benefits of tax holiday, and the credit for carry forward losses applicable as per the provisions of the Income Tax Act 1961 shall be passed on to the consumers.''

Unquote

In absence of any claim from the Petitioner, the Commission has not approved any income tax claim for the MYT Control Period. The Commission will review the same at the time of True-up for each year of the Control Period.

7.20. Revenue at existing retail tariff for FY 2016-17

Petitioner Submission:

The Revenue from Tariff for FY 2016-17 based on the existing tariff is outlined below for assessing the revenue gap/ (surplus) for the Control Period.

Table 7.39: Revenue at existing tariff for FY 2016-17 submitted by the Petitioner

S. No.	Particulars	Sales (MUs)	Revenue (Rs.Crs)
	LT Category		
1	Domestic	819.46	223.47
2	OHOB	10.38	1.15
3	Commercial	207.32	109.05
4	Agriculture	57.00	1.49
5	Public Lighting	28.17	18.51
6	LT Industrial	184.77	94.91
7	Water Tank	39.25	20.03
8	Temporary Supply-LT&HT		
	Total LT	**1346.35**	**468.61**
	HT Category		
9	HT 1 Industrial / Commercial	1008.99	573.20
10	HT 2 - Government & Water Tank	65.33	43.75
11	HT 3 - EHT	376.41	209.20
12	**Total HT**	**1450.73**	**826.15**
13	**Total LT and HT**	**2797.08**	**1294.76**
17	**Total**	**2797.08**	**1294.76**

The Petitioner has submitted that the revenue does not consist of the FPPCA charges and Commission is requested to allow the revenue at existing tariff at Rs. 1294.76 Crores as proposed by the Petitioner for FY 2016-17.

Commission Analysis:

Based on the slab-wise information provided by the Petitioner and category-wise sales, connected load and number of consumers approved by the Commission, the Commission approves the revenue from sale of power for the Control Period as mentioned in the following Table. The Commission notes that the Petitioner has considered the sales, consumers and connected load as approved by the Commission in the Business Plan Order dated 4th December 2015. The Commission has also considered the sales, consumers and connected load figures as approved in the Business Plan Order. The Commission has found the slab-wise figures as considered by the Petitioner to be reasonable. The Commission, therefore, approves the following revenue at the existing tariff for FY 2016-17.

Table 7.40: Revenue at existing tariff for FY 2016-17 approved by the Commission

Sr. No.	Category of Consumer	No. of Consumers	Energy Sale (MUs)*	Contracted Maximum Demand (KW/kVA)	Revenue (Rs Crore)		
					Demand Charges	Energy Charges	Total Billing
1	Domestic & Cottage						
a	0 - 100	1,22,968	246	-	4.72	27.04	31.76
b	101 - 200	67,633	180	-	2.60	29.75	32.34
c	201 - 300	55,336	123	-	2.12	39.95	42.07
d	>300	61,484	270		2.36	114.93	117.29
e	OHOB	35,539	10	2,843	1.15	-	1.15
f	**Total**	**3,42,960**	**829.84**	**5,09,672**	**12.96**	**211.67**	**224.62**
2	Commercial						
a	0 - 100	7,961	31	-	0.72	13.22	13.93
b	101 - 250	7,463	29	-	0.67	14.08	14.75
c	> 250	34,330	147	-	3.09	77.28	80.37
d	**Total**	**49,754**	**207.32**	**1,09,627**	**4.48**	**104.57**	**109.05**
3	Agriculture						
a	Small farmers	958	8	5,438	0.06	-	0.06
b	Other farmers	5,878	49	54,100	1.75	-	1.75
c	**Total**	**6,836**	**57.00**	**59538**	**1.81**	**-**	**1.81**
4	Public lighting	**50,824**	**28.17**	**6,058**	**3.29**	**15.21**	**18.51**
5	LT Industrial & Water Tank						
a	LT Industrial	6,566	184.77	-	0.68	94.23	94.91
b	Water tank	117	39.25	-	0.01	20.02	20.03
c	**Total**	**6,683**	**224.02**	**1,22,804**	**0.69**	**114.25**	**114.94**
6	Temporary supply - LT&HT	-		-	-		-
7	HT 1 Industrial						
a	HT I(a) for contract demand upto 5000 kVA	362	928.27	3,06,450	86.42	440.93	527.35
b	HT I(b) for contract demand upto 5000 kVA	81	80.72	26,648	7.51	38.34	45.86
	Total	**443**	**1,008.99**	**3,33,098**	**94**	**479**	**573.20**
8	HT 2 - Government & water tank	**56**	**65.33**	**27,731**	**7.82**	**35.93**	**43.75**
9	HT 3 – EHT	**7**	**376.41**	**1,15,167**	**30.40**	**178.79**	**209.20**
10	**Total**	**4,57,562**	**2,797.07**	**12,68,811**	**155.39**	**1,139.70**	**1295.08**

Note: * Some of the sub-category sales figures are rounded-off figures.

The Commission considers the revenue from existing retail tariff of Rs. 1295.08 Crores for FY 2016-17 as reasonable and approves the same.

7.21. Aggregate Revenue Requirement (ARR) for the Control Period

Petitioner Submission:

The Aggregate Revenue Requirement (ARR) is based on Business Plan Order dated 4th December, 2015, certain assumptions with respect to current projection and expected strategic plans to be undertaken in future. However, the impacts of any uneven internal or external parameters have not been considered in the current projections. While the Petitioner would aggressively pursue the goals envisaged in the Petition, however a change in such assumed parameters may impact the operational performance. Accordingly, based on the expenditure items discussed above, the ARR for the Control Period has been formulated.

Commission Analysis:

The Commission has considered and approved the ARR for the Control Period 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 as below for the Control Period.

Table 7.41: ARR approved by the Commission for the Control Period (Rs. Crores)

S. No.	Particulars	FY 2016-17		FY 2017-18		FY 2018-19	
		Submitted	Approved	Submitted	Approved	Submitted	Approved
1	Cost of Power Purchase	1124.57	1,121.79	1185.47	1,182.27	1251.34	1,249.70
2	Employee Expenses	75.12	75.13	81.75	81.74	88.94*	88.94
3	A&G expenses	5.11	5.11	5.56	5.56	6.05	6.05
4	R&M Expenses	20.06	19.41	22.66	22.02	27.15	26.51
5	Depreciation	32.24	31.25	38.93	37.96	46.86	45.80
6	Interest & Finance Charges	28.80	25.63	36.40	33.00	45.67	41.99
7	Interest on Working Capital	-	-	-	-	-	-
8	Interest on Security Deposit	15.02	13.70	16.84	15.35	18.65	17.00
9	Return on Equity	18.26	17.01	22.47	21.27	27.61	26.46
10	Provision for Bad Debts	-	-	-	-	-	-
11	**Total Revenue Requirement**	**1319.18**	**1,309.03**	**1410.07**	**1399.17**	**1512.27****	**1502.45**
12	Less: Non-Tariff Income	2.80	2.80	2.93	2.93	3.08	3.08
13	**Aggregate Revenue Requirement (ARR)**	**1316.38**	**1306.23**	**1407.14**	**1396.24**	**1509.19****	**1499.37**

Note- * The employee expenses as per the Petitioner's calculation is shown as Rs. 88.94 Crores for FY 2018-19 in the Petition; however the Petitioner has inadvertently mentioned the same as Rs. 80.32 Crores in the ARR Table 6-34 of the MYT Petition

** - The Commission has considered the employee expense of Rs. 88.94 Crores for FY 2018-19 under Column ''Submitted'' in the Table above and has accordingly, revised the ARR figure to Rs. 1509.19 Crores for FY 2018-19 from Rs. 1500.56 Crores submitted in the Petition

The Commission has considered Aggregate Revenue Requirement (ARR) at Rs. 1306.23 Crores, Rs. 1396.24 Crores and Rs. 1499.37 Crores for the MYT Control Period from FY 2016-17 to FY 2018-19 respectively.

7.22. Revenue Gap/(Surplus) for FY 2016-17

Petitioner Submission:

The revenue gap calculated by the Petitioner on the basis of projection for FY 2016-17 is Rs. 21.62 Crores. The Commission is requested to approve the revenue gap at Rs. 21.62 Crores for FY 2016-17.

Commission Analysis:

The revenue gap approved for the year is Rs. 11.15 Crores on the basis of the approved aggregate revenue requirement of Rs. 1306.23 Crores and revenue from existing tariff of Rs. 1295.08 Crores for FY 2016-17.

Table 7.42: Revenue Gap approved by the Commission for FY 2016-17 (Rs. Crores)

Particulars	FY 2016-17
Aggregate Revenue Requirement	1306.23
Revenue from Sale of Power at Existing Tariff	1295.08
Revenue Gap/(Surplus)	**11.15**

The revenue gap of Rs. 11.15 Crores not considering the previous year(s) gap has been approved for FY 2016-17.

7.23. Additional Claim – Interest on Security Deposit Provision

Petitioner Submission:

The Petitioner has submitted that the interest on security deposit to the consumers has not been paid for the previous years and accordingly the Commission had not allowed the same during the True-up of FY 2009-10 to FY 2012-13. The Petitioner has submitted that due to delay in collating of security deposit data of old LT consumers, the payment of interest on security deposit to such consumers has been delayed.

In the last Tariff Order dated 10th April 2015, the Commission had given directions to make payment of the interest on security deposit due to the consumers and accordingly the provision of the amount of pending interest on security deposit due to the consumers was allowed in the ARR of FY 2015-16. This provision was allowed considering that this would enable EDP to discharge its obligations and make all pending payments in this regard. Considering the obligations of making payment to the consumers, the Commission had allowed interest on security deposit from FY 2009-10 to FY 2014-15 amounting to Rs. 39.98 Crores in the ARR of FY 2015-16.

The Petitioner has submitted that since the interest on security deposit has not been paid in the past years i.e. from FY 2009-10 to FY 2014-15, the same has not been included in the computation of ARR. Also, of the total liability of interest on security deposit payable to the consumers, Rs. 2.02 Crores was paid in FY 2014-15 and Rs. 2.50 Crores is estimated to be paid to the consumers in FY 2015-16. The security deposit paid by individual consumers is partially captured in the computer data. For rest of the cases, the amount paid by consumers is being verified where policy files are missing/not traceable. However, the interest on security deposits is being paid periodically to the consumers (LT & HT) for whom the data has already been captured in the computer system. The Petitioner has requested the Commission to allow the provision of actual security deposit from FY 2009-10 to FY 2015-16 (after excluding amount paid in FY 2014-15 and estimated to be paid in FY 2015-16), to be included in the revenue gap to be recovered in the MYT control period from FY 2016-17 to FY 2018-19.

The calculation of the provision of interest on security deposit estimated to be paid to the consumers in the MYT Control period as proposed by the Petitioner is as reproduced below:

Table 7.43: Provision for Interest on Security Deposit claimed by the Petitioner (Rs. Crores)

S. No.	Particulars	Previous Year (Audit)					Previous Year (Provisional)	Current Year (Est.)
		FY 2009-10	FY 2010-11	FY 2011-12	FY 2012-13	FY 2013-14	FY 2014-15	FY 2015-16
1	Opening Security Deposit			64.25	73.03	95.90	123.48	144.79
2	Add: Deposits during the Year			8.78	22.87	27.58	21.31	21.31
3	Less: Deposits refunded			0.00	0.00	0.00	0.00	0.00
4	Less: Deposits in form of BG/FDR			0.00	0.00			
5	Closing Security Deposit			73.03	95.90	123.48	144.79	166.10
6	Bank Rate			0.06	0.10	0.09	0.09	0.09
7	Interest on Security Deposit *	**2.99**	**3.18**	**4.12**	**8.02**	**9.32**	**12.07**	**13.21**
8	Cumulative Security Depsit of Past Years	**52.92**						
9	Security Deposit Paid			-	-	-	2.02	2.50
10	Balance Security Deposit to be Paid during control Period	**48.40**						

The Petitioner has requested the Commission to allow the provision of unpaid security deposit of Rs. 48.40 Crores to be included in the total revenue gap to be recovered in MYT Control Period i.e. FY 2016-17 to FY 2018-19.

Commission Analysis:

The Commission notes that in the last Tariff Order dated 10th April 2015, a provision of Rs. 27.63 Crores to meet arrears of Interest on Security Deposit covering the period from FY 2009-10 to FY 2013-14 was allowed in ARR of FY 2015-16. In addition, an amount of Rs. 8.35 Crores pending for FY 2014-15 was also allowed in the ARR of FY 2015-16 for timely payment of the interest on security deposit to the consumers and to enable the Petitioner to discharge its pending obligations in this regard.

The Petitioner has submitted in the MYT Petition that it would be able to pay only Rs. 2.02 Crores in FY 2014-15 and Rs. 2.50 Crores in FY 2015-16 to the consumers. The Commission notes with serious concern that despite the provisioning of the unpaid interest on security deposit amount during FY 2014-15 and FY 2015-16, only a marginal amount of Rs. 4.52 Crores is estimated to be actually paid upto FY 2015-16. The Commission is of the view that it is the consumer's right to receive the interest on security deposit in a timely manner. **The Commission reiterates that its earlier directive on the payment of the pending interest on security deposit amount must be adhered to by the Petitioner. The Commission, in the interest of stakeholders, directs the Petitioner to adhere to the requirement of payment of pending interest on security deposit from FY 2009-10 to FY 2015-16.** The Commission notes the issues pointed out by the Petitioner in the payment of the pending interest on security deposit due to the consumers. The Petitioner is directed to improve its software to facilitate data collection in order to fulfill its pending obligation to the consumers.

