TARIFF ORDER

Determination of Tariff for FY 2017-18, Annual Performance Review of FY 2016-17 and True-up of FY 2015-16

Petition No. 226/2017

For

DNH Power Distribution Corporation Limited

09th June 2017

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

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Before the
Joint Electricity Regulatory Commission
For the State of Goa and Union Territories, Gurgaon

QUORUM
Sh. M. K. Goel (Chairperson)
Smt. Neerja Mathur (Member)

Petition No. 226/2017

In the matter of

Approval for the True-up of the FY 2015-16, Annual Performance Review for the FY 2016-17 and Aggregate Revenue Requirement (ARR) and the Tariff proposal for the FY 2017-18.

And in the matter of

DNH Power Distribution Corporation Limited ……………………………………….**Petitioner**

ORDER

Dated: 09th June 2017

a. This Order is passed in respect of the Petition filed by the DNH Power Distribution Corporation Limited for approval for the True-up of the FY 2015-16, Annual Performance Review for the FY 2016-17 and Aggregate Revenue Requirement (ARR) and the Tariff proposal for the FY 2017-18.

b. After receiving the Petition, the Commission scrutinised its contents and requisitioned further information/clarifications on the data gaps observed in the Petition to take a prudent view of the Petition. The Commission also held a Technical Validation Session to determine its sufficiency. Further, suggestions /comments/objections were invited from the public/stakeholders. A Public Hearing was held and the stakeholders/Public were heard. The schedule of activities performed in the course of this quasi-judicial process are given below:

Particulars	**Details**
Date of Admission	23rd December 2016
Public Hearing	08th February 2017
Technical Validation Session	10th March 2017

c. The approved tariff for the FY 2017-18, as detailed in the Chapter "Tariff Schedule," shall come into force from 1st April 2017 and shall remain valid till further Orders of the Commission.

d. The licensee shall publish the revised Tariff Schedule and the salient features of tariff within one week of receipt of the Order in three daily newspapers in the respective local languages of the region, besides English, having wide circulation in their respective areas of supply.

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

-Sd-	-Sd-
नीरजा माथुर	**एम. के. गोयल**
(सदस्य)	**(अध्यक्ष)**

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

स्थान : गुडगाँव
दिनांक: 09 जून 2017

(Certified Copy)
कीर्ति तिवारी, सचिव

Table of Contents

List of Tables

List of Abbreviations

Abbreviation		**Full Form**
A&G	:	Administration and General
Act	:	The Electricity Act, 2003
ARR	:	Aggregate Revenue Requirement
BNP	:	Bharat Nirman Programme
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
DDUGJY	:	Deendayal Upadhyaya Gram Jyoti Yojana
DISCOM	:	DNH Power Distribution Corporation Limited
CPSU	:	Central Public Sector Undertaking
EA 2003	:	The Electricity Act, 2003
FC	:	Fixed Charges
FPPCA	:	Fuel and Power Purchase Cost Adjustment
FY	:	Financial Year
GFA	:	Gross Fixed Assets
HEP	:	Hydro Electric Project
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
LPS	:	Late Payment Surcharge
LT	:	Low Tension
MU	:	Million Unit
MW	:	Mega Watt
MYT	:	Multi Year Tariff
NDS	:	Non-Domestic Supply
NFA	:	Net Fixed Assets
O&M	:	Operation and Maintenance
PGCIL	:	Power Grid Corporation of India Ltd.
PLF	:	Plant Load Factor
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 and Maintenance
SLDC	:	State Load Dispatch Centre
SBI CAPS	:	SBI Capital Market Limited
SBI PLR/SBAR	:	SBI Prime Lending Rate/State Bank Advance Rate
SCC	:	System Control Centre
T&D	:	Transmission and Distribution
UI	:	Unscheduled Interchange
VC	:	Variable Charges

Chapter 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 the "Joint Electricity Regulatory Commission for Union Territories" with headquarters at Delhi as notified vide notification no. 23/52/2003 – R&R dated 02nd May 2005. Later, with the joining of the State of Goa, the Commission came to be known as the "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 located in Gurgaon, Haryana.

1.2. Electricity Regulatory Process in the DNH Power Distribution Corporation Limited

In earlier years, the DNH Power Distribution Corporation Limited had submitted the Tariff and Business Plan Petitions on which the Commission had subsequently issued the following Orders:

Table 1.1: Details of Tariff and related Petitions submitted by the Petitioner so far & Orders issued by JERC

Sr. No.	For FY	Filing date	Date of Tariff Order
1.	FY 2010-11	06th April 2010	01st November 2010
2.	FY 2011-12	08th March 2011	13th September 2011
3.	FY 2012-13	30th November 2011	31st July 2012
4.	FY 2013-14	30th November 2012	25th March 2013
5.	FY 2014-15	25th November 2013	05th May 2014
6.	FY 2015-16	02nd December 2014	01st April 2015
7.	Business Plan Order for 1st MYT Control Period	8th September 2015	15th December 2015
8.	MYT Order for 1st MYT Control Period	19th January 2016	07th April 2016

1.3. Filing and Admission of the Present Petition

The present Petition was filed by DNH Power Distribution Corporation Limited vide letter dated 01st December 2016 which was received at the Commission's office on 05th December 2016. On preliminary scrutiny of the Petition, certain data gaps were observed on which the reply of the Petitioner was sought. The Petition was also scrutinized in terms of JERC (Conduct of Business) Regulations, 2009. The Petition was admitted on 23rd December 2016 and numbered as Petition No. 226/2017 and simultaneously the letter indicating gaps in the information as well as the documentation was sent to the Petitioner.

1.4. 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 responsible for carrying out the technical due diligence and validation of data of the Petitions filed by the DNH Power Distribution Corporation Limited, obtaining and analysing information/clarifications received from the DNH Power Distribution Corporation Limited, and submitting relevant issues for consideration of the Commission.

The Commission's staff interacted regularly with the Petitioner to seek clarifications and justifications on various issues essential for analysis of the Tariff Petition, and conducted a Technical Validation Session (TVS) with the Petitioner during which discrepancies in the Tariff Petition were pointed out and additional information sought by the Commission was informed. Relevant dates, including dates of correspondence and interaction with the Petitioner are as follows:

Table 1.2: List of interactions with the Petitioner

S .No.	Date	Subject
1.	23rd December 2016	Data Gaps sought by the Commission
2.	31st January 2017	Reply to Data Gaps furnished by the Petitioner
3.	27th February 2017	Additional Data gaps sought by the Commission
4.	09th March 2017	Reply to Additional Data Gaps furnished by the Petitioner
5.	10th March 2017	Technical Validation Session
6.	06th April 2017	Open Access details furnished by the Petitioner
7.	20th April 2017	Response to Stakeholders objections furnished by the Petitioner

1.5. Public Hearing process

The Commission directed the Petitioner to publish a Summary of the Tariff Petition in an abridged form to ensure meaningful public participation. Public Notices were published by the Petitioner for inviting suggestions/objections from the stakeholders on the Tariff Petition as follows:

Table 1.3: Details of Public Notices published by the Petitioner

Sr. No.	Date	Name of newspaper	Place of circulation
1.	22nd December 2016	Dawn of India (Hindi)	Silvassa
2.	22nd December 2016	Silvassa Mirror (English)	Silvassa

Sr. No.	Date	Name of newspaper	Place of circulation
3.	22nd December 2016	UT Today (Hindi)	Silvassa
4.	22nd December 2016	Gujarat Chitra (Gujarati)	Silvassa

The Petitioner also uploaded the Petition on its website http://powerdnh.nic.in and invited objections and suggestions on the Petition. Interested parties/stakeholders were requested to file their suggestions/objections on the Petition to the Commission with a copy to the Petitioner on or before 30th January 2017. Copies of the Public Notices published by the Petitioner are attached as **Annexure 1** to this Order. The Commission received many suggestions on the Petition, on which the department responded in writing to the stakeholders, with a copy to the Commission.