The Commission, further, in the interest of all stakeholders, allows the provision in FY 2016-17 to meet the obligation towards the pending interest on security deposit to the consumers from FY 2009-10 to FY 2015-16. The calculation of the same as analyzed by the Commission is given in the following Table:

Table 7.44: Interest on Security Deposit outstanding from FY 2009-10 to FY 2015-16

Figures as approved by the Commission (Rs. Crores)

Particulars	**FY 2009-10 (As per actuals)**	**FY 2010-11 (As per actuals)**	**FY 2011-12 (As per actuals)**	**FY 2012-13 (As per actuals)**	**FY 2013-14 (As per actuals)**	**FY 2014-15 (Review as per Tariff Order dt. 10th April 2015)**	**FY 2015-16 (Review as per this Tariff Order)**
Opening Security Deposit			64.25	73.03	95.90	123.48	144.79*
Addition in Security Deposit			8.78	22.87	27.58	27.58	21.31
Closing Security Deposit			73.03	95.90	123.48	151.06	166.10
Average Security Deposit			68.64	84.47	109.69	137.27	155.45
Bank Rate (%)			6.00%	9.50%	8.50%	9.00%	8.50%
Interest on Security Deposit to be paid	**2.99**	**3.18**	**4.12**	**8.02**	**9.32**	**12.35**	**13.21**
Cumulative Security Deposit of the past years	**53.19**						
Interest on Security Deposit expected to be paid						4.00	2.50
Balance Security Deposit to be paid during the Control Period	**46.69**						

Note- * - The opening security deposit for FY 2015-16 has been considered as submitted by the Petitioner for Review of FY 2015-16 to be reasonable. The Commission, however, has retained the opening and closing security deposits for FY 2014-15 as per the Tariff Order dated 10th April 2015 as the interest on security deposit of Rs. 12.35 Crores was allowed on the same during the year in the above mentioned Tariff Order.

The Commission, therefore, approves the pending interest on security deposit of Rs. 46.69 Crores due to the consumers from FY 2009-10 to FY 2015-16 to be paid to the consumers during FY 2016-17 and allows the same in the cumulative revenue gap for FY 2016-17. This amount is further subject to adjustment based on the True-up of FY 2014-15 and FY 2015-16.

The Commission, directs that the entire outstanding amount of the Interest on Security Deposit should be paid during FY 2016-17. The status of the payment of pending interest on security deposit from FY 2009-10 to FY 2015-16 must be submitted before the Commission by 31st October 2016.

7.24. Cumulative Revenue Gap from FY 2013-14 to FY 2015-16 carried forward to FY 2016-17, including adjustment of the pending Regulatory Asset (from FY 2009-10 to FY 2012-13)

Petitioner Submission:

The Petitioner has submitted that the current petition covers 6 years which includes True-up for FY 2013-14, Provisional True-up for FY 2014-15, APR for FY 2015-16 and ARR for MYT Control period from FY 2016-17 to FY 2018-19. However, the gap from FY 2011-12 to FY 2012-13 (including the past gaps from FY 2009-10 to FY 2010-11) is adjusted against the recovery of the Regulatory Asset and therefore the revenue gap has been calculated along with the additional adjustment from FY 2013-14 to FY 2016-17 which is proposed to be recovered in FY 2016-17 (i.e. first year of the MYT Control Period). The calculation of the cumulative revenue gap as proposed by the Petitioner is reproduced below:

Table 7.45: Cumulative Revenue Gap for FY 2016-17 submitted by the Petitioner (Rs. Crores)

S.No.	Particulars	FY 2013-14	FY 2014-15	FY 2015-16	FY 2016-17
1	Net ARR	1,108.47	1,091.80	1,206.80	1,316.38
2	Revenue at existing tariff excluding surcharge but including FPPCA	1,045.82	1,077.06	1,164.07	1,294.76
3	Revenue gap for the year	62.64	14.74	42.73	21.62
4	Opening balance of gap		62.64	77.39	181.19
5	**Addition during the year**				
6	Gap during the corresponding year		14.74	42.73	21.62
7	**Additional past recoveries to be claimed in the MYT Control Period**				
8	**Under-recovered regulatory asset**			12.67	
9	Accumulated interest on security deposit to be paid during the control period			48.40	
10	**Total cummulative gap for the years**	**62.64**	**77.39**	**181.19**	**202.81**

Note: * In the above Table, the revenue gap for FY 2015-16 as claimed by the Petitioner has been revised downwards to Rs. 40.85 Crores and therefore, the cumulative revenue gap at the end of FY 2016-17 also comes down to Rs. 200.93 Crores (as per revised submission).

The Petitioner has requested the Commission to approve the revenue gap of Rs. 202.81 Crores till FY 2016-17. Further, the Petitioner has requested the Commission to allow the revenue gap to be recovered by way of creation of regulatory assets instead of recovering through tariff hike in FY 2016-17.

Commission Analysis:

The calculation of the cumulative revenue gap as analyzed by the Commission for FY 2016-17 is as follows:

Table 7.46: Cumulative Revenue Gap at the end of FY 2016-17 approved by the Commission

(Rs. Crores)

Particulars	FY 2013-14 (True-up in this Tariff Order)	FY 2014-15 (Review as per Tariff Order dt. 10th April 2015)	FY 2015-16 (Review as per this Tariff Order)	FY 2016-17 (In this Tariff Order)
Revenue Gap/(Surplus) for the year	56.44	(21.33)	22.98	11.15
Carry-over revenue gap of previous year	-	56.44	35.11	64.20
Additional past recoveries to be recovered during FY 2016-17				
Pending Regulatory Asset (from FY 2009-10 to FY 2012-13) at the end of FY 2015-16	-	-	6.11	-
Accumulated Interest on Security Deposit from FY 2009-10 to FY 2015-16 to be paid in FY 2016-17	-	-	-	46.69
Cumulative Revenue Gap for the year	**56.44**	**35.11**	**64.20**	**122.04**

The Regulatory Asset outstanding at the end of FY 2015-16 (from FY 2009-10 to FY 2012-13) has been carried forward and adjusted in the cumulative revenue gap for FY 2016-17. Further, the interest on security deposit provision as allowed by the Commission in this Tariff Order has been carried forward and adjusted in the cumulative revenue gap for FY 2016-17.

The Commission, therefore, approves the cumulative revenue gap at Rs. 122.04 Crores for FY 2016-17. The recovery of this cumulative revenue gap for FY 2016-17 has been discussed subsequently in the Chapter on 'Tariff Philosophy and Category-wise Tariffs for FY 2016-17' of this Tariff Order.

8. Tariff Philosophy and Category-wise Tariffs for FY 2016-17

8.1.Preamble

The Commission in determining the aggregate revenue requirement and retail supply tariff for FY 2016-17 has been guided by the provisions of the Electricity Act, 2003, the Tariff Policy 2016, 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 guide the determination of retail tariff.

8.2. Tariff for FY 2016-17

Petitioner Submission:

The Petitioner has submitted that

Quote *''During November 2015, Puducherry and Karaikal region had faced unprecedented heavy rainfall with floods in most of the places. The neighboring districts of Puducherry such as Cuddalore, Kanchipuram and Chennai (in Tamil Nadu) also faced severe heavy rainfalls and floods never seen in the past 100 years. These natural calamities have caused great strain especially on the small and medium-scale industries. Most of the industries face production issues due to heavy flooding and damage to machinery. The industrial growth in Puducherry and Karaikal region is also inter-related with industrial growth in neighboring districts of Tamil Nadu.*

Besides, the commercial and domestic sectors are also facing economic hardships due to floods and hence raising tariff at the level of 16% (approx.) may become unsustainable and would over-burden all categories of consumers.'' **Unquote**

Therefore, the Petitioner has requested the Commission to approve the cumulative revenue gap at the end of FY 2016-17 as regulatory asset to be recovered during the MYT Control Period.

Further, the Petitioner has submitted that considering the proposed total revenue gap of Rs. 202.81 Crores till FY 2016-17, the Commission may kindly create a regulatory asset to recover the revenue gap during the three years of the MYT Control Period i.e. from FY 2016-17 to FY 2018-19. The Petitioner has not proposed any tariff hike in FY 2016-17 and is requesting the Commission to allow recovery of the revenue gap via additional surcharge of 5.22% over three years' time-frame from FY 2016-17 to FY 2018-19.

The category-wise existing and proposed tariff submitted by the Petitioner is as follows:

Table 8.1: Summary of Existing and Proposed Tariff for FY 2016-17 submitted by the Petitioner

Sr. No.	Category of Consumer	Existing Tariff for FY 2015-16		Proposed Tariff for FY 2016-17	
		Fixed Charge (Rs/kW; Rs/kVA; Rs/HP; Rs/Month/ Connection)	Energy Charges RS/kWh	Fixed Charge (Rs/kW; Rs/kVA; Rs/HP; Rs/Month/ Connection)	Energy Charge (Rs/kWh)
1(a)	Domestic & Cottage				
	0 - 100	32.00	1.10	32.00	1.10
	101 - 200	32.00	1.65	32.00	1.65
	201 - 300	32.00	3.25	32.00	3.25
	>300	32.00	4.25	32.00	4.25
1 (b)	OHOB	27.00		27.00	
2	Commercial				
	0 - 100	75.00	4.25	75.00	4.25
	101 - 250	75.00	4.85	75.00	4.85
	> 250	75.00	5.25	75.00	5.25
3	Agriculture				
	Small farmers	9.00	-	9.00	-
	Other farmers	27.00	-	27.00	-
4	Public lighting	54.00	5.40	54.00	5.40
5	LT Industrial & Water Tanks				
	All Consumption	86.00	5.10	86.00	5.10
6	Temporary supply				
6 (a)	Light Load	200.00	9.45	200.00	9.45
6 (b)	Special Illumination	500.00	9.45	500.00	9.45
6 (c)	Load exceeding 97kW/ 130HP	500.00	9.45	500.00	9.45
7	Hoardings/ Signboards	100.00	7.00	100.00	7.00
8	HT - I Industrial & Commercial				
8 (a)	I(a) upto CD 5000 kVA (Industrial/IT/ITES)	235.00	4.75	235.00	4.75
8 (b)	I(b) upto CD 5000 kVA (Commercial)	235.00	4.75	235.00	4.75
9	HT - II Government & water tank	235.00	5.50	235.00	5.50
10	HT - III EHT (above 5000 kVA)	220.00	4.75	220.00	4.75

Commission Analysis:

The Commission has analyzed in the process of determination of the retail tariff for FY 2016-17 in view of the guiding principles as stated in the Electricity Act, 2003 and Tariff Policy, 2016, the suggestions/objections of the stakeholders in this regard and the Petitioner's submission as discussed above.

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

The relevant section from Tariff Policy, 2016 is as under:

Quote:

8.3. Tariff design: Linkage of tariffs to cost of service

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

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

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

Accordingly, the following principles would be adopted:

1. Consumers below poverty line who consume below a specified level, as prescribed in the National Electricity Policy may receive a special support through cross subsidy. Tariffs for such designated group of consumers will be at least 50% of the average cost of supply.

2. For achieving the objective that the tariff progressively reflects the cost of supply of electricity, the Appropriate Commission would notify a roadmap such that tariffs are brought within ±20% of the average cost of supply. The road map would also have intermediate milestones, based on the approach of a gradual reduction in cross subsidy.

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

4. Extent of subsidy for different categories of consumers can be decided by the State Government keeping in view various relevant aspects. But provision of free electricity is not desirable as it encourages wasteful consumption of electricity. Besides in most cases, lowering of water table in turn creating avoidable problem of water shortage for irrigation and drinking water for later generations. It is also likely to lead to rapid rise in demand of electricity putting severe strain on the distribution network thus adversely affecting the quality of supply of power. Therefore, it is necessary that reasonable level of user charges is levied. The subsidized rates of electricity should be permitted only up to a pre-identified level of consumption beyond which tariffs reflecting efficient cost of service should be charged from consumers. If the State Government wants to reimburse even part of this cost of electricity to poor category of consumers the amount can be paid in cash or any other suitable way. Use of prepaid meters can also facilitate this transfer of subsidy to such consumers.

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

Unquote

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

1) ....

2) ....

3) ....

Quote

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

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

6) Fuel and Power Purchase cost is a major expense of the distribution Company which is uncontrollable. Every State Commission must have in place a mechanism for Fuel and Power Purchase cost in terms of Section 62 (4) of the Act. The Fuel and Power Purchase cost adjustment should preferably be on monthly basis on the lines of the Central Commission's Regulations for the generating companies but in no case exceeding a quarter. Any State Commission which does not already have such formula/mechanism in place must within 6 months of the date of this order must put in place such formula/ mechanism."