1.6. Notice for Public Hearing

The Commission also published Public Notices in the leading newspapers as tabled below, giving due intimation to the stakeholders, consumers and the public at large about the Public Hearing to be conducted by the Commission on 08th February 2017 from 10 AM onwards at the President Hall, Yatri Niwas, Silvassa:

Table 1.4: Details of Public Notices published by the Commission

S .No.	Date	Name of Newspaper	Place of Circulation
1.	13th January 2017	Gujarat Samachar (Gujarati)	Surat
		Indian Express (English)	Mumbai
		Navbharat Times (Hindi)	Mumbai
2.	05th February 2017	Gujarat Samachar (Gujarati)	Surat
		Indian Express (English)	Mumbai
		Navbharat Times (Hindi)	Mumbai

Copies of the Public Notices published by the Commission for intimation of the Public Hearing are attached as **Annexure 2** to this Order. This notice was uploaded on the Commission's website also.

The major issues raised/indicated during the Public Hearing, along with comments/replies of the utility and views of the Commission thereon, have been summarised in Chapter 2 of this Order. The Commission has taken into consideration all the suggestions and comments raised on the Petition.

1.7. Organisation of the Order

This Order is organised into the following chapters:

- **Chapter 1**: Background and brief description of the regulatory process undertaken by the Commission.
- **Chapter 2:** Various suggestions and objections raised by the Stakeholders in writing, as well as during the Public Hearing before the Commission.
- **Chapter 3:** True-up for the FY 2015-16.
- **Chapter 4:** Annual Performance Review of the FY 2016-17
- **Chapter 5:** Aggregate Revenue Requirement (ARR) for the FY 2017-18.
- **Chapter 6:** Approach of the Commission on tariff principles and design.
- **Chapter 7:** Open Access Charges for the FY 2017-18.
- **Chapter 8:** Tariff schedule of the FY 2017-18 and Schedule of Services and Charges approved by the Commission
- **Chapter 9:** Directives to the DNH Power Distribution Corporation Limited.

Chapter 2. Summary of Suggestions/Objections received, Response from the Petitioner and the Commission's Views

2.1. 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 the same in the newspapers in an abridged form in the given format duly inviting comments/objections from the public as per the provisions of the JERC (Terms and Conditions for Determination of Tariff) Regulations, 2009 (hereinafter referred to as the Tariff Regulations 2009) and JERC (Multiyear Distribution Tariff) Regulations 2014 (hereinafter referred to as the MYT Regulations 2014) as amended from time to time.

The Public Hearing was held on 08th February 2017 at Silvassa. During the Public Hearing, some of the stakeholders who had submitted their comments in writing also presented their views in person before the Commission. Other participants from the general public, who had not submitted written objections earlier, were also given an equal opportunity to present their views/suggestions in respect of the Petition.

The list of the Stakeholders is attached as **Annexure 3** to this Order.

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

The Commission is appreciative of the efforts of various stakeholders in providing their suggestions/comments/observations to make the Electricity Distribution Sector responsive and efficient. The Commission has noted the concerns of all stakeholders and has tried to address them to the extent possible in the tariff design and directive chapters. The submissions of the Stakeholders, response of the Petitioner and views of the Commission are summarized below:

2.2.1. Wrong estimation of Annual Revenue Requirement and Revenue from sale of Power

Stakeholder's Comment:

The Petitioner always over-estimates its ARR and under-estimates its revenue from the sale of power. The revenue deficit thus projected is made the basis for undue tariff hike.

Petitioner's Response:

The revenue surplus has been arrived at after considering the actual costs and revenue realized during the FY 2015-16. Hence, the revenue surplus for the FY 2015-16 should be approved as submitted in the Tariff petition.

Commission's View:

The Commission would like to highlight that all the expenses and income are prudently examined by the Commission within the framework of the Electricity Act 2003 and the Regulations framed thereunder so as to eliminate any discrepancies in the submissions of the Petitioner. Further, as an established process, the Petition is also available in the Public domain so that the same may be viewed and scrutinized by the public at large for comments. Furthermore, tariff revisions, if required, are considered by the Commission only after prudence check and review of comments/suggestions received from the Stakeholders.

2.2.2. Higher Power Purchase Cost

Stakeholder's Comment:

Power Purchase cost has increased despite reduction in fuel cost due to non-observance of the Merit Order Dispatch principle. There is also a steep increase in the fixed charge of EMCO power plant, submitted by the Petitioner as compared to the value approved by the Commission in the MYT Order. DNHPDCL should separately account for the cost of power allocated to it but not actually scheduled by it for sale.

Petitioner's Response:

The power purchase cost as submitted for the FY 2015-16 is the actual cost incurred in procurement of power from the various generating stations allocated to it by the Ministry of Power. Moreover, there is no own generation, hence, reliance is placed on the power scheduled from the capacity of the generation stations allocated to it. The fixed charges for EMCO for the MYT Control Period have been considered on the basis of the PPA signed with the generator for a period of seven years. Per unit cost of EMCO Energy Ltd. (GMR Group) has increased due to payment of fixed charges to the generator without procuring an equivalent amount of energy.

However, in view of the consumers opting for open access, the department has approached the Ministry of Power for surrender of capacity allocated to it from the different generating stations and the matter is being pursued by the department.

Commission's View:

The Commission has noted the submission of the Petitioner. The Commission, as a part of prudence check, considers the Merit Order Dispatch principle to approve the Power Purchase cost for the current as well as the ensuing year. Further, the Commission has revisited the Tariff Design for optimum recovery of fixed costs from the Demand Charges as detailed in the Chapter 6 "Tariff Principles and Design".

2.2.3. Interest on Working Capital

Stakeholder's Comment:

The Petitioner has taken no Working Capital loans from any bank and hence should not be allowed Interest on Working Capital. The Interest rate allowed on Working Capital is also on the higher side.

Petitioner's Response:

The Interest on Working Capital for the FY 2015-16 has been computed on the basis of normative principles outlined by the Commission in the JERC (Terms and Conditions for determination of Tariff), Regulations, 2009. Further, the Interest on Working Capital for the MYT Control Period has been computed on normative principles outlined by the Hon'ble Commission in the JERC (Multi Year Distribution Tariff) Regulations, 2014. Hence, the Commission is requested to allow the interest on Working Capital as submitted in the Tariff Petition.