Unquote

Based on the approved ARR and expected revenue from existing tariff for FY 2016-17, the cumulative revenue gap of Rs. 122.04 Crores for FY 2016-17 has been estimated by the Commission at the existing tariff.

The Commission, for the purpose of the tariff determination has considered that the entire cumulative revenue gap of Rs. 122.04 Crores would be recovered from the revenue at the approved tariff for FY 2016-17.

Further, the Commission has not created any new regulatory asset since the cumulative revenue gap as allowed by the Commission for FY 2016-17 would be met through the additional revenue at the approved tariff during the year.

The Average Cost of Supply (ACOS) as approved for FY 2016-17 is Rs. 4.67/kWh and the Average Revenue Realization at the existing tariff for FY 2016-17 is Rs. 4.63/kWh. While fixing the tariff for FY 2016-17 to be charged from the consumers, the Commission has appropriately fixed tariff to ensure that the increase in tariff of the different consumer categories does not cause a tariff shock to them. The Commission has approved an average tariff hike of 9.54%, resulting into an additional revenue recovery of Rs. 123.59 Crores from the revised tariff. The Average Revenue Realization at the approved tariff for FY 2016-17 works out to Rs. 5.07/kWh.

The Commission’s approved tariff for FY 2016-17 is as follows:

Table 8.2: Tariff approved by the Commission for FY 2016-17

S. No.	Category/Consumption Slab/month	Fixed Charges (Rs per month per connection/kW/kVA/HP)	Energy/Variable Charges (Rs/kWh)	Average Tariff (Rs./Unit)**	K Factor for FPPCA formula for FY 2016-17
1	**Domestic**				
	0 – 100	40.00	1.10	1.34	0.26
	101 – 200	40.00	1.75	1.93	0.38
	201 – 300	40.00	3.50	3.72	0.73
	>300	40.00	4.60	4.71	0.93
	OHOB	27.00	-	1.11	N/A
2	**Commercial**				
	0 – 100	100.00	4.70	5.01	0.99
	101 – 250	100.00	5.60	5.91	1.16
	> 250	100.00	6.25	6.53	1.29
3	**Agriculture**				
	Small farmers	9.00	-	0.07	N/A
	Other farmers	27.00	-	0.36	N/A
4	**Public Lighting**	75.00	6.75	8.37	1.65
5	**LT Industrial and Water Tanks**				
	LT Industrial	86.00	5.10	5.14	1.01
	Water Tanks	100.00	5.90	5.90	1.16
6	**Temporary Supply**				
6 a	Light Load	-	9.75	-	N/A
6 b	Special Illumination	-	10.00	-	N/A
6 c	Load exceeding 97 kW/130 HP	-	10.00	-	N/A
7	**Hoardings/Signboards**	120.00	8.00	-	N/A
8	**HT 1 Industrial and Commercial**				
8 a	Industrial/IT/ITeS (Contracted maximum demand upto 5000 kVA)	250.00	5.25	6.24	1.23
8 b	Commercial (Contracted maximum demand upto 5000 kVA)	250.00	5.25	6.24	1.23
9	**HT 2 - Government & Water Tank**	250.00	6.75	8.02	1.58
10	**HT 3 – EHT (above 5000 kVA)**	220.00	5.10	5.91	1.16

Note:

1. ** 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

2. 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 N/A.

8.3.Average Cost of Supply (ACoS)

The ACoS as approved for FY 2015-16 as per the Tariff Order dated 10th April 2015 was Rs. 4.64/kWh. The ACoS as arrived for FY 2016-17 is Rs. 4.67/kWh (considering only the ARR of the utility).

The Commission observes that with the progressive increase in the tariff of the subsidized categories towards the ACoS, the tariff may over the years touch ACoS and the existing gap of the cross subsidy may progressively narrow down. The average tariff as a percentage of ACoS of Rs. 4.67/kWh as approved in this Tariff Order for FY 2016-17 is as shown in the following Table. The ACOS as approved for FY 2015-16 of Rs. 4.64/kWh as per the Tariff Order dated 10th April 2015 has been used for drawing comparison with FY 2016-17.

Table 8.3: Approved Tariff as a %age of the ACoS for FY 2016-17

Category	Approved Tariff for FY 16-17			As approved in Tariff Order dated 10th April 2015	
	Average Revenue Realization (FY 2016-17)	%age of ACOS (FY 2016-17)	%age of Required Revenue Requirement* (FY 2016-17)	Average Revenue Realization (FY 2015-16)	%age of ACOS (FY 2015-16)
Domestic excluding OHOB	2.94	63%	58%	2.61	56%
Commercial	6.21	133%	123%	5.25	113%
Agriculture	0.32	7%	6%	0.32	7%
Public Lighting	8.37	179%	165%	6.52	140%
LT Industrial	5.14	110%	101%	5.12	110%
LT Water Tanks	5.90	126%	117%	5.12	110%
HT 1 Industrial	6.24	134%	123%	5.65	122%
HT 1 Commercial	6.24	134%	123%	5.65	122%
HT 2 - Government & Water Tank	8.02	172%	158%	6.79	146%
HT 3 - EHT	5.91	127%	117%	5.54	119%

Note: * This indicates the total revenue requirement of the utility for FY 2016-17 i.e. ARR for FY 2016-17 i.e. Rs. 1306.23 Crores + carry-over revenue gap from FY 2013-14 to FY 2015-16 including adjustment of the pending regulatory asset i.e. Rs. 64.20 Crores + accumulated Interest on Security Deposit from FY 2009-10 to FY 2015-16 to be paid in FY 2016-17 i.e. Rs. 46.69 Crores = Rs. 1417.12 Crores. This revenue requirement has been divided by the sales for FY 2016-17 i.e. 2797.07 MU to arrive at the revenue requirement per unit of sale of Rs. 5.07/kWh.

8.4.Applicability of Revised Tariffs

The revised tariffs shall be applicable from 1st April 2016.

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 the 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 the number of days in the respective period falling under the billing cycle).

8.5.Revenue at Approved Tariff for FY 2016-17

The approved tariff shall be effective from 1st April 2016 and shall remain valid till revised through a separate Order.

The Commission based on the approved retail tariff for FY 2016-17 and approved sales, number of consumers and connected load as discussed in the relevant chapter has arrived at the following revenue at the approved tariff for the various consumer-categories for FY 2016-17.

Table 8.4: Revenue at approved tariff for FY 2016-17

S. No	Category/Consumption Slab	Consumer	Sales* [MU]	Contract demand / connected load [HP/ kVA]	Approved Tariff - FY 17		Revenue for FY 17 at Approved Tariff		TOTAL Revenue
					Fixed Charges	Variable Charges	Fixed Charges	Variable Charges	
		FY 17	FY 17	FY 17	Rs per month per connection/ HP/kW/kVA	Rs./kWh	Rs. Crores	Rs. Crores	Rs. Crores
1	**Domestic**								
	0 - 100	1,22,968	246		**40.00**	**1.10**	5.90	27.04	32.94
	101 - 200	67,633	180		**40.00**	**1.75**	3.25	31.55	34.80
	201 - 300	55,336	123		**40.00**	**3.50**	2.66	43.02	45.68
	>300	61,484	270		**40.00**	**4.60**	2.95	124.39	127.35
	OHOB	35,539	10		**27.00**	**-**	1.15	-	1.15
	Total	**342960**	**829.84**	**-**			**15.91**	**226.01**	**241.91**
2	**Commercial**								
	0 - 100	7,961	31		**100.00**	**4.70**	0.96	14.62	15.57
	101 - 250	7,463	29		**100.00**	**5.60**	0.90	16.25	17.15
	> 250	34,330	147		**100.00**	**6.25**	4.12	92.00	96.12
	Total	**49754**	**207.32**	**-**			**5.97**	**122.87**	**128.84**
3	**Agriculture**								
	Small farmers	958	8	5,438	**9.00**	**-**	0.06	0.00	0.06
	Other Farmers	5,878	49	54,100	**27.00**	**-**	1.75	0.00	1.75
	Total	**6836**	**57.00**	**59538**			**1.81**	**0.00**	**1.81**
4	**Public Lighting**								
	Total	**50,824**	**28.17**		**75.00**	**6.75**	**4.57**	**19.01**	**23.59**
5	**LT Industrial**								
	LT Industrial	6,566	184.77		**86.00**	**5.10**	0.68	94.23	94.91
	Water Tank	117	39.25		**100.00**	**5.90**	0.01	23.16	23.17
	Total	**6683**	**224.02**				**0.69**	**117.39**	**118.08**
6	**HT 1 Industrial & Commercial**								
	HT 1(a)	362	928.27	3,06,450	**250.00**	**5.25**	91.94	487.34	579.28
	HT 1(b)	81	80.72	26,648	**250.00**	**5.25**	7.99	42.38	50.37
	Total	**443**	**1008.99**	**333098**			**99.93**	**529.72**	**629.65**
7	**HT 2 - Government & water tank**								
	Total	**56**	**65.33**	**27,731**	**250.00**	**6.75**	8.32	44.10	**52.42**
8	**HT 3 - EHT**								
	Total	**7**	**376.41**	**1,15,167**	**220.00**	**5.10**	30.40	191.97	**222.37**
	Total	**457563**	**2797.07**				**167.61**	**1251.07**	**1418.68**

Note: * The above are rounded-off figures.

The Commission considers the revenue from revised retail tariff of Rs. 1418.68 Crores as reasonable and approves the same for FY 2016-17.

8.6.Revised Revenue Gap/(Surplus) till FY 2016-17

The approved tariff for FY 2016-17 results into an additional revenue recovery of Rs. 123.59 Crores. The Commission, therefore, has arrived at the following cumulative revenue gap/(surplus) at the end of FY 2016-17.

Table 8.5: Revenue Gap/(Surplus) at Approved Tariff for FY 2016-17 (Rs. Crores)

S. No.	Particulars	Approved FY 2016-17
1	Aggregate Revenue Requirement	1306.23
2	Revenue from Sale of Power at Existing Tariff	1295.08
3	**Revenue Gap/(Surplus) for FY 2016-17 (1-2)**	**11.15**
4	Carry-over revenue gap from FY 2013-14 to FY 2015-16 including adjustment of the pending regulatory asset (from FY 2009-10 to FY 2012-13)	64.20
5	Accumulated Interest on Security Deposit from FY 2009-10 to FY 2015-16 to be paid in FY 2016-17	46.69
6	**Cumulative Revenue Gap at Existing Tariff for FY 2016-17 (3+4+5)**	**122.04**
7	Less: Additional Revenue from Approved Tariff	123.59
8	**Cumulative Revenue Gap/(Surplus) at Approved Tariff for FY 2016-17 (6-7)**	**(1.55)**

The Commission, therefore, approves the revenue surplus of Rs. 1.55 Crores at the end of FY 2016-17.

9. Open-Access Charges for FY 2016-17

The Commission in order to facilitate open access has approved the open access charges for FY 2016-17. It is seen from the Petitioner's submission that the Transmission and Distribution business has not been segregated and EDP continues to function as an integrated utility. The Commission has considered the fact that the expenses of the utility are consolidated and has therefore considered "NIL" transmission charges for the open access consumers of EDP.

9.1.Allocation Matrix

Petitioner Submission:

The Petitioner has submitted that as per clause 33 of MYT Regulations, the distribution licensee needs to maintain separate books of accounts for wheeling and retail supply business. It is further submitted that the distribution licensee does not have the accounts segregated based on the wheeling and retail supply business. Therefore, as also mentioned in the Regulations, in the absence of segregated accounts, the ratio of the segregation may be decided by the Commission based on the data obtained from the distribution licensee.

The Petitioner has submitted that since it does not have segregated accounts, it has to rely on certain assumptions for segregation of the total expenses into wires and supply business. The allocation proposed by the Petitioner is based on the basis that the distribution network up to consumer meter is part of the wires business and the infrastructure beyond meter is part of the retail supply business. The allocation matrix proposed by the Petitioner is as follows.

Table 9.1: Allocation Matrix for FY 2016-17 proposed by the Petitioner

S. No.	Particulars	FY 2016-17	
		Wires Business	Supply Business
1	Cost of Power Purchase	0%	100%
2	Employee Expenses	70%	30%
3	A&G Expenses	50%	50%
4	R&M Expenses	90%	10%
5	Depreciation	90%	10%
6	Interest & Finance Charges	90%	10%
7	Interest on Working Capital	22%	78%
8	Interest on Security Deposit	0%	100%
9	Return on Equity	90%	10%
10	Provision for Bad Debts	0%	100%
11	Less: Non-Tariff Income	0%	100%

Commission Analysis:

The Commission is of the view 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. The Commission has considered it 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 same allocation matrix was adopted by the Commission in the Tariff Order for FY 2015-16 dated 10th April 2015.