Commission's View:

The Commission has noted the submission of the Petitioner. The Commission would like to highlight that as per the provisions of Tariff Regulations, the Petitioner is entitled to interest on normative loan even if it has not availed any actual loan. As a part of prudence check, the Commission has considered the various interest rates strictly as per the provisions of JERC for the State of Goa and Union Territories (Terms and Conditions for Determination of Tariff) Regulations, 2009/ JERC for the State of Goa and Union Territories (except Delhi) (Multi Year Distribution Tariff) Regulations, 2014.

2.2.4. Return on Equity

Stakeholder's Comment:

DNHPDCL doesn't share the profit accrued to it due to higher tariff allowed to it on the basis of wrong projections. The RoE allowed to DNHPDCL is also very high @ 16% and should be reduced to 14%.

Petitioner's Response:

Return on equity has been computed on the actual paid up equity. The rate of return has been taken as 16% as per the MYT Regulations. Hence, the Commission is requested to allow the Return on Equity for the MYT Control Period as submitted in the Tariff Petition.

Commission's View:

The Commission has noted the submission of the Petitioner. The Commission would like to highlight that the Petitioner is eligible for Return on Equity on 30% of the capital base or actual equity whichever is lower. Further, the rate of return of 16% is as per the provisions of the JERC for the State of Goa and Union Territories (except Delhi) (Multi Year Distribution Tariff) Regulations, 2014 only.

2.2.5. Surrender of Power Allocation

Stakeholder's Comment:

DNHPDCL should surrender at-least 200 MW- 225 MW of power capacity allocated from various central generating plants.

Petitioner's Response:

In view of the consumers opting for open access, Ministry of Power has been approached for surrender of part of allocated capacity from the different generating stations and the matter is being pursued by the department.

Commission's View:

The Commission has noted the submission of the Petitioner. However, the Commission advises the Petitioner to undertake power purchase planning for short, medium and long term so as to optimize the overall power cost.

2.2.6. Calculation of Wheeling Charges

Stakeholder's Comment:

The methodology of calculation of wheeling charges is erroneous as it only considers the quantum of energy sold to consumers and not that quantum which is wheeled through Open Access.

Petitioner's Response:

The methodology followed for computation of wheeling charges is the same as approved by the Commission in its Tariff Order dated 07th April, 2016.

Commission's View:

The Commission has noted the submission of the Petitioner. The Commission would like to highlight that the methodology adopted by the Commission is in sync with the approach adopted by the other Regulatory Commissions for computation of wheeling charges. However, the stakeholder may, if desires, submit its calculations along with justification for the consideration of the Commission, if that approach brings in more accuracy and recovery.

2.2.7. Calculation of Cross Subsidy Surcharge

Stakeholder's Comment:

DNHPDCL has used wrong figures of 'T' (Tariff applicable) and 'C' (Average Cost of Power Purchase) for calculation of Cross Subsidy Surcharge for the FY 2017-18. There was also an error in calculation of Cross Subsidy Surcharge for the FY 2016-17 in the Tariff Order dated 07th April 2016.

Petitioner's Response:

The methodology followed for computation of cross subsidy surcharge is based on the formula as given in the National Tariff Policy dated 28th January 2016. DNHPDCL has noted the objections of the objector. However, the matter falls under purview of the Commission.

Commission's View:

The Commission would like to highlight the error in computation of Cross-Subsidy Surcharge for the FY 2016-17 already stands rectified vide the Commission's Order dated 09th May 2017 in the Petition no. 232/2017. The calculation for the FY 2017-18 has also been based on the correct formula as per the National Tariff Policy dated 28th January 2016.

2.2.8. Calculation of Additional Surcharge

Stakeholder's Comment:

DNHPDCL has not used the methodology of calculation of additional surcharge adopted by the Commission in its Order dated 15th September 2016. Therefore the proposal of levy of Additional Surcharge should not be considered in its present form and DNHPDCL should file calculations of Additional Surcharge as per the Order dated 15th September 2016.

Petitioner's Response:

While computing the additional surcharge DNHPDCL has considered the fixed charges projected in the Review of the FY 2016-17. Further, the percentage of open access has been computed based on the actual consumption by the open access consumers during the period April 2016 to September 2016.

Commission's View:

The Commission has noted the submission of the Petitioner. The Commission has detailed the computation of Additional Surcharge in line with the broad methodology approved in the Order dated 15th September 2016 along with appropriate modifications in Section 7.4 of this Order.

2.2.9. Transmission and Distribution Losses

Stakeholder's Comment:

The Petitioner has not shared the expert report on distribution losses and also the action taken by it on the said report. The transmission losses should also be approved after being thoroughly examined by the Commission.

Petitioner's Response:

The loss level of DNHPDCL is one of the lowest in the country and the industrial consumers are getting substantial benefit of the reduced losses in the form of yearly tariff which is much lesser than the industrial tariff of other States. Merely stating that the losses are high, apart from being misconceived is vague and unsubstantiated.

Commission's View:

The Commission has noted the submission of the Petitioner. The Commission acknowledges the fact that the present loss levels are one of lowest in the country and the Petitioner is putting in constant efforts to maintain it at the level less than 5%.

2.2.10. Bad Debt

Stakeholder's Comment:

No bad debt should be allowed for the Petitioner as most of the energy sales is to Industrial consumers for which there is hardly any chance of bad debt. Moreover the Petitioner has not initiated any legal action for recovery of bad debt.

Petitioner's Response:

Provision for Bad and Doubtful Debts has been considered as 0.10% of the receivables in the revenue requirement for the FY 2016-17 and FY 2017-18.

Commission's View:

The Commission has noted the submission of the Petitioner. The Commission, as a part of prudence check, has considered only the bad debts actually written off strictly as per the provisions of the JERC for the State of Goa and Union Territories (Terms and Conditions for Determination of Tariff) Regulations, 2009/ JERC for the State of Goa and Union Territories (except Delhi) (Multi Year Distribution Tariff) Regulations, 2014.

2.2.11. Income Tax

Stakeholder's Comment:

Income Tax should be limited to the tax applicable on the return in allowed equity excluding incentives and not on actual paid basis.

Petitioner's Response:

As per the JERC Terms and Conditions for determination of Tariff Regulations, 2009, "Obligatory taxes, if any, on the income of the generating company or the licensee from its core / licensed business shall be computed as an expense and shall be recovered from the customers/consumers". DNHPDCL had paid an income tax of Rs. 23.43 Crore during the FY 2015-16. Hence, the same should be allowed for the FY 2015-16 as submitted in the Tariff Petition.

Commission's View:

The Commission has noted the submission of the Petitioner. The Commission has allowed the income tax strictly as per the provisions of JERC for the State of Goa and Union Territories (Terms and Conditions for Determination of Tariff) Regulations, 2009/ JERC for the State of Goa and Union Territories (except Delhi) (Multi Year Distribution Tariff) Regulations, 2014.