The allocation between wheeling and retail supply business for FY 2016-17 as per the ARR approved in this Tariff Order is as provided in the following Table:

Table 9.2: Allocation of ARR between Wheeling and Retail Supply for FY 2016-17 approved by the Commission

S. No.	Particulars	Wires Business (%)	Supply Business (%)	FY 2016-17 (Rs. Crores)		
				Wires Business	Supply Business	Total ARR
1	Cost of Power Purchase	0%	100%	-	1,121.79	1,121.79
2	Employee Expenses	70%	30%	52.59	22.54	75.13
3	A&G expenses	50%	50%	2.55	2.56	5.11
4	R&M Expenses	90%	10%	17.47	1.94	19.41
5	Depreciation	90%	10%	28.13	3.13	31.25
6	Interest & Finance Charges	90%	10%	23.07	2.56	25.63
7	Interest on Working Capital	22%	78%	-	-	-
8	Interest on Security Deposit	0%	100%	-	13.70	13.70
9	Return on Equity	90%	10%	15.31	1.70	17.01
10	Provision for Bad Debts	0%	100%	-	-	-
11	**Total Revenue Requirement**			**139.12**	**1169.91**	**1309.03**
12	Less: Non-Tariff Income	0%	100%	-	2.80	2.80
13	**Aggregate Revenue Requirement (ARR)**			**139.12**	**1167.11**	**1306.23**

9.2.Voltage-wise Wheeling Charges

Petitioner Submission:

The Petitioner has submitted that the allocation of network and supply cost has been considered in line with the allocation matrix proposed by it. Further, the Petitioner has submitted that the apportionment of wheeling charges has to account for losses and therefore in the absence of voltage-wise details, it has considered the bifurcation of the wheeling cost based on the sales and losses at each voltage level. The voltage-wise losses are taken as approved by the Commission in the last Tariff Order for FY 2015-16.

The wheeling charges as submitted by the Petitioner are as follows:

Table 9.3: Wheeling Charges for the MYT Control Period as submitted by the Petitioner

S.No.	Particulars	UoM		FY 2016-17	FY 2017-18	FY 2018-19
1	Wheeling Cost	Rs.Crs	a	144.56	168.41	191.81
2	Wheeling Cost at EHT	Rs.Crs	b=ax49%	70.83	82.52	93.99
3	Wheeling Cost at HT	Rs.Crs	c=ax9%	13.01	15.16	17.26
4	Wheeling Cost at LT	Rs.Crs	d=ax42%	60.71	70.73	80.56
5	Energy Input at Discom Periphery	MU	e	3115.22	3313.23	3524.64
6	**Wheeling Charge at EHT Level**	**Rs./kWh**	**f=b/ex10**	**0.23**	**0.25**	**0.27**
7	EHT Losses	%	g	1%	1%	1%
8	EHT Losses	MU	h	31.15	33.13	35.25
9	Sales at EHT Level	MU	i	376.41	398.99	422.93
10	Energy Input at HT	MU	j=e-h-i	2707.66	2881.10	3066.47
11	**Wheeling Charge at HT Level**	**Rs./kWh**	**k=c/jx10**	**0.05**	**0.05**	**0.06**
12	HT Losses	%	l	5%	5%	5%
13	HT Losses	MU	m	135.38	144.06	153.32
14	Sales at HT Level	MU	n	1,074.32	1,137.71	1204.84
15	Energy Input at LT	MU	o=j-m-n	1497.96	1599.34	1708.30
16	**Wheeling Charge at LT Level**	**Rs./kWh**	**p=d/ox10**	**0.41**	**0.44**	**0.47**
17	Sales at LT Level	MU	q	1,306.24	1,403.79	1509.16
18	LT Losses	MU	r=o-q	191.72	195.55	199.14
19	LT Losses	%	%	12.8%	12.2%	11.7%
20	Total Losses	MU	s=r+m+h	358.25	372.74	387.71
		%		11.50%	11.25%	11.00%

The apportionment of the wheeling cost has been considered in the ratio of 49:9:42 between EHT, HT and LT respectively (as considered in the last Tariff Order dated 10th April 2015).

The Petitioner has requested the Commission to approve the proposed wheeling charges.

Commission Analysis:

The Petitioner has submitted that the voltage-wise bifurcation of expenses and assets are not available. The Commission opines that in the absence of the details of bifurcation of assets and expenses, the open access should not be restricted due to lack of information. The Commission in this regard would like to mention that the apportionment of wheeling charges has to account for losses. Therefore, in the absence of the voltage-wise details, the Commission has considered the bifurcation of wheeling cost based on the sales and losses at each voltage level.

The Commission has considered the losses at EHT and HT same as approved in the last Tariff Order dated 10th April 2015. Accordingly, the Commission has considered the losses for HT and EHT at 5% and 1% respectively. The loss for FY 2016-17 has been approved by the Commission at 11.50% in this Order. Accordingly, the balancing loss has been considered at the LT level in the following Table.

Table 9.4: Voltage-wise Losses considered by the Commission for FY 2016-17

Voltage level	Loss
EHV	1.00%
HT - 33/22/11 kV	5.00%
LT	12.80%
Total	**11.50%**

The apportionment of the wheeling cost has been considered in the ratio of 49:9:42 between EHT, HT and LT respectively (as considered in the last Tariff Order dated 10th April 2015). The apportionment of the wheeling cost has been considered in the same ratio. The wheeling charge so arrived has been shown in the following Table.

Table 9.5: Wheeling Charges approved for FY 2016-17

Particulars	UoM	S. No	FY 2016-17
Wheeling Cost	Rs Crores	A	139.12
Wheeling Cost at EHT	Rs Crores	B=A*49%	67.94
Wheeling Cost at HT	Rs Crores	C=A*9%	12.98
Wheeling Cost at LT	Rs Crores	D=A*42%	58.20
Energy Input at Discom Periphery	MU	E	3,115.22
Wheeling Charge at EHT level	Rs per Unit	**F=B/E*10**	**0.22**
EHT Losses	%	G	1%
EHT Losses	MU	H	31.15
Sales at EHT Level	MU	I	376.41
Energy Input at HT	MU	J=E-H-I	2,707.66
Wheeling Charge at HT level	Rs per Unit	**K=C/J*10**	**0.05**
HT Losses	%	L	5%
HT Losses	MU	M	135.38
Sales at HT Level	MU	N	1,074.32
Energy Input at LT	MU	O=J-M-N	1,497.95
Wheeling Charge at LT level	Rs per Unit	**P=D/O*10**	**0.39**
Sales at LT level	MU	Q	1,306.24*
LT Losses	MU	R=O-Q	191.71
Total Losses	MU	S=R+M+H	358.25
	%		11.50%

Note - * Sales at LT level have been considered after considering the energy savings of 40.11 MU.

9.3.Cross-Subsidy Surcharge

Petitioner Submission:

The Petitioner has submitted that as per the National Electricity Policy, a surcharge is to be levied by the respective State Commissions on consumers switching to alternate supplies under open access. This is to compensate the host distribution licensee serving such consumers who are permitted Open Access under Section 42 (2) of the Electricity Act, for loss of cross-subsidy element built into the tariff of such consumers. An additional surcharge may also be levied under sub-section (4) of Section 42 of the said Act for meeting the fixed cost of the distribution licensee arising out of its obligation to supply in cases where consumers are allowed open access.

The Petitioner has determined the cross-subsidy surcharge (CSS) in accordance with the formula specified in the National Tariff Policy.

The category-wise CSS applicable is arrived on consideration of the components ABR, C, L & D as discussed in the corresponding sections. The CSS as proposed by the Petitioner is as follows:

Table 9.6: Cross-subsidy Surcharge (CSS) proposed by the Petitioner

S.No.	Particulars	Sales	Revenue from proposed tariff	Average tariff T	Cost of power C	Wheeling charges D	Loss L	Cross subsidy surcharge CSS
		MUs	Rs.Crs	Rs./kWh	Rs./kWh	Rs./kWh	%	Rs./kWh
1	HT Industrial & Commercial	1,008.99	573.20	5.68	3.04	0.05	5.00%	2.44
2	HT II Govt. & Water Tank	65.33	43.75	6.70	3.04	0.05	5.00%	3.46
3	HT III EHT	376.41	209.20	5.56	3.04	0.23	1.00%	2.26

The Petitioner has requested the Commission to approve the cross-subsidy surcharge as proposed by it.

Commission Analysis:

The Government of India has notified the National Tariff Policy, 2016 on 28th January 2016. The Cross subsidy surcharge is based on the following formula given in the Tariff Policy, 2016 which is as follows:

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

Where,

S is the surcharge

T is the tariff payable by the relevant category of consumers, including reflecting the Renewable Purchase Obligation;

C is the per unit weighted average cost of power purchase by the Licensee, including meeting the Renewable Purchase Obligation;

D is the aggregate of transmission, distribution and wheeling charge applicable to the relevant voltage level

L is the aggregate of transmission, distribution and commercial losses, expressed as a percentage applicable to the relevant voltage level

R is the per unit cost of carrying regulatory assets.

The cross subsidy surcharge shall be taken as 'NIL' if negative.

The computation of each component is as given below:

Table 9.7: Calculation of 'T'

Particulars	Sales (MU)	Revenue from approved tariff (Rs. Crores)	Average Tariff (Rs/kWh)
HT 1 Industrial & Commercial	1008.99	629.65	6.24
HT 2 - Government & Water Tank	65.33	52.42	8.02
HT 3 - EHT	376.41	222.37	5.91

Table 9.8: Calculation of 'C'

Station	Energy at the periphery (MU)	Average Rate (Rs./kWh)	Total Power Purchase Cost (Rs. Crores)
Energy availability at the periphery	3115.22	3.60	1121.79

The cross-subsidy surcharge based on the above formula is worked out as follows:

Table 9.9: Approved Cross-Subsidy Surcharge for FY 2016-17

Particulars	UoM	HT 1	HT 2	EHT
T	Rs. Per kWh	6.24	8.02	5.91
C	Rs. Per kWh	3.60	3.60	3.60
D	Rs. Per kWh	0.05	0.05	0.22
L	%	5.00	5.00	1.00
Surcharge	**Rs. Per kWh**	**2.41**	**4.19**	**2.05**

The cross-subsidy surcharge has been calculated for the HT and EHT category only as presently the open access is allowed to 1 MW and above consumers which fall under this category.

9.4. Additional Surcharge

Petitioner Submission:

The Petitioner has submitted that it will approach the Commission separately on case-to-case basis for seeking approval for the 'Additional Surcharge'.

Commission Analysis:

In order to promote competition through open access, the Commission in line with the Petitioner's submission has approved 'NIL' Additional Surcharge. This would be revisited at the time of the next Tariff Order based on Open Access implementation in EDP.

10. Directives

10.1. Directives continued in this Tariff Order

In respect of the directives given earlier by the Commission, while examining the compliance note and supporting documents submitted by the Petitioner in the present Petition, it is observed that some of the directives have not been fully complied with by the Petitioner.

The Commission, considering the constraints/submissions of the Petitioner, is of the view that some of the directions need further action by the Petitioner. Thus, the Commission has decided to continue with the following directives:

Directives as per the Tariff Order for FY 2009-10 dated 5th February 2010

10.1.1. Annual Statement of Accounts

Quote ''The Electricity Department, Puducherry has not prepared the accounts for the Electricity Department separately. Electricity Business being come under Regulation under Electricity Act, 2003, the accounts pertaining to Electricity Business are required to be prepared separately and got audited. The Department is directed to prepare "Accounting Statement" which includes balance sheet, profit and loss account, cash flow statement, and report of the auditors, cost records etc., together with notes and such other supporting statements and submit the same along with the next ARR and Tariff Petition. The Commission will not accept ARR and Tariff Petition from EDP without the Audited Annual Statement of Accounts.'' **Unquote**		
Reference Order/ Petitions	**Petitioner Submission**	**Commission Analysis**
Compliance / Action taken by the Petitioner and the Commission's comments as per Tariff Order dated 10th April 2015	Audit of FY 2011-12 & FY 2012-13 has been completed and the same has been furnished for Truing up of FY 2011-12 & FY 2012-13 respectively along with this petition. Unaudited accounts have been prepared and the same are attached for provisional true up of FY 2013-14. Audit of	The filing of Final True up for FY 2011-12 and FY 2012-13 is noted. The audited accounts for FY 2013-14 shall be expedited and submitted along with True up Petition for FY 2013-14 by June 2015.

	accounts for FY 2013-14 is expected to be completed by February 2015 and the same will be furnished to the Commission immediately. Hence, it is prayed that the directive may be dropped.	
Present Petition	The Accounts for the FY 2013-14 has been audited and for the FY 2014-15 it is programmed to take up the audit during Jan-Feb of 2016. The True-up Petition for FY 2013-14 has been filed with this Petition with audited accounts and for FY 2014-15 Provisional True-up is being filed with this petition for kind consideration of the Commission as audited accounts for FY 2014-15 would be ready by Feb-2016.	The Commission notes the submission of the Petitioner. The Commission has noted that the True-up of FY 2013-14 has been filed along with the MYT Petition. The True-up for FY 2014-15 was to be filed during this year's tariff filing. However, only the Provisional True-up has been submitted along with the MYT Petition. The Commission expects timely completion of audit of the relevant year so that True-up Petition for the respective year can be filed on time before the Commission. The Commission reiterates that audit and True-up be carried out on time as per the provisions of the JERC Regulations.