2.2.12. Tariff Fixation

Stakeholder's Comment:

70% of Revenue Surplus as calculated should be passed on to the consumers of the UT.

Petitioner's Response:

The Commission is empowered to take any decision in the matter.

Commission's View:

The Commission has noted the submission of the Petitioner. The Commission has dealt with the issue of revenue surplus in the Chapter 6 "Tariff Principles and Design".

2.2.13. Wrong base for FPPCA calculation

Stakeholder's Comment:

There is an apparent error in calculation of FPPCA for the FY 2016-17 in Order dated 07th April 2016.

Petitioner's Response:

The FPPCA charges have been computed based on the formula approved by the Hon'ble Commission and the per unit power purchase cost approved in the Tariff Order dated 07th April, 2016 for the FY 2016-17.

Commission's View:

The Commission has noted the submission of the Petitioner. The Commission has already restricted the recovery of FPPCA vide its Order dated 22nd February 2017 in the Petition no. 230/2017. The Commission has issued further directions in this regard in Section 6.5 of this Order.

2.2.14. Augmentation of Power Infrastructure

Stakeholder's Comment:

The Petitioner should augment its infrastructure and complete the project/scheme in time frame as approved by the Commission.

Petitioner's Response:

All the schemes approved by the Commission are being implemented and shall be completed as per the stipulated timelines.

Commission's View:

The Commission has noted the submission of the Petitioner. The Commission has already directed the Petitioner to submit the quarterly progress report of the capital expenditure approved in the Business Plan Order.

2.2.15. Depreciation and RoE

Stakeholder's Comment:

The Petitioner has not considered closing GFA for the FY 2014-15 as approved by the Commission and has taken higher depreciation. The Petitioner is also taking depreciation and RoE on assets created by consumer contribution.

Petitioner's Response:

Depreciation for the FY 2015-16 has been sought for by applying category-wise asset's depreciation rates (as per CERC Regulations) on the opening balance of Gross Fixed Assets and average of the addition during the FY 2015-16. Depreciation has been calculated considering the opening balance of the GFA for the FY 2015-16 plus the assets capitalized in the FY 2015-16. Similar methodology has also been utilized for calculation of depreciation for the FY 2016-17 and FY 2017-18

The Petitioner has been vested with the assets, liabilities etc. under a Statutory Transfer Scheme from the Government and in lieu thereof has issued equity shares. The Petitioner is entitled to the return on equity on the equity shares actually issued by the Petitioner and as appearing on its books of accounts. The Objector is mixing up the accounts of the Electricity Department with that of the Petitioner, which is incorrect. The primary object of the unbundling and corporatization of the Petitioner under Section 131 and other applicable provisions of the Electricity Act is to ensure that the Petitioner operates as a commercial entity and recovers tariff based on commercial principles in terms of Section 61 of the Electricity Act. If the contention of the Objector is to be accepted, the entire purpose of the unbundling of the Petitioner would be defeated.

Commission's View:

To bring in uniformity in approach across all the Union Territories and the State of Goa under its jurisdiction, the Commission from this year onwards has decided to consider full GFA as per the audited accounts. Accordingly, the depreciation for the FY 2015-16 has been considered as per the accounts only. Further, RoE has been considered on the actual paid up equity capital plus the approved equity addition in the MYT Control Period.

Chapter 3. True-up for the FY 2015-16

3.1. Applicable provisions of JERC for the State of Goa and Union Territories (Terms and Conditions for Determination of Tariff) Regulations, 2009

The True-up of the previous years is to be carried out as per Regulation 8 (2) of the JERC for the State of Goa and Union Territories (Terms and Conditions for Determination of Tariff) Regulations, 2009 herein referred to as Tariff Regulations, 2009:

"(2) (i) 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'.

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

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

(4) 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.

(5) 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.

(6) 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.

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

3.2. Approach for the True-up of the FY 2015-16

The Petitioner, in its True-up Petition for the FY 2015-16, has submitted the details of expenditure and revenue for the FY 2015-16 based on the audited accounts submitted for the FY 2015-16. The Petitioner provided the comparison of the actual revenue and expenditure against each head with the revenue and expenditure approved by the Commission.

In this Chapter, the Commission has analysed all the elements of the actual revenue and expenses for the FY 2015-16 and has carried out the True up of expenses and revenue with reference to the actual figures (final) as per the audited accounts, after a prudence check and has permitted necessary adjustments in cases where variations are for reasonable and justifiable reasons.

3.3. Energy sales within the UT

Petitioner's submission:

The actual category-wise energy sales to retail consumers for the FY 2015-16 are 4,772.40 MU.

Commission's analysis:

The Commission, during the approval for the Review of the FY 2015-16 in the Order dated 07th April 2016, had approved sales for the FY 2015-16 at 5,476.49 MU. The Petitioner now has submitted the actual energy sales of 4,772.40 MU to be considered in the True-up of the FY 2015-16.

The Petitioner also submitted that the actual sales for the FY 2015-16 are substantially lower than the sales approved by the Commission due to shifting of the HT consumers to the open access. In the FY 2015-16, an average of 85 MW load from July 2015 to January 2016 was shifted to open access due to which the DNHPDCL witnessed a reduction in demand of approximately 85 MW during this period.

The Petitioner in its annexure to the petition had submitted the energy audit report for the FY 2015-16 which is not tallying with the submission of the Petitioner in respect to sales, energy availability and losses. The Petitioner is directed to submit the revised energy audit report along with the revised figures for the FY 2015-16 to validate the same.

The Commission has observed that the Petitioner has not submitted the sales for the LIG category, either in the main Petition or in the response to the data gaps. In the absence of the requisite details, the Commission has considered the category-wise and slab-wise information as submitted by the Petitioner.

Further, the Commission is of the view that energy sales are an uncontrollable factor for the utility. The variation in sales from the values approved in the Review Order dated 07th April 2016 is mainly on account of reduction in energy sales in the industrial HT category, which comprises about 92.65% of the total energy consumption of the DNH Power Distribution Corporation Limited.

The detailed category wise sales as projected by the Petitioner and approved by the Commission are given below:

Table 3.1: Energy Sales approved by the Commission in the True-up of the FY 2015-16 (in MU)

S. No.	Category	FY 2015-16		
		Approved in APR Order Dated 07/04/2016	Petitioner's Submission (True-up)	Approved by the Commission (True-up)
A	**Domestic**	**103.28**	**101.52**	**101.52**
1	*0-50 units*	*17.70*	*0.18*	*0.18*
2	*51-200 units*	*31.05*	*13.49*	*13.49*
3	*201 - 400 units*	*31.06*	*11.17*	*11.17*
4	*401 and above*	*20.71*	*76.69*	*76.69*
5	*Low Income Group (LIG)*	*2.77*	*0.00*	*0.00*
B	**Commercial**	**30.55**	**28.78**	**28.78**
1	*1- 100 units*	*11.42*	*11.51*	*11.51*
2	*101 and above units*	*19.13*	*17.27*	*17.27*
C	**Agriculture**	**4.86**	**5.77**	**5.77**
1	*Up to 10 HP*	*3.37*	*4.01*	*4.01*
2	*Above 10 HP*	*1.49*	*1.76*	*1.76*
D	**LTP Industry**	**201.95**	**200.86**	**200.86**
1	*Up to 20 HP*	*201.95*	*198.74*	*198.74*
2	*Above 20 HP*		*2.11*	*2.11*
E	**Public Lighting**	**10.01**	**7.46**	**7.46**
F	**Public Water Works**	**3.39**	**3.56**	**3.56**
G	**HT (A)**	**4,712.66**	**4,067.78**	**4,067.78**
1	*Up to 66 kV*	*3,722.22*	*3,131.83*	*3,131.83*
2	*Above 66 kV*	*990.44*	*935.95*	*935.95*
H	HT (B)	409.79	353.72	353.72
I	Hoardings/ Signboards	0.00	0.00	0.00
J	Temporary	0.00	2.95	2.95
K	**Gross Total**	**5,476.49**	**4,772.40**	**4,772.40**

Therefore, the Commission approves the total sales of 4,772.40 MU in the True-up of the FY 2015-16.

3.4. Open Access Sales and Purchase

Petitioner's submission:

The actual open access sales is 750.74 MU and the corresponding open access purchase is 773.96 MU.

Commission's analysis:

The Commission approves the open access sales as 750.74 MU as submitted by the Petitioner. Further, the Commission has verified open access purchase transactions from the Regional Energy Accounts (REA) maintained by Western Regional Power Committee (WRPC) and accordingly approves open access purchase as 776.36 MU.

3.5. Surplus Energy sale/UI sales

Petitioner's submission:

The actual under drawal is Nil MU under UI mechanism for the FY 2015-16.

Commission's analysis:

The Commission has verified the weekly summary sheets/bills of UI from the WRPC for the complete year of the FY 2015-16 and for the purpose of this order has considered the over-drawal and under-drawal of UI separately. The Commission has considered the UI over-drawal of 1.04 MU and UI under drawal of 55.61 MU for the FY 2015-16 as per the UI bills for the FY 2015-16.

For the purpose of the True-up of the FY 2015-16, the Commission has considered the surplus energy sale of 55.61 MU as verified from the UI bills available on the website of WRPC for the FY 2015-16.

3.6. Power Purchase Quantum and Cost

Petitioner's submission:

The power is primarily sourced from Central Generating Stations like Korba, Vindyachal, Kahalgaon, Kawas, Sipat, Tarapur and Kakrapar atomic power stations of NPCIL etc. Apart from that, power is also drawn from RGGPL and EMCO Energy Limited. The actual power purchase cost in the FY 2015-16 was Rs. 2039.34 crore as per the annual accounts (Rs. 2084.29 crore, less rebate of Rs. 39.08 crore, less Rs. 5.61 crore on account of stores and spares).

Further, the power purchase quantum and cost also depends on various parameters such as the energy sales, distribution loss, energy requirement and the energy availability. The variation in the power purchase cost from the Tariff Order is on account of variation in sales and variation in actual cost with respect to the base rate along with purchase of power from short-term sources to meet the shortfall during the year.

Commission's analysis:

The Commission had approved the power purchase cost including transmission charges at Rs. 2,220.97 crore for the purchase of 6,000.08 MU in its Review for the FY 2015-16 vide Order dated 07th April 2016. The Petitioner in its True-up Petition has submitted that the actual power purchase cost for the FY 2015-16 is Rs. 2,039.34 crore including transmission costs as per the audited accounts. Further, in reply to the data gaps pointed out by the Commission, the Petitioner submitted the month wise power purchase quantum and cost along with its summary for the FY 2015-16. The Commission, as part of prudence check, verified the month and station-wise bills of power purchase cost submitted by the Petitioner for the FY 2015-16 and has considered the month and summary wise cost as verified from the bills and the audited accounts for the FY 2015-16. Further, the Commission has verified the power purchase details as submitted by the Petitioner in its Petition with the publicly available information from the Regional Energy Accounts (REA) maintained by Western Region Power Committee (WRPC) on their website (http://www.wrpc.gov.in/) for the Central Generating Stations (CGS).

As mentioned in the foregoing paragraphs of this order, the Commission has considered separate effect of UI over drawal / under drawal for the FY 2015-16; therefore the UI over drawal of 1.04 MU and UI under drawal of 55.61 MU (verified from the weekly UI bills as available with WRPC) under UI mechanism for the FY 2015-16 have been considered for the purpose of the True-up.

In the Petition, the Petitioner has not submitted any details about the expenses incurred towards compliance of RPO. However, in reply to the data gaps pointed out by the Commission, the Petitioner has submitted that it has purchased 56.16 MU of physical power (Non-Solar) and 80 REC's (Solar – 30 and Non-Solar - 50).

The Commission has verified the power purchase cost and units from the power purchase bills for the FY 2015-16 and arrived at Rs 2040.55 crore for 5209.19 MU. However, total power purchase cost as per the audited accounts stands at Rs 2,039.34 crore only [after reduction of wrong adjustment of Rs 5.60 crore on account of stores & spares and power purchase rebate (considered under Non-Tariff Income in the audited accounts i.e. Rs 39.08 crore) from the audited power purchase cost of Rs. 2,084.03 crore]. Therefore, the Commission has considered Rs. 2,039.34 crore with reference to the final actual figures as per the audited accounts for the purpose of further analysis of True-up for 5209.19 MU.

Further, the Commission has dealt with separately with the cost incurred towards the REC purchase for meeting RPO compliance in subsequent sections.

The summary of power purchase quantum and costs, for the FY 2015-16 as approved by the Commission after the true-up including UI over drawal, is given in the following Table:

Table 3.2: Power purchase quantum (in MU) and cost (Rs crore) approved by the Commission in the True-up of the FY 2015-16

Name of Source	Units (MU) as per REA	Fixed Charges (Rs Crores)	Variable Charges (Rs Crores)	Other Charges (Rs Crores)	Total (Rs Crores) As per Bills)	P.U. Cost (Rs/Unit)
NTPC Stations						
KSTPS	394.71	19.07	42.88	4.19	66.14	1.68
KSTPS 3	160.74	23.85	17.14	0.05	41.04	2.55
VSTPP-I	318.53	18.49	48.62	7.76	74.87	2.35
VSTPP-II	236.74	14.33	35.70	5.50	55.53	2.35