10.1.2. Preparation of Asset and Depreciation Register

Quote ''The Electricity Department, Puducherry has mentioned that in the absence of audited annual accounts the asset-wise details are not available and the block-wise details are being assimilated and will be made available in the future filings. Similarly, the Electricity Department has not maintained the depreciation register. The Department has taken the pro-forma accounts of 1992-93 as base and the capital expenditure additions during the years 1993-94 to 2008-09 and applied the prevailing depreciation rates to the

entire capital expenditure without taking into consideration, whether the assets exist, are in useful condition, are used for the electricity business and the assets have not been completely depreciated etc. The Electricity Department is directed to arrange for the preparation of Asset and the Depreciation Registers function-wise and asset-classification wise." **Unquote**

Reference Order/ Petitions	**Petitioner Submission**	**Commission Analysis**
Compliance / Action taken by the Petitioner and the Commission's comments as per Tariff Order dated 10th April 2015	Asset and Depreciation Registers have been prepared for the FY 2011-12, FY 2012-13 & FY 2013-14. Audit of accounts along with Asset and Depreciation Registers for the FY 2011-12 & FY 2012-13 has been completed. Audit of FY 2013-14 is awaited. Hence, it is prayed that the directive may be dropped.	Compliance is noted. The Fixed Asset Register (FAR) for FY 2013-14 may be submitted along with True-up Petition for FY 2013-14.
Present Petition	The Petitioner has submitted that the asset and depreciation register for FY 2014-15 is being prepared. For FY 2013-14, asset and depreciation registers have been prepared and available with EDP.	The Commission notes the compliance with the said directive of the Commission. The Commission, directs that in the future True-up Petition be duly submitted along with the audited accounts and the asset and depreciation registers for the respective year on time.

10.1.3. Accounting of Security Deposits etc. under appropriate heads of accounts

Quote ''EDP has combined the security deposits, meter security deposits and consumer contribution for service lines from the consumers under one account head. EDP is directed to separate these components and account them separately under relevant heads of account.'' **Unquote**		
Reference Order/ Petitions	**Petitioner Submission**	**Commission Analysis**
Compliance / Action taken by the Petitioner and the Commission's comments as per Tariff Order dated 10th April 2015	In the case of HT consumers, the payment of interest on security deposits has been made for the year FY 2012-13, FY 2013-14 and FY 2014-15. For LT consumers, interest on security deposits has been paid to Town O&M Division of Puducherry and to Mahe Region. With respect to Yanam region, the sanction of the Government for payment of interest on security deposit for FY 2012-13 & FY 2013-14 is under process.	Compliance on payment of interest on security deposits is noted. The sanction of the Government for payment of interest on security deposit for LT consumers and Yanam region for FY 2012-13 and FY 2013-14 may be obtained early and payment released. The sanction for payment of security deposit for FY 2014-15 may also be obtained early and payment released to the consumers. It is seen that though the Commission has approved and included a provision of Rs. 39.98 Crores in the ARR covering the payment from FY 2009-10 to FY 2014-15, EDP has not taken serious steps for payment/credit to the consumers concerned. A paltry amount of only Rs. 4 Crores is provided in FY 2014-15 (RE) by EDP. The Commission reiterates the earlier directive for early payment/credit to the consumers to liquidate the entire arrears by FY 2015-16 itself.
Present Petition	The accumulated security deposit with the Department is cumulative total of 30 years. The security deposits paid by individual consumers are captured in the	The Commission notes the submission of the Petitioner. However, the Commission is not satisfied with the progress of compliance of the said directive.

	computer data only to some extent. For rest of the cases, the amount paid by consumers are being verified where policy files are missing/ not –traceable. However, interest on security deposits is being paid periodically to consumers (HT&LT) for whom the data is available with the computer system. Efforts will be made in FY 2016-17, to document the security deposit made by all consumers in the computer system and for those consumers, the interest will be paid from FY 2009-10 onwards as directed by the Hon'ble Commission. EDP prays to the Hon'ble Commission to extend the time limit up to FY 2016-17.	The Commission notes that as per the latest submission in the MYT petition, a provision of Rs. 48.40 Crores has been proposed by the Petitioner towards the arrears on interest on security deposit from FY 2009-10 to FY 2015-16 and the same has been included in the total revenue gap to be recovered in FY 2016-17. The Commission notes in the Petition that of the total interest on security deposit of Rs. 52.92 Crores (approximately) estimated to be paid from FY 2009-10 to FY 2015-16, only a marginal amount of Rs. 4.52 Crores is estimated to be actually paid up to FY 2015-16 and the rest has been provisioned in FY 2016-17 by the Petitioner. The Commission has also noted that a provision of Rs. 27.63 Crores in FY 2015-16 was made during the last Tariff Order dated 10th April 2015. However, the Petitioner as per the revised estimates submitted this time has shown only an amount of Rs. 2.50 Crores to be paid during FY 2015-16. A provision of Rs. 9.78 Crores was also approved in the Tariff Order for FY 2014-15. The Commission notes with serious concern that despite the provisioning of the unpaid interest on security deposit amount during FY 2014-15 and FY 2015-16, only a marginal amount amounting to Rs. 4.52 Crores is estimated to be actually paid up to FY 2015-16. The software and data related issues need to be sorted out at the earliest. The status report on the payment of the pending amount due to the consumers

		from FY 2009-10 to FY 2015-16 must be submitted to the Commission by September 2016.

10.1.4. Energy Audit and T&D Losses

Quote ''Electricity Department has projected the transmission and distribution losses at 14% for the year 2009-10. It is observed that two categories of consumers are being supplied un-metered electricity. This fact also has a bearing on accuracy of losses being reported. It is considered that this loss level for a small distribution system is high and there is scope for reduction of losses. Since EDP operates small areas it is possible to reduce T&D losses from the existing 14% during 2010-11. The EDP is directed to get a study of the distribution system of EDP conducted by a third-party with the approval of the Commission so that appropriate loss trajectory could be fixed.

Electricity Department, Puducherry shall get energy audit conducted by a third party at 11kV feeder and distribution transformer levels to identify the high loss areas and take steps to reduce the technical loss and control pilferage of energy. The deemed licensee shall also furnish six monthly energy audit report to the Commission as required under Regulation 15(4) of the Draft Regulations.

Effective steps are required to be taken to segregate technical and commercial losses and reduce the losses.'' **Unquote**

Reference Order/ Petitions	Petitioner Submission	Commission Analysis
Compliance / Action taken by the Petitioner and the Commission's comments as per Tariff Order dated 10th April 2015	At present, meters are available at the voltage levels of 220 KV, 110 KV, 22 KV and 11 KV in all the EHT sub stations. The sanction of the Government has been received for providing metering arrangements for 1220 no's, of distribution transformers. The work order for the same is proposed to be issued shortly. The required energy meters have already been purchased.	Compliance is noted. The metering arrangements for 1220 distribution transformers should be expedited as the meters are already obtained. The time schedule for providing meters at distribution transformers should be furnished by 15th June, 2015.

	In the case of Karaikal region, energy meters have been fixed in 24 number of distribution transformers.	
Present Petition	All the Distribution transformers at Yanam, Mahe and Karaikal regions are completely metered. Most of the transformers at Puducherry region were metered except few cases. Proper energy audit report will be generated by monitoring HT feeder consumption vs connected DTRs. Similar energy audit report will be generated by monitoring consumption vs transformer metering. The reports will be furnished to Hon'ble Commission from FY 2016-17.	The Commission has noted the various steps taken by the Petitioner towards compliance of the said directive. The Commission notes that considerable time has already been given to the Petitioner to fulfill compliance of the said directive. However, the energy audit report has still not been submitted before the Commission. The Commission expects compliance of the said directive during FY 2016-17 failing which strict action would be initiated by the Commission under various provisions of the JERC Regulations. The energy audit report should be submitted before the Commission along with the next ARR & Tariff filing.

10.1.5. Estimation of the consumption by agriculture pump-sets

Quote ''Electricity Department, Puducherry has not furnished the basis for arriving at the estimated consumption of Agriculture category of the consumers. EDP shall obtain the actual connected load particulars of agricultural connection and submit the same to the Commission. Wherever possible, lines predominantly feeding agricultural connections shall be segregated from other loads and metered to assess agricultural consumption at agricultural feeder level as well as consumer level.'' **Unquote**		
Reference Order/ Petitions	**Petitioner Submission**	**Commission Analysis**
Compliance / Action taken by the Petitioner and the Commission's comments as per Tariff Order dated 10th April 2015	As directed by the Commission, EDP has taken initiatives to provide meters at the distribution transformers feeding power supply predominantly to the agriculture consumers and assess the actual energy consumption per HP of agriculture consumers. 97 energy meters have been fixed and analysis is being undertaken by the Department.	The consumption observed on the meters provided at distribution transformer feeding agricultural consumers and the actual consumption assessed per HP based on the meters provided so far may be furnished to the Commission by June, 2015. Metering of balance transformers should be expedited and road map for providing meters on all transformers should be furnished by June, 2015.
Present Petition	As mentioned above, agriculture consumption will also be computed from the metered distribution transformers of predominant agriculture connected transformers and the report will be furnished to Hon'ble Commission from FY 2016-17.	Work of the metering of the distribution transformers connected to agriculture consumers should be expedited and the status report be submitted before the Commission along with the next ARR & Tariff filing.

10.1.6. Management Information System (MIS)

Quote ''Electricity Department, Puducherry is directed to take steps to build credible and accurate data base and management information system to meet the requirements for filing ARR & Tariff Petition as per regulatory requirement and also to suit the Multi-Year Tariff Principles which the Commission may consider at the appropriate time under Regulation-11. The formats software and hardware may synchronize with the Regulatory Information and Management System (RIMS) circulated by Central Electricity Regulatory Commission (CERC).'' **Unquote**		
Reference Order/ Petitions	**Petitioner Submission**	**Commission Analysis**
Compliance / Action taken by the Petitioner and the Commission's comments as per Tariff Order dated 10th April 2015	Government of India has extended the last date for completion of Part - A, R-APDRP Scheme up to March 2015. After completion of the R-APDRP Scheme the necessary MIS inputs will be submitted to the Commission.	The EDP is directed to report the timeline for completion of the RAPDRP Scheme to the Commission by 30th June, 2015.
Present Petition	The MIS reports would be generated as soon as the full implementation of R-APDRP scheme is done, which is likely to be completed by March 2016 as per the present schedule.	The status of the progress of work related to the R-APDRP scheme be submitted before the Commission by September 2016. The Petitioner is directed to take this up further with the relevant authorities for expediting work related to the R-APDRP schemes.

10.1.7. Metering of consumer installations/replacement of non-functional or defective meters

<table>
<tr><td colspan="3">Quote ''The non-functional / defective meters existing in the EDP distribution system contribute to losses of the system.

Electricity Department, Puducherry is directed to report to the Commission by 30.06.2010 details of such defective meters category-wise in the system as on 31.12.2009, with an action plan to replace them.'' Unquote</td></tr>
<tr><th>Reference Order/ Petitions</th><th>Petitioner Submission</th><th>Commission Analysis</th></tr>
<tr><td>Compliance / Action taken by the Petitioner and the Commission's comments as per Tariff Order dated 10th April 2015</td><td>Regarding replacement of non-functional and defective meters, the department has procured 50,000 numbers of single phase energy meters and 9,000 numbers of three phase energy meters for this purpose. Out of 50,000 single phase meters, 45,500 have already been allotted to different sections for replacement of defective/stuck up meters. The replacement of stuck up meters have been carried out under war footing basis.

During H1 of FY 2014-15, 8548 numbers of meters were replaced. Further, the Department proposes to place orders for purchase of 22,000 & 10,000 numbers of single phase & three phase electronic meters</td><td>Acton taken by EDP on the compliance of the directive is noted. EDP is directed to submit the present status of replacement of defective meters etc., with meters already available, the additional meters proposed to be ordered and timeline for receipt of the additional meters. EDP is directed to report time-schedule for replacement of defective meters as on 31.03.2015. The report must be submitted by 30th June, 2015.</td></tr>
</table>

	at a cost of Rs.2.5 Crore. It is further programmed to procure under RAPDRP scheme 30,000 & 12,000 numbers respectively of single phase & three phase electronic meters with AMR compatibility for Rs 8 Crores.	
Present Petition	Through 100% metering programme it is proposed to convert 20% of unmetered services (OHOB & Agriculture services) during FY 2016-17, 40% during FY 2017-18, and the remaining 40% during FY 2018-19. Further, it is also programmed to eliminate the struck-up meters in the system. As per the programme, 91,000 meters are being replaced in the FY 2015-16 and 118,000 meters will be replaced in FY 2016-17.	The Commission in the Business Plan Order dated 4th December 2015, has expected full compliance of the 100% metering programme by FY 2017-18 and has accordingly approved the capital expenditure for this scheme for FY 2016-17 and FY 2017-18. No carry-over of capital expenditure has been allowed during FY 2018-19. Further, the Commission in the Business Plan Order has directed as below: **Quote** *''The Commission directs the department to provide detailed plan to undertake metering in the different areas, especially Karaikal. The details regarding plan of distribution of meters in different areas of Puducherry needs to be elaborated and submitted before the Commission.''* **Unquote** The Commission expects compliance of the above directive. The Petitioner is directed to submit the present status of replacement of defective meters, meters already available, additional meters proposed to be ordered and timeline for receipt of additional meters. EDP is directed to report time schedule for replacement of defective

		meters as on 30.04.2016. The status report must be submitted by June 2016.