Name of Source	Units (MU) as per REA	Fixed Charges (Rs Crores)	Variable Charges (Rs Crores)	Other Charges (Rs Crores)	Total (Rs Crores) As per Bills)	P.U. Cost (Rs/Unit)
VSTPP- III	263.78	26.48	38.22	6.23	70.93	2.69
VSTPP- IV	317.16	44.91	47.27	19.51	111.69	3.52
KGPP	175.43	43.57	54.21	-2.40	95.37	5.44
GGPP	87.67	39.52	25.73	-0.40	64.85	7.40
Sipat-I	634.52	85.05	78.46	7.49	170.99	2.69
Sipat-II	246.55	27.51	31.49	3.82	62.82	2.55
Mauda	23.94	60.58	7.13	21.95	89.66	37.45
VSTPS-V	68.27	9.58	10.07	3.21	22.87	3.35
FSTPS	0.00	0.00	0.00	-0.07	-0.07	
RSTPS	0.00	0.00	0.00	-0.73	-0.73	
KHSTPP-II	23.28	2.40	5.33	0.06	7.79	3.35
Other Charges billed by NTPC				2.15	2.15	
Subtotal - NTPC	**2951.31**	**415.34**	**442.24**	**78.31**	**935.89**	**3.17**
NSPCL - Bhilai	422.89	109.59	105.76	-0.38	214.96	5.08
NPCIL						
KAPS	52.11	0.00	12.11	5.66	17.77	3.41
TAPS	328.53	0.00	92.08	5.22	97.30	2.96
Subtotal	**380.64**	**0.00**	**104.19**	**10.88**	**115.07**	**3.02**
Others						
EMCO Energy Ltd. (GMR Group)	1397.15	436.82	239.26	4.75	680.83	4.87
Subtotal	**1397.15**	**436.82**	**239.26**	**4.75**	**680.83**	**4.87**
Power purchase from Other Sources						
UI	1.04		0.85		0.85	8.15
Solar (Physical Power)			0.00		0.00	
Non Solar (Physical Power)	56.16	0.00	27.16	0.00	27.16	4.84
Subtotal	**57.21**	**0.00**	**28.01**	**0.00**	**28.01**	**4.90**
Misc. Arrears						
Total Power Purchase	**5209.19**	**961.75**	**919.44**	**93.55**	**1974.75**	**3.79**
External Losses	144.02					
PGCIL CHARGES					99.91	
WRPC					0.41	
Reactive charges					0.92	
MSTCL					3.21	
STOA Expenses					0.43	
Less: Rebate on Power Purchase					39.08	
Grand Total of Charges	**5065.17**				**2040.55**	**4.03**
Power Purchase as per Audited Accounts	**5065.17**				**2039.34**	**4.03**

The total power purchase quantum and cost as submitted by the Petitioner and approved by the Commission is tabulated hereunder:

Table 3.3: Summary of Power Purchase approved by the Commission in the True-up of the FY 2015-16

Particulars	Approved in APR Order Dated 07/04/2016	Petitioner's Submission (True-up)	Approved by the Commission (True-up)
Power Purchase Quantum (MU)	6,000.08	5,275.66	5,209.19
Power Purchase Cost (Rs crore)	2220.97*	2039.34	2039.34*
Average Per Unit Cost (Rs/kWh)	**3.70**	**3.87**	**3.91**

Excluding provision for RPO compliance

Therefore, the Commission approves the overall power purchase quantum of 5,209.19 MU at the cost of Rs 2039.34 crore in the True-up of the FY 2015-16.

3.7. Renewable Purchase Obligations (RPOs)

As per Clause 1, Sub-clause (1) of the JERC for the State of Goa and UTs (Procurement of Renewable Energy) Regulations, 2010

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

The Commission, in its Business Plan Order dated 15th December 2015 issued against Petition no. 182/2015, has reiterated that all pending RPO's 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 MYT Control Period of the FY 2016-17 to FY 2018-19**.**

However, in the Order dated 27th July 2016 in the Petition no. 175/2015, the Commission has ordered as follows:

"The Commission feels that the above efforts of the Respondent to fulfill its current RPO indicate that the Respondent has taken cognizance of the Commission's directions in right earnest. The Commission directs the Respondent to comply with its current RPO by 31st March, 2017 and clear backlog for the FY 2010-11 to FY 2013-14 in three equal installments within a period of three years. The Commission also directs the Respondent to submit quarterly progress report regarding RPO compliance to the Commission."

Accordingly, the Commission has computed the backlog on the basis of submissions made by the Petitioner during the True up of the FY 2010-12, FY 2011-12, FY 2012-13 and FY 2013-14 and notes that till FY 2013-14, there is a shortfall of 184.14 MU (Solar: 60.64 MU and Non-Solar: 123.50 MU) for RPO compliance as detailed in Table 3.5. Based on the judgement in the Order dated 27th July 2016, the Commission has considered this shortfall to be cleared in the FY 2016-17, FY 2017-18 and FY 2018-19 in 3 equal installments.

The Petitioner in its additional submission has stated that during the period from April 2015 to March 2016, it has bought physical power of 77.27 MU (Solar – 0.136 MU and

77.09 MU from Non-Solar) and REC certificates of 95.238 Units (Solar – 45.238 Units and Non-Solar 50 Units). The Commission, on verification of actual documentary proofs submitted by the DNHPDCL, notes that the Petitioner has purchased only 56.16 MU of physical non-solar power from HPSEBL and the Petitioner failed to provide documentary evidence for purchase of physical Solar Power. The Petitioner has also provided RE certificates corresponding to 30 MU of Solar compliance (at the rate of Rs 3500/MWh) and 50 MU of non-Solar compliance (at the rate of Rs 1500/MWh). The Commission notes that while the Petitioner has actually purchased the RECs, the cost of the same is not reflecting in the overall power purchase cost of Rs. 2039.34 crore in the audited accounts. As the Petitioner has submitted actual certificates as documentary proof, the Commission finds it appropriate to approve additional Rs 18 crore towards the purchase of RECs (Rs. 10.50 crore for Solar RECs and Rs. 7.50 crore for non-Solar RECs) as pass through in the ARR.

Based on the above, the Commission has computed the accumulated compliance of RPO at the end of the FY 2015-16 as shown in the following Table:

Table 3.4: Summary of RPO Compliance upto end of the FY 2015-16

Particulars	FY 11	FY 12	FY 13	FY 14		FY 15	FY 16
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%
Total	**1.00%**	**2.00%**	**3.00%**	**3.00%**		**3.30%**	**3.55%**
Sales Within UT	**3896.99**	**4232.02**	**4591.12**	**4959.89**		**5166.02**	**4772.40**
RPO Obligation (in MU)	**38.97**	**84.64**	**137.73**	**148.80**		**170.48**	**169.42**
- Solar	*9.74*	*12.70*	*18.36*	*19.84*		*31.00*	*40.57*
-Non Solar	*29.23*	*71.94*	*119.37*	*128.96*		*139.48*	*128.85*
RPO Compliance (Actual Purchase)	**0.00**	**0.00**	**0.00**	**0.00**		**51.50**	**56.16**
- Solar	*0.00*	*0.00*	*0.00*	*0.00*		*0.14*	
-Non Solar	*0.00*	*0.00*	*0.00*	*0.00*		*51.36*	*56.16*
RPO Compliance (REC Certificate Purchase)	**0.00**	**58.00**	**128.00**	**40.00**		**95.00**	**80.00**
- Solar	*0.00*	*0.00*	*0.00*	*0.00*		*30.00*	*30.00*
-Non Solar	*0.00*	*58.00*	*128.00*	*40.00*		*65.00*	*50.00*
Total RPO Compliance	**0.00**	**58.00**	**128.00**	**40.00**		**146.50**	**136.16**
- Solar	*0.00*	*0.00*	*0.00*	*0.00*		*30.14*	*30.00*
-Non Solar	*0.00*	*58.00*	*128.00*	*40.00*		*116.36*	*106.16*
Cumulative Requirement till current year	**38.97**	**123.61**	**261.34**	**410.14**		**170.48**	**339.90**
- Solar	*9.74*	*22.44*	*40.80*	*60.64*		*31.00*	*71.56*
-Non Solar	*29.23*	*101.17*	*220.54*	*349.50*		*139.48*	*268.34*
Cumulative Compliance till current year	**0.00**	**58.00**	**186.00**	**226.00**		**146.50**	**282.66**
- Solar	*0.00*	*0.00*	*0.00*	*0.00*		*30.14*	*60.14*
-Non Solar	*0.00*	*58.00*	*186.00*	*226.00*		*116.36*	*222.52*
Net Shortfall in RPO Compliance till current year	**38.97**	**65.61**	**75.34**	**184.14**		**23.98**	**57.24**
- Solar	*9.74*	*22.44*	*40.80*	*60.64*		*0.86*	*11.43*
-Non Solar	*29.23*	*43.17*	*34.54*	*123.50*		*23.12*	*45.81*

It is evident from the Table above that the Petitioner has failed to comply with the directive of the Commission that all the pending RPO's up-to the FY 2015-16 (for the FY 2014-15 and FY 2015-16) must be fulfilled by the Petitioner by 31st March 2016. The Commission notes that there is a net shortfall in RPO compliance of 57.24 MU (11.43 MU – Solar and 45.81 MU – non Solar).

The consequences of default are prescribed in Regulation 10 of the JERC (Procurement of Renewable Energy) (Second Amendment), Regulations, 2015 issued on 22nd December 2015, as under:

"*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 decided by the Central Commission. Where any obligated entity fails to comply with the obligation to purchase the required minimum quantum of purchase from renewable energy sources or procure the Renewable Energy Certificate (s), it shall also be liable for penalty as may be decided by the Commission under Section 142 of the Act.*

Provided

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

10.2. 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.

10.3. 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.

10.4. That in case of genuine difficulty in complying with a Renewable Purchase Obligation the obligated entity can approach the Commission for carry forward of compliance requirement to the next year.

However, credit for excess renewal energy purchase would not be adjusted in the next year.

Provided that where the Commission has consented to the carry forward of compliance requirement, the provision of penalty as mentioned in the first paragraph of this Regulation or the provision of section 142 of the Act shall not be invoked.

Provided further that the penalty enforced by the Commission on the obligated entity shall not be a pass through in the Aggregate Revenue Requirement (ARR) in case the obligated entity is the licensee / deemed licensee."

Accordingly, considering the shortfall of 57.24 MU in RPO compliance computed above and the prevailing forbearance price of Rs 5800/MWh for Solar and Rs. 3300/MWh for non-Solar, the Commission arrives at the amount of Rs. 21.75 crore (Rs. 6.63 crore towards Solar and Rs. 15.12 crore towards non-Solar) to be deposited in the fund.

In view of the above mentioned provisions, the Commission now directs the Petitioner to deposit into a separate fund (to be created and maintained by the State Agency), the full amount of Rs. 21.75 crore corresponding to the shortfall in RPO within 15 days of issuance of this Order.

Further, as discussed earlier in this section, as the Petitioner has submitted actual certificates as documentary proof, the Commission finds it appropriate to approve additional Rs 18 crore towards purchase of RECs in the True up of the FY 2015-16.

3.8. Intra-State Distribution losses

Petitioner's submission:

The actual distribution loss level achieved in the FY 2015-16 was 4.74% as against the loss level of 4.70% approved by the Commission in its Tariff Order dated 07th April 2016.

Commission's analysis:

The Commission in its Review Order for the FY 2015-16 dated 07th April 2016 had approved the targeted distribution loss level of 4.70%. The Petitioner has submitted sale to open access consumers of 750.74 MU. The Commission has considered the schedule drawal from WRPC i.e. 5785.92 MU including open access injection as against 5798.10 MU submitted by the Petitioner. Accordingly, the Commission approves the intra-state transmission and distribution loss level of 4.54% as shown in the Table below:

Table 3.5: Intra-State Distribution Losses approved by the Commission in the True-up of the FY 2015-16 (MU)

Particulars		Approved in APR Order Dated 07/04/2016	Petitioner's Submission (True-up)	Approved by the Commission (True-up)
Net energy drawn at State periphery (MU)	**a**	**6631.24**	**5798.10**	**5785.92**
Retail sales within the UT (MU)	b	5476.49	4772.40	4772.40
Open Access Sales within the UT (MU)	c	843.08	750.74	750.74
Total Sales within the UT	**d=b+c**	**6319.57**	**5523.14**	**5523.14**
T&D Losses (MU)	e=a-d	275.13	274.96	262.78
T&D Losses (%)	**f=e/a**	**4.70%**	**4.74%**	**4.54%**

The Commission, therefore, considers the actual Intra-State distribution loss of 4.54% for the True-up of the FY 2015-16.

3.9. Incentive towards over-achievement of in reduction of the distribution losses

Petitioner's submission:

No submission has been made in this regard.

Commission's analysis:

In the Review for the FY 2015-16, the Commission had approved the distribution loss level of 4.70% as the Commission viewed that the loss level were at an optimum level and it would be difficult to reduce it further. As detailed in Section 3.7 of this Order, the Commission has approved the intra-state T&D loss level of 4.54% with reference to the audited figures of quantum of power purchase, energy sales (including separate effect of UI over drawal / under drawal as per the bills) and actual energy drawal for the FY 2015-16. Therefore, the Commission, in accordance with Regulation 9 of the JERC Tariff Regulations, 2009 (reproduced below), finds it reasonable to allow incentive towards over-achievement of the norms laid down by the Commission.

As per Regulation 9 of the Tariff Regulations 2009,

"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.

1) *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."*

Consequent to the reduction in percentage losses over the target approved by the Commission, the actual power purchased is less than that corresponding to the approved % of losses in the Review Order for the FY 2015-16 for the same sale of power.

The incentive has been considered at Rs. 4.06/kWh, which is the rate of effective power purchase at the periphery of the Petitioner arrived at after deducting revenue from UI i.e. Rs 11.73 crore from the gross power purchase cost (Rs. 2039.34 crore) and dividing it by the energy required at the periphery for sale to retail consumers (4999.46 MU).