10.1.8. Billing and Collection Efficiency

Quote ''Electricity Department, Puducherry is directed to initiate measures to improve the billing efficiency in respect of metered services and collection efficiency to hundred percent in a time-bound manner.'' **Unquote**		
Reference Order/ Petitions	**Petitioner Submission**	**Commission Analysis**
Compliance / Action taken by the Petitioner and the Commission's comments as per Tariff Order dated 10th April 2015	Government of India has extended the last date for completion of Part - A, R-APDRP Scheme up to March 2015. After completion of the R-APDRP Scheme the billing and collection efficiency will drastically improve. On completion of the above work, necessary report will be submitted to the Commission.	EDP is directed to report the present status of Billing and Collection efficiency and the improvement expected on completion of R-APDRP Scheme which is expected to be completed by March, 2015. The report should be submitted by 30th June, 2015.
Present Petition	The billing efficiency will drastically improve on implementation of above mentioned metering programme. In addition, the billing software is also being modified through R-APDRP programme and it is likely to be commissioned by 1st quarter of FY 2016-17	As per the True-up of FY 2013-14, collection efficiency of 91.60% has been submitted by the Petitioner. Further, the Petitioner in the MYT Petition has submitted that it would be able to achieve collection efficiency of 95% for FY 2015-16. Likewise, 95% for FY 2016-17, 96% for FY 2017-18 and 97% for FY 2018-19 has been submitted by the Petitioner for the Control Period. The Commission does not find such low levels of collection efficiency being reported by the Petitioner as acceptable. Billing and collection

	on completion of project by March 2016. The collection efficiency of the Department will improve on implementation of new software system.	efficiency should be improved through various channels and the process of speedy implementation of the R-APDRP should be carried out so that related activities can improve. The Commission during the Public Hearing directed the Petitioner to announce the list of defaulters in payment of power bills in the public domain. The Commission in the Business Plan Order for EDP dated 4th December 2015, has directed the Petitioner to achieve 100% collection efficiency by the end of the Control Period i.e. FY 2018-19. Further, targets of 98% for FY 2016-17 and 99% for FY 2017-18 have been set. The Commission retains these targets as set out in the Business Plan Order for purposes of this Tariff Order. Status report on the same should be submitted before the Commission along with the next ARR & Tariff filing.

10.1.9. Collection of Arrears

Quote ''Electricity Department, Puducherry is having substantial arrears outstanding from various categories of consumers.

Electricity Department, Puducherry is directed to provide age-wise analysis before the next ARR and initiate measures to liquidate the arrears.'' **Unquote**

Reference Order/ Petitions	Petitioner Submission	Commission Analysis
Compliance / Action taken by the Petitioner and the Commission's comments as per	Arrears to the tune of Rs. 80 Crores have been collected from the consumers up to June 2014. The Department has initiated special	Compliance is noted. EDP is directed to collect the arrears from the Government Departments, public under takings and private consumers and submit quarterly reports on the realisation of the arrears.

Tariff Order dated 10th April 2015	drive to collect outstanding arrears both from Government and private sectors. The respective Head of the Departments have been addressed to pay special attention to clear arrears. The Government of Puducherry is releasing an amount of Rs. 100 Crores for liquidating the arrears of all public sector undertakings and Government Departments.	
Present Petition	The Government of Puducherry has released Rs. 80 Crores to liquidate the Government arrears in FY 2014-15 and the level of support is expected during FY 2015-16 to liquidate the arrears of the Government/Local Bodies. Special drive is also programmed during the last quarter of FY 2015-16 to collect arrears from private consumers and defunct industry/commercial establishments.	The Commission has been repeatedly giving directive to the Petitioner on the collection of outstanding arrears from all consumers including Government Departments and Public Sector Undertakings. The Commission reiterates that its directive on the collection of arrears should be duly adhered to. The Petitioner must submit quarterly progress reports on the status of the same. The list of consumers defaulting should be announced in public.

10.1.10. Load Shedding and Ensuring Proper Service to the Consumers

<table>
<tr><td colspan="3">Quote ''Electricity Department, Puducherry is directed to minimize load shedding. EDP shall obtain the prior approval of the Commission if any load shedding is planned. If there are any constraints in the system such as over loading of lines or power transformers, a detailed project report has to be prepared immediately to improve the system. The

Department should provide uninterrupted power supply as per the Supply Code & SOP to the extent possible at the stipulated voltage in accordance with standards notified by the Commission.'' Unquote</td></tr>
<tr><th>Reference Order/ Petitions</th><th>Petitioner Submission</th><th>Commission Analysis</th></tr>
<tr><td>Compliance / Action taken by the Petitioner and the Commission's comments as per Tariff Order dated 10th April 2015</td><td>Sanction of the Government has been obtained for man power employment for Customer Care Centre. IT implementing Agency is about to set up the Customer Care Centre.</td><td>Action taken is noted. EDP is directed to report the present status and the target date for setting up of the full-fledged Centre to provide better service to consumers. Details of load shedding has to be informed to the consumers in advance through newspapers etc. The report should be submitted to the Commission by 30th June 2015.</td></tr>
<tr><td>Present Petition</td><td>The 24X7 call centre will be opened as soon as the software implementation is completed by the firm under R-APDRP scheme. The other infrastructure for the 24X7 call centre is completed. It is to be commissioned by the 1st quarter of FY 2016-17.</td><td>Action taken is noted. The status report on the operationalization of the 24X7 call centre should be reported before the Commission along with the next ARR & Tariff filing.</td></tr>
</table>

10.1.11. Demand Side Management and Energy Conservation

Quote ''Demand side management and energy conservation are important areas, which should be in focus in the EDP, particularly, in the context of peak load. Time of Day (ToD) tariff is one of the measures, which could be implemented to control the peak demand. EDP is directed to examine the feasibility of introducing ToD tariff to consumers. The other measures that could be implemented to reallocate and rationalize demand and conserve energy are promoting awareness towards use of CFL lamps by the consumers. EDP shall educate the consumers by way of demonstration, holding meetings at various levels and through electronic and print media in order to promote demand side management and energy conservation measures by way of using energy-efficient lights. EDP shall install capacitors at 110 kV and 33 kV substations and also for agricultural pump-sets to meet the reactive power requirements of the system.'' **Unquote**		
Reference Order/ Petitions	**Petitioner Submission**	**Commission Analysis**
Compliance / Action taken by the Petitioner and the Commission's comments as per Tariff Order dated 10th April 2015	As a part of demand side management with the approval of the Hon'ble commission, the Electricity Department, Puducherry is implementing the scheme namely Demand side management Energy Efficient Lighting Programme (DELP). EESL has so far distributed about 6.00 Lakhs numbers of 7 W LED bulbs for the households in the all the regions of Puducherry for replacement of 60 W ICL. Further Department has submitted a proposal to the government for constituting DSM cell in accordance with DSM	The action taken is noted. EDP is directed to report the energy savings obtained by implementation of the measures taken so far. EDP is also directed to report on further action being taken on implementation of demand side management and on the impact of the measures. The status report may be submitted by 30th June, 2015.

	Regulations of the Hon'ble Commission. The Government of Puducherry is also planning to replace the existing street lights with LED fittings. Under pilot project, so far 250 numbers of LED streetlights have been provided. The Government of Puducherry had constituted a high level committee for further examination. On finalisation of scheme, detailed report will be submitted to Hon'ble Commission.	
Present Petition	As a part of demand side management, the Department has already successfully implemented Demand side management energy efficient lighting programme (DELP) for domestic category of consumers. The Department is also assisting Puducherry Government to convert all existing street lights into LED fittings and the scheme is under preparation. A significant reduction under energy	The Commission appreciates the efforts of the Petitioner in this regard. The Commission notes that the Department has successfully implemented Demand side management energy efficient lighting programme (DELP) for domestic category of consumers. Also, efforts are being made to convert the street lights into LED fittings. The Commission is satisfied with the progress on compliance of the said directive. Further steps taken by the Petitioner in this regard should be reported to the Commission along with the next ARR & Tariff filing.

	consumption of street lights category is anticipated on implementation of scheme by Local bodies/Municipality.	

10.1.12. Pilferage of Energy

Reference Order/ Petitions	Petitioner Submission	Commission Analysis
Quote ''Pilferage of electricity by various categories of consumers by illegal tapings from electric lines, tampering of meters etc., result in enormous loss of revenue to the EDP. The Commission feels that there is need to launch an extensive drive to revoke illegal connections, if any, check meter tampering and also to keep constant vigil in this regard which will result in reduction of AT&C losses. Requisite action under Sections 135 and 138 of Electricity Act, 2003 is required to check pilferage in a time-bound manner. Electricity Department, Puducherry is directed to furnish an action plan on this.'' **Unquote**		
Compliance / Action taken by the Petitioner and the Commission's comments as per Tariff Order dated 10th April 2015	Quarterly progress report has been submitted to the Hon'ble commission vide letter No. 135 ED/SE-l/EE-ll/F-ARR/2014-15 dated 11.09.2014. Further the Department has submitted a petition No. 140 of 2013 seeking for directions/clarifications in supply code and First Amendment pertaining to unauthorized use of Electricity and theft of Energy. On receipt of the above clarification/ direction, the intensity of Inspection will be increased.	The compliance is noted. The Commission will expedite the direction/clarification after studying the views of other licensees also.

Present Petition	The Hon'ble Commission has issued draft supply code, which has addressed the issues raised by the Department. The exclusive APTS (anti power theft squad) is undertaking inspections and periodic reports are being furnished to the Hon'ble Commission.	The Commission directs that theft of energy should be identified and action should be taken against the persons indulging in theft of energy. The concerned official(s) should ensure that the inspection of services is carried out regularly and quarterly status reports should be submitted before the Commission in a timely manner. Action taken report should be submitted to the Commission, on the identified misuse of the supply of electricity.

10.1.13. Employee Cost/Manpower Study

Quote ''As per information made available by EDP on deployment of manpower on O&M work and Administration, EDP is directed to have a look at the employee strength its relative deployment and rationalize the staff requirement to reduce the manpower and the related costs. A study may be conducted on the manpower in EDP and see to what extent the manpower could be rationalized/reduced.'' **Unquote**

Reference Order/ Petitions	Petitioner Submission	Commission Analysis
Compliance / Action taken by the Petitioner and the Commission's comments as per Tariff Order dated 10th April 2015	At present the proposal for the proposed restructuring of the Department is in advanced stage in Ministry of Finance / Government of India.	Compliance is noted. The present status of restructuring shall be reported to the Commission by 30th June, 2015.
Present Petition	At present the proposal is with the Central Government Ministry of Finance and the query raised by the Department of	The steps taken by the Petitioner in this regard are noted. However, considerable time has already been given to the Petitioner to submit the employee cost/manpower study.

	Expenditure is being addressed.	The Petitioner should take up the matter with the concerned officials at the Central Government to expedite the processing of the said study. The Commission directs that the employee cost/manpower study should be submitted before the Commission along with the next ARR & Tariff filing.

Directives as per the Tariff Order for FY 2012-13 dated 12th June 2012

10.1.14. Load Forecasting Study

Quote ''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.'' **Unquote**		
Reference Order/ Petitions	**Petitioner Submission**	**Commission Analysis**
Compliance / Action taken by the Petitioner and the Commission's comments as per Tariff Order dated 10th April 2015	The short term forecasting for 3 years has been furnished in the Business Plan of the Department. The same has been filed on 29.09.2014. A medium and long term forecast would be prepared shortly.	The study for medium term (7-10 years) and long term (15-25 years) forecasting may be expedited. The study to be conducted by EDP should be an independent study reflecting the realistic forecast. In this connection the EDP may refer to the 18th Power Survey of CEA.
Present Petition	PwC is conducting load research study in the UT of Puducherry. Once the report is finalised EDP will prepare long term forecast either internally or through appointment of consultant.	Action taken is noted. However, considerable time has already been given to the Petitioner to submit the load forecasting study. The Petitioner is directed to take necessary steps to expedite the completion of the study and submit the

		same before the Commission along with the next ARR & Tariff filing.

10.1.15. Bill Payment

Quote ''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.'' **Unquote**		
Reference Order/ Petitions	**Petitioner Submission**	**Commission Analysis**
Compliance / Action taken by the Petitioner and the Commission's comments as per Tariff Order dated 10th April 2015	Various modes of Collection 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	Compliance of the directives is noted. The Commission appreciates, the steps taken by EDP to improve the bill collection.

	Puducherry/Karaikal region. For HT and LT consumers', arrangements have been made with the State Bank of India for online payment.	
Present Petition	At present on-line payment gateway is available through State Bank of India portal. Through the portal any bank account holder can make payment. Other mode of payment gateways would be implemented on commissioning of new billing software under R-APDRP scheme which is likely to be commissioned by 1st quarter of FY 2016-17 on finishing the project by March 2016.	The Commission notes the submission of the Petitioner. The Commission expects that the online bill payment facility would work properly and the software interface would be smooth. Other modes of payment as mentioned by the Petitioner linked to the RAPDRP scheme should be implemented quickly. Meanwhile, the present bill collection center should work properly so that consumers do not face issues in bill payment. The Commission will monitor the compliance of this directive very strictly as many stakeholders during the Public Hearing had pointed out that the billing is delayed and they get very little time to make the payment by due date. The Commission, during the Public Hearing, directed the Petitioner to introduce a new bill format from 1st April 2016. The status report on the same should be submitted before the Commission along with the next ARR & Tariff filing.

10.1.16. Enforcement Cell

Quote ''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.'' **Unquote**		
Reference Order/ Petitions	**Petitioner Submission**	**Commission Analysis**
Compliance / Action taken by the Petitioner and the Commission's comments as per Tariff Order dated 10th April 2015	Quarterly progress report has been submitted to the Hon'ble Commission vide letter No. 135 ED/SE-l/EE-ll/F-ARR/2014-15 dated 11.09.2014. Further the Department has submitted a petition No. 140 of 2013 seeking for directions/clarifications in supply code and First Amendment pertaining to unauthorized use of electricity and theft of energy. On receipt of the above clarification/ direction, the intensity of inspection will be increased.	The compliance of the directive is noted. Steps may be taken to intensify the inspection to curb pilferage of energy. The Commission will expedite the clarifications/ directions after studying the views of other licensees also.
Present Petition	The Hon'ble Commission has issued draft supply code, which has addressed the issues raised by the Department. The exclusive APTS (anti power theft squad) is undertaking inspections and periodic reports are	The concerned official(s) of the Enforcement Cell should see that the inspection of services is carried out regularly and status reports be submitted before the Commission in a timely manner. Action taken report should be submitted to the Commission, on the identified misuse of the supply of electricity. The same should be submitted before the Commission along with the next ARR & Tariff filing.

	being furnished to the Hon'ble Commission.	

10.1.17. Assessment of the Open Access Consumers

Quote ''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.'' **Unquote**

Reference Order/ Petitions	Petitioner Submission	Commission Analysis
Compliance / Action taken by the Petitioner and the Commission's comments as per Tariff Order dated 10th April 2015	No applications have been received by the Department for Open Access so far. The approval of the Government has been sought for Separation of SLDC from the Department.	The compliance by EDP is noted.
Present Petition	The open access application submitted by M/s. Inox Air product Pvt Limited is under process. However, the Department is ready with the modalities to address the indenting open access consumers.	The steps taken by the Petitioner in this regard are noted. The status of setting up of the STU and SLDC (nodal agency) should be reported before the Commission along with the next ARR & Tariff filing.

10.1.18. Connected Load/Contract Demand based fixed charges for LT Industrial and Commercial Categories

Quote ''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.'' **Unquote**		
Reference Order/ Petitions	**Petitioner Submission**	**Commission Analysis**
Compliance / Action taken by the Petitioner and the Commission's comments as per Tariff Order dated 10th April 2015	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.	Compliance is noted. EDP is directed to report by 30th September, 2015 on the present status of implementation of R-APDRP programme.
Present Petition	The Department had initiated proposal to install smart meters for the bulk load (meter with CT) consumers of Industrial and commercial category during the FY 2017-18. On completion of the same, the Department will opt for demand based tariff to those class of consumers.	Action taken is noted. Status of the same should be submitted before the Commission along with the next ARR & Tariff filing.

10.1.19. True-up Petition for the respective years

The Petitioner is directed to file the pending True-up Petitions.		
Reference Order/ Petitions	**Petitioner Submission**	**Commission Analysis**
Compliance / Action taken by the Petitioner and the Commission's comments as per	Audit of FY 2011-12 & 2012-13 has been completed and the same has been furnished for Truing up of FY 2011-12 & FY 2012-13	It is noted that Final True-up for FY 2011-12 and FY 2012-13 and Provisional True-up for FY 2013-14 are submitted with ARR and Tariff Petition for MYT Period FY 2015-16 to FY 2017-

Tariff Order dated 10th April 2015	respectively along with this petition. Unaudited accounts have been prepared and the same is attached for provisional true up of FY 2013-14. Audit of accounts for FY 2013-14 is expected to be completed by February 2015 and the same will be furnished to the Commission immediately.	18. Audit of accounts for FY 2013-14 should be expedited.
Present Petition	True-up petition for the FY 2013-14 has been filed along with the audited accounts.	The Commission notes that the True-up of FY 2013-14 has been filed along with the MYT Petition. The True-up for FY 2014-15 was to be filed during this year's tariff filing. However, only the Provisional True-up for FY 2014-15 has been submitted along with the MYT Petition. The Commission directs that timely completion of audit of the relevant year be carried out so that True-up Petition for the respective year be filed before the Commission on time. The Commission reiterates that audit and True-up be carried out on time as per the provisions of the JERC Regulations.

Directive as per the Tariff Order for FY 2013-14 dated 10th April 2013

10.1.20. Proposal of the Energy Charges for the Agriculture category

Quote ''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.'' **Unquote**		
Reference Order/ Petitions	**Petitioner Submission**	**Commission Analysis**
Compliance / Action taken by the Petitioner and the Commission's comments as per Tariff Order dated 10th April 2015	The work of providing energy meters to the agriculture category is under process. The sample reading will be studied and proposal for energy based tariff will be submitted for the FY 2016-17.	Compliance is noted. The present status of providing meter to Agricultural consumers should be reported by 30th June, 2015.
Present Petition	On completion of metering to all agriculture consumers, the Department will opt for energy based tariff to the agriculture sector and the metering process would be completed by FY 2016-17.	The submission of the Petitioner is noted. The status report on the same should be submitted before the Commission along with the next ARR & Tariff filing.

Directive as per the Tariff Order for FY 2014-15 dated 25th April 2014

10.1.21. Public Grievance Meetings

Quote ''The Petitioner is directed to convene monthly meetings with the consumers to discuss/sort out issues of consumers in the licensee area related to the supply of power/electricity/connections by EDP.'' **Unquote**		
Reference Order/ Petitions	**Petitioner Submission**	**Commission Analysis**
Compliance / Action taken by the Petitioner and the Commission's comments as per Tariff Order dated 10th April 2015	Public Grievance meeting has been conducted in the Town area of Puducherry, one meeting has been held at Mahe & Yanam respectively. The consumer related matters have been addressed. Further public grievance meeting in all Division are proposed to be convened in the months of December'14, January '15 & February'15.	The compliance is noted. These meetings shall be conducted every month and a monthly report shall be submitted to the Commission in this regard. The Commission also insists that the Department should sort out the issues raised in the meetings.
Present Petition	Public grievance meeting is being conducted by EDP at sub-division/divisional levels after proper press advertisements and the details of the same will be furnished by this Department.	The Commission, as also directed in the earlier Tariff Orders, reiterates that the Petitioner should convene monthly public grievance meetings with the consumers to sort out issues related to the supply of power, quality of power and other related issues. These meetings shall be held on monthly basis at different locations in all the regions under EDP and monthly report in this regard be submitted before the Commission. The Commission insists that the Department should sort out the

		various stakeholder grievances in these meetings.

Directives as per the Tariff Order for FY 2015-16 dated 10th April 2015

10.1.22. Unbundling & Corporatisation

Quote ''As part of the Power Sector Reforms as envisaged by the Electricity Act, 2003, the transmission and distribution activities are to be separated and independent corporations are to be formed. The transmission companies and the distribution companies thus formed under the Companies Act will have a distinct legal identity, apart from providing the management with better financial autonomy and more delegation of powers. Further, the new management structure ensures financial accountability and better consumer satisfaction.

The Commission directs the Petitioner to take up this matter the Government of Puducherry for early implementation.'' **Unquote**

Reference Order/ Petitions	Petitioner Submission	Commission Analysis
Present Petition	As directed by the Hon'ble Commission, the issue will be taken up with the Government of Puducherry during FY 2016-17 for unbundling and corporatization.	The submission is noted. However, the Petitioner is directed to speed-up its efforts in this regard and submit progress report in this regard before the Commission along with the next ARR & Tariff filing.

10.1.23. Safety of Consumers and Employees

Quote ''The Commission noted with concern from the audited accounts of the FY 2012¬13 that an amount of Rs. 0.19 Crores was paid towards claims of electrocution cases and that there is a contingent liability of Rs. 0.85 Crores regarding the pending electrocution cases. The Commission directs the Petitioner to take necessary steps for regular patrolling to check the distribution lines particularly during the monsoon season. Further, the Petitioner should disseminate information and tips among the consumers during their monthly consumer grievance meetings to handle electrical items and to avoid touching the live wires. Apart from compliance to the statutory requirements, these types of consumer

education and awareness programmes will be very helpful to avoid electrocution/accidents in semi-urban and rural areas. The Commission also directs the Petitioner to take necessary steps to provide safety equipment/tools such as gum boots, safety boots, mechanical ladders, helmets etc. for the safety of their employees.'' **Unquote**		
Reference Order/ Petitions	**Petitioner Submission**	**Commission Analysis**
Present Petition	Intensive training on safety was conducted by the Technical Training Centre of this Department in all the four regions of Puducherry during the second and third quarter of FY 2015-16. Further training programme will be conducted during the last quarter of FY 2015-16. The above training programme includes artificial resuscitation being conducted by JIPMER doctors for the employees and the engineers. The consumers also will be addressed regarding the safety and energy efficiency during the public grievances meeting. It is also programmed to supply safety equipment to the employees from the FY 2016-17 onwards and the employees were	The Commission appreciates the efforts of the Petitioner in this regard. The Commission expects that the Petitioner would continue its efforts in this regard. The training sessions as being conducted by the Department should be continued. Status of the work done in this regard should be updated to the Commission along with the next ARR & Tariff filing.

	also being motivated to use the safety equipment during the above training sessions.	

10.1.24. Technology up-gradation

Quote ''The Commission directs the Petitioner should upgrade transmission and distribution lines and substations with latest and advanced technology. While drafting the Business Plan for the Control Period from FY 2016-17, this aspect should be kept in mind to improve efficiency in service and to provide uninterrupted/reliable power supply. The commercial, financial and administrative functions should be fully computerised. The Commission also directs the Petitioner to initiate immediate action to introduce online billing, collection and complaints system to facilitate the consumers. The Business Plan should also make provision for proper training of the employees to handle the modern equipment, computer network etc.'' **Unquote**		
Reference Order/ Petitions	**Petitioner Submission**	**Commission Analysis**
Present Petition	As directed by the Hon'ble Commission, while framing the Business Plan necessary provision was made to upgrade the transmission and distribution networks with modern/latest design. The employees also will be trained in adopting latest IT technology to maintain online billing system, collection and redressal of complaints.	Action taken is noted. The status report indicating various other measures taken by the Petitioner towards technology up-gradation should be submitted before the Commission along with the next ARR & Tariff filing.

10.1.25. Publicity for Consumer Grievance Handling System

<table>
<tr><td colspan="3">Quote ''The Commission directs the Petitioner to give proper publicity to the consumers through bills, advertisement in local newspapers and during the monthly consumer grievances meetings, the entire system for handling the consumer grievances as envisaged in the Electricity Act and the Regulations of the Commission. This will create awareness amongst the consumers to approach the proper forum for redressal of their grievances.''
Unquote</td></tr>
<tr><th>Reference Order/ Petitions</th><th>Petitioner Submission</th><th>Commission Analysis</th></tr>
<tr><td>Present Petition</td><td>Public Grievance Meetings are being conducted at sub-divisional / divisional level at all the four regions of Puducherry. Proper advertisements in the regional newspapers are being issued for public awareness and redressal of their grievances.</td><td>The submission of the Petitioner is noted. However, the Commission notes that many stakeholders during the Public Hearing pointed out that they are not aware of the public grievance meetings being conducted by the Department.

The Commission directs the Petitioner to take all possible steps for adequate publicity of the Public Grievance Forum and conduct monthly consumer grievances meetings in a regular manner in all four regions of Puducherry. The quarterly progress report in this regard should be submitted before the Commission.

The Commission, further, expects that stakeholders would not complain in this regard during the next Public Hearing.</td></tr>
</table>

10.1.26. Levy of FPPCA before 30th June of the following Financial Year

Quote ''During the Public Hearing held at Puducherry on 17th February 2015, the representatives from HT/EHT industries made a request that FPPCA may be finalised and levied before 30th June of the following year which will enable the units to account the FPPCA claim in the respective Financial Year. It was pointed out by them, if the expenditure

towards FPPCA claim is received after the closure of the annual accounts of the Financial Year, it is accounted by the units in the next accounting period. The representatives of HT/EHT Industries apprehended that the Income Tax authorities may consider the FPPCA claim pertaining to the previous year(s) as "prior period items" and may not allow the same as business expenditure while assessing the current year income of the unit.

The Commission directs the Petitioner to finalise the FPPCA amount due from the consumers with respect to the Financial Year before 30th June of the following financial year and upload the same on the website of the Petitioner and give advertisement in the newspapers. This would facilitate the companies to assess the total liability of the company towards FPPCA of the Financial Year for accrual accounting before compilation, audit & adoption of the annual accounts.'' **Unquote**

Reference Order/ Petitions	Petitioner Submission	Commission Analysis
Present Petition	The above direction of Hon'ble Commission has been complied with by the Electricity Department during FY 2014-15 and the same will be complied with in future also.	The submission of the Petitioner is noted. However, the Commission notes that many stakeholders during the Public Hearing pointed out that the same is not being followed by the Department in practice. The Commission expects compliance of the above directive of the Commission and directs that the FPPCA amount due from the consumers with respect to the Financial Year be finalized before 30th June of the following Financial Year. Further, the Commission directs that the adjustment of FPPCA charges be made in the bills of the consumers within a month following the end of the current quarter.

10.2. New Directives issued in this Tariff Order

The Commission is of view that with the implementation of MYT regime and changing power sector scenario, there is requirement of issuance of new directions to the Petitioner.

10.2.1. Information for determination of Voltage-wise Wheeling Charges

The Petitioner is directed to provide the details of voltage wise assets and expenses along with the allocation methodology if any for the determination of voltage wise wheeling charges in the next tariff petition.

10.2.2. Promotion of Solar Generation

The Petitioner is directed to take-up with the Government for formulation of a comprehensive policy for promotion of solar energy in line with the latest GoI directives on this matter in its area especially among the industrial consumers.

10.2.3. Time-of-Day (ToD) Tariff for HT/EHT consumers

The Petitioner is directed to introduce ToD tariff for the HT/EHT consumers during FY 2016-17 as per the terms & conditions of ToD tariff as laid out in the Chapter on 'Tariff Schedule' of this Tariff Order.

10.2.4. New Bill Format

The Petitioner is directed to introduce the new bill format from 1st April 2016, so that consumers are able to easily understand the various billing charges applicable to them.

10.3. Directives complied with in this Tariff Order

While examining the compliance note and supporting documents submitted by the Petitioner in the present Petition, it has been observed that the some of the directives issued in previous Tariff Orders are no longer required.

The Commission is of view that since these directions have been complied with satisfactorily, these directions are no longer required in present context and thus required to be dropped or replaced with new directions.

<u>Directive in Tariff Order dated 12th June 2012</u>

10.3.1. Capital Expenditure

Quote ''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.'' **Unquote**

Reference Order/ Petitions	Petitioner Submission	Commission Analysis
Compliance / Action taken by the Petitioner and the Commission's comments as per Tariff Order dated 10th April 2015	Capital expenditure for the next three years FY 2015-18 has been submitted along with the Business Plan for approval of the Hon'ble Commission.	The compliance is noted. The business plan is being examined by the Commission.
Present Petition	The Business Plan for MYT period of FY 2016-17 to FY 2018-19 has been submitted by the Department and the same was approved by	Compliance of the said directive is noted. Thereby, this directive is dropped.

	Hon'ble Commission on 4/12/2015.	

Directive in Tariff Order dated 10th April 2015

10.3.2. Submission of the Business Plan for the MYT Control Period

Quote ''The details in the Business Plan submitted by the Petitioner are insufficient. The supporting data such as, scheme- wise cost benefit analysis, financing plan, loss trajectory have not been adequately submitted. In view of the same, the Commission is constrained to defer the implementation of Multi Year Tariff and concomitant Business Plan. The Petitioner is therefore, directed to submit the revised Business Plan for the period FY 2016-17 to FY 2018-19, along with the requisite details as provided in JERC (Multi-year Tariff and Distribution) Regulations, 2014, latest by 31st July 2015. No further extension will be given as the MYT Petition would be required to be prepared only after approval of the Business Plan. The MYT submission deadline remains 30th November, 2015.'' **Unquote**		
Reference Order/ Petitions	**Petitioner Submission**	**Commission Analysis**
Present Petition	As per the directions of the Hon'ble Commission, the Business plan for the MYT control period of FY 2016-17 to 2018-19 has been filed by the Department and the orders on the business plan has been issued by the Hon'ble Commission on 04th December, 2015. The Department has also filed the MYT petition for the control period of FY 2016-17 to 2018-19 on time.	Compliance of the said directive is noted. Thereby, this directive is dropped.

11. 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 off two decimals.
   a) The monthly average power factor of the supply shall be maintained by the consumer not less than 90% (lagging). If the monthly average power factor of a consumer falls below 90% (90% lagging), such consumer shall pay a surcharge in addition to his normal tariff @ 1% on billed demand and energy charges for each fall of 1% in power factor upto 70%(lagging)
   b) In case the monthly average power factor of the consumer is more than 95% (95% lagging), a power factor incentive @ 1% on demand and energy charges shall be given for each increase of 1% in power factor above 95%(lagging)
   c) If the average power factor falls below 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.

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-drawal is more than 20% of the contract demand then the connections shall be disconnected immediately.
   Explanation: Assuming the contract demand as 100 KVA, maximum demand at 120 KVA and total energy consumption as 12000 kWh, then the consumption corresponding to the contract demand will be 10000 kWh (12000*100/120) and consumption corresponding to the excess demand will be 2000 kWh. This excess demand of 20 KVA and excess consumption of 2000 kWh will be billed at twice the

respective normal rate. Such connections drawing more than 120 kVA, shall be disconnected immediately.

10. Unless specifically stated to the contrary, the figures of energy charges relates to Rs per unit (kWh) charge for energy consumed during the month.

11. **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. In case of delay less than a month, the surcharge will be levied at 2% per month on proportionate basis considering a month consists of 30 days. Such surcharge shall be rounded off to the nearest multiple of one rupee. Amount less than 50 paisa shall be ignored and amount of 50 paisa or more shall be rounded off to next rupee. In case of permanent disconnection, delayed payment surcharge shall be charged only up to the month of permanent disconnection.

12. **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.

13. **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.

14. **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) The Commission directs the Petitioner to introduce TOD tariff as mentioned above during FY 2016-17

(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

15. 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.

16. 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 2016-17.

17. 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 organizations.
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 Charges Rs./kWh
0-100 units per month	40.00	1.10
101-200 units per month	40.00	1.75
201-300 units per month	40.00	3.50
Above 300 units per month	40.00	4.60

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. 40/month and energy charges Rs (80 units X Rs 1.10/unit)
(b) In case the units billed are 275, then the fixed charges will be Rs. 40/month and energy charges will be Rs. (100 units X 1.10 + 100 units X 1.75 + 75 units X 3.50)

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:

Description	Fixed Charges (Rs./connection/month)
Hut Services	27.00

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 Charges Rs./kWh
0-100 units per month	100.00	4.70
101-250 units per month	100.00	5.60
Above 250 units per month	100.00	6.25

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. 9.00 per HP per month
Other Farmers	Rs. 27.00 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 Charges Rs./kWh
0-100 units per month	40.00	1.10
101-200 units per month	40.00	1.75
201-300 units per month	40.00	3.50
Above 300 units per month	40.00	4.60

Note:

(a) Cottage industries

The following conditions should be satisfied in order that an industry may be classified as a bonafide 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/Pisiculture

1) The applications of the beneficiary seeking such concession shall be verified and recommended by the Director, Agriculture Department. For Pisiculture, 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:

Description	Fixed Charges Rs./pole/month	Energy Charges Rs./kWh
Public Lighting	75.00	6.75

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 LT Industrial and Water Works (C)

6.1 Applicable to low tension industrial consumers including lighting in the industrial services and Water Tanks including lighting in the premises maintained by State Government Departments/Undertakings and Local Bodies.

6.2 The charges are as indicated in the table below.

Description	**Fixed Charges Rs./connection/month**	**Energy Charges Rs./kWh**
LT Industrial	86.00	5.10
Water Tanks	100.00	5.90

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, IT and ITES based Companies registered under Factories Act/ Companies Act with contracted maximum demand upto 5000 kVA.

High Tension I (b)

For Commercial Establishments including Laboratories, Hotels, Marriage Halls, Cinema Theatres, Private educational Institutions, Private Hospitals, shopping Malls, Telephone exchanges, broadcasting companies with contracted maximum demand upto 5000 kVA.

7.2 The Demand and Energy Charges are as indicated in the following Table:

Description	Charges
HT (I) (a) For contract demand up to 5000 kVA/Industrial	
Fixed (Demand) Charges	Rs. 250.00 per kVA per month
Energy Charges	Rs. 5.25/kWh
HT (I) (b) For contract demand up to 5000 kVA/Commercial	
Fixed (Demand) Charges	Rs. 250.00 per kVA per month
Energy Charges	Rs. 5.25/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-drawal 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 X 100/ 120) and consumption corresponding to the excess demand will be 2000 units. This excess demand of 20 kVA and excess consumption of 2000 units will be billed at twice the respective normal rate. E.g. in case of HT(I) (a) category, excess demand and consumption will be billed at the rate of Rs. 500 per kVA per month and Rs. 10.50/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 following Table:

Description	Charges
Fixed (Demand) Charges	Rs. 250.00 per kVA per month
Energy Charges	Rs. 6.75/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-drawal 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. 220.00 per kVA per month
Energy Charges	Rs. 5.10/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-drawal 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:

S. No.	Category	Tariff Applicable	Minimum Charges
(a)	Lights or combined installation of lights and fans, motive power, heating and others	Entire Consumption: Rs. 9.75/kWh	Rs. 200 per connection per month or part thereof
(b)	Special Illumination	Entire Consumption: Rs. 10.00/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. 10.00/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.

D. HOARDINGS/SIGNBOARDS

Electricity for lighting external advertisements, external hoardings and displays at departments stores, malls , multiplexes, theatres, clubs, hotels, bus shelters, Railway Stations shall be separately metered and charged at the tariff applicable for "Advertisements and Hoardings" category, except such displays which are for the purpose of indicating / displaying the name and other details of the shop, commercial premises itself. Such use of electricity shall be covered under the prevailing tariff for such shops or commercial premises. The connection for ''Advertisements and Hoardings" category would be covered under the permanent supply of connection.

Fixed Charges	**Energy Charges Rs./kWh**
Rs. 120 per kVA per month or part thereof	8.00

12. Schedule of Services and Charges

12.1. Charges for Service Connections

S. No.	Particulars	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.

12.2. Testing for 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.

S. No.	Particulars	Charges (Rs.)
(i)	Domestic lighting / Commercial lighting / Agriculture Services	200
(ii)	Other LT Services	900
(iii)	HT/EHT Services	7500

12.3. Testing for meters and metering arrangements

For testing of meter at the instance of the consumer:

S. No.	Particulars	Charges (Rs.)
(i)	Single phase direct meter	150
(ii)	Three phase direct meter up to 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

12.4. Testing of HT/EHT Consumer Protective Equipment

S. No.	Particulars	Charges (Rs.)
(i)	Testing charges for protective relays (Earth fault, line fault etc.)	4500
(ii)	Testing charges for one set of current transformer	4500
(iii)	Testing charges for one set of potential transformers	4500
(iv)	Testing charges for one set of circuit breaker	4500
(v)	Testing charges for measurement of earth resistance	3000
(vi)	Testing charges for Transformer oils	500

12.5. Disconnection/Re-connection Charges

S. No.	Particulars	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

12.6. Title Transfer of Services

S. No.	Particulars	Charges (Rs.)
(i)	Domestic	250
(ii)	Commercial Lighting Installation	500
(iii)	All other LT installation	1000
(iv)	HT/EHT Services	2000

12.7. Furnishing of Certified Copies (To be issued to the consumer only)

S. No.	Particulars	Charges (Rs.)
(i)	Issue of duplicate Monthly bills for a month	10
(ii)	Contractor's completion-cum test report	10
(iii)	Ledger Extract	**20**/calendar year or part thereof
(iv)	Agreement	50
(v)	Estimate	50

12.8. 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 equipment	500/- per meter/ month or part thereof

12.9. Fuse Renewal Charges

S. No.	Particulars	Charges (Rs.)
(i)	Domestic	NIL
(ii)	Commercial	50
(iii)	L.T Industrial	50
(iv)	High Tension/Extra High Tension Installation	250

12.10. Shifting of Meter Board at Consumer's Request

S. No.	Particulars	Charges (Rs.)
(i)	LT Single Phase Supply	125
(ii)	LT Three Phase Supply	250

Annexure 1: Public Notices published by the Petitioner

Annexure 2: Public Notices published by the Commission for intimation of Public Hearing

Annexure 3: List of Objectors/Stakeholders

The following is the list of the stakeholders who have submitted objections/suggestions:

S. No.	Name of Stakeholder
1.	Chemplast Sanmar Limited
2.	Karaikal Industries Forum
3.	Chemfab Alkalis Limited
4.	Shri. K. Murugan (CPI)
5.	Shri. P. Narayanasami
6.	Shri. Kaliya Murugan
7.	Shri. P. Raghupathy (President, Rajiv Gandhi Human Rights Organization)
8.	Shri. Kaliya Murugan
9.	Shri. N. Arunachalam
10.	Shri. V. Perumal (CPM)
11.	Shri. G. Nehru, Kuppusamy
12.	Shri. Lakshmi Narayanan
13.	Shri. Vai Balasubramani
14.	Shri. Rajendiran Sabanayagam
15.	Shri. S. Ravichandran
16.	Shri. M Narayanasamy
17.	Shri. T. Subrayan Ravi
18.	Shri. K. R. Shivalingam
19.	Shri. R. Chanemougam
20.	Shri. Mohammed Annas