The assessment of incentive for reduction in distribution losses is shown in the Table below:

Table 3.6: Incentive for over-achievement of distribution losses in the FY 2015-16

Particulars	FY 2015-16	
	Approved	Actual
Retail sales within the UT (MU)	4772.40	4772.40
T&D Loss within the UT (%)	4.70%	4.54%
Energy required at UT Periphery for Sale to Retail Consumers*	5007.76	4999.46
Savings in Power Purchase (MU)	8.30	

Particulars	FY 2015-16	
	Approved	Actual
Approved Per unit Power Purchase Cost (Rs per kWh)	4.06	
Incentive for Overachievement (Rs crore)	**3.37**	
30% of total estimated gain to be shared with ED-DNH (Rs crore)	**1.01**	

**** Excluding requirement of energy for the Open Access consumers at the periphery***

Keeping in view the above mentioned provisions of the Regulations, the Commission approves an incentive of Rs. 1.01 crore in the True-up for the FY 2015-16.

3.10. Energy Balance

Petitioner Submission

The energy balance for the FY 2015-16 is tabulated below:

Table 3.7: Energy Balance for the FY 2015-16 as submitted by the Petitioner (MU)

Particulars	FY 2015-16
Sales	4,772.40
Open Access Sales	750.74
Total Sales	**5,523.14**
Add: Losses	274.96
T&D Losses	***4.74%***
Energy Required at Periphery	***5798.10***
Add: Sales to common pool consumer	*0.00*
Total Energy Required at Periphery	***5798.10***
Transmission loss	251.53
Transmission loss (%)	4.77%
Total Energy to be purchased	**6,049.62**
Power Purchase from other sources	5,275.66
Open Access Purchase	773.96

Commission's analysis:

As detailed in the previous sections, the Commission has examined the REA and weekly UI accounts for the FY 2015-16 as available in the public domain on the website of WRPC for validating the energy purchased by the Petitioner from the power plants/ traders/ exchange/ banking arrangement/UI mechanism.

Accordingly, the Energy Balance as considered by the Commission for the True-up of the FY 2015-16 is shown in the following Table:

Table 3.8: Energy Balance approved by the Commission for True-up of the FY 2015-16 (MU)

S. No.	Particulars	FY 2015-16			
		Formulae	Approved in APR Order Dated 07/04/2016	Petitioner's Submission (True-up)	Approved by the Commission (True-up)
1	**ENERGY REQUIREMENT**				
2	Energy sales within the State/UT	a	5476.49	4772.40	4772.40
3	Open Access Sales	b	843.08	750.74	750.74
4	Less: Energy Savings	c	-	-	-
5	**Total Sales within the State/UT**	**d=a+b-c**	**6319.57**	**5523.14**	**5523.14**
6	**Distribution losses**				
7	*%*	e	*4.70%*	*4.74%*	*4.54%*
8	*MU*	f=g-d	*275.13*	*274.96*	*262.78*
9	**Energy required at State Periphery**	**g=1/(1-e)**	**6631.24**	**5798.10**	**5785.92**
	Energy Transactions at Periphery				
10	Add: Sales in Unscheduled Interchange	h	22.64		55.61
11	Add: Sales in Power Exchanges	i			
12	Less: Purchase under UI (MU)	j	0.46	0.00	1.04
13	Less: Purchase from Traders (MU)	k	201.85	0.00	0.00
14	Less: Open Access Purchase (MU)	l	873.41	773.96	776.36
14	**Total energy scheduled at State Periphery from Tied-up Sources (MU)**	**m=g+h+i-j-k-l**	**5578.16**	**5024.14**	**5064.13**
15	Transmission losses				
16	%	n	3.79%	4.77%	2.77%
17	MU	o=p-m	219.60	251.52	144.02
18	**Total requirement from Tied-up sources at generator end (MU)**	**p=1/(1-n)**	**5797.77**	**5275.66**	**5208.15**
19	**Total requirement from Tied-up sources at generator end & UI/Traders/Banking/within State (MU)**	**q=p+j+k+l**	**6873.49**	**6049.62**	**5985.55**
20	**Gross Availability**				
21	Power Purchase from Renewable Sources	r	75.37	5275.66	56.16
22	NPCIL	s	377.96		380.64
23	Unscheduled Interchange	t	0.46		1.04
24	Power Purchase from other sources	u	5344.44		4771.34
25	Open Access Purchase	v	873.41	773.96	776.36
26	PXIL (Buy) to match the energy requirement	w	201.85	-	-
27	**Gross Purchase including PXIL**	**x=r+s+t+u+v+w**	**6873.49**	**6049.62**	**5985.55**

3.11. Employee Expenses

Petitioner's submission:

The actual employee expenses for the FY 2015-16 are Rs. 10.22 crore, as reflected in the audited accounts.

Commission's analysis:

The Petitioner has submitted the employee expenses of Rs. 10.22 crore in its True-up Petition for the FY 2015-16 as compared to the employee expenses of Rs. 9.57 crore approved by the Commission in its Review Order dated 07th April 2016. The Petitioner has submitted the detailed break-up of employee expenses on each of the expenditure heads for consideration by the Commission. The Commission has verified the same through the audited accounts of the Petitioner for the FY 2015-16 and found it correct and accordingly approves the employee expenses in the Table below:

Table 3.9: Employee Expenses approved by the Commission for the True-up of the FY 2015-16 (Rs crore)

Particulars	FY 2015-16		
	Approved in APR Order Dated 07/04/2016	Petitioner's Submission (True-up)	Approved by the Commission (True-up)
Salaries & Wages	9.05	9.62	9.62
Leave Salary	0.16	0.14	0.14
Gratuity	0.00	0.03	0.03
NPS Contribution	0.00	0.01	0.01
Bonus	0.14	0.22	0.22
Pension	0.22	0.21	0.21
Gross Total	**9.57**	**10.22**	**10.22**

Therefore, the Commission approves actual employee expenses of Rs 10.22 crore in the True-up of the FY 2015-16.

3.12. Administrative and General (A&G) Expenses

Petitioner's submission:

The actual A&G expenses for the FY 2015-16 are Rs. 6.24 crore, as reflected in the audited accounts.

Commission's analysis:

The Petitioner has submitted the A&G expenses of Rs. 6.24 crore in its True-up Petition for the FY 2015-16 as compared to the A&G expenses of Rs. 4.39 crore approved by the Commission in its APR Order dated 07th April 2016. The Petitioner has submitted the detailed break-up of Administrative and General Expenses on each of the expenditure heads for consideration by the Commission. The Commission has verified the same through the audited accounts of the Petitioner for the FY 2015-16 and found it correct, and accordingly approves the A&G expenses in the following Table:

Table 3.10: A&G Expenses approved by the Commission for the True-up of the FY 2015-16 (Rs crore)

Particulars	FY 2015-16		
	Approved in APR Order Dated 07/04/2016	Petitioner's Submission (True-up)	Approved by the Commission (True-up)
Accounting Charges	0.02	0.00	0.00
Advertisement Expenses	0.22	0.18	0.18
Annual Membership Subscription Fees	0.00	0.07	0.07
Consultancy Fees	0.00	0.20	0.20
Cost Audit Fees	0.01	0.08	0.08
Director Sitting Fees	0.02	0.02	0.02
Electricity Charges	0.04	0.00	0.00
E-Tendering Expenses	0.03	0.07	0.07
Fees and Charges of JERC for Tariff Petition	0.10	0.60	0.60
Honorarium under Recruitment	0.00	0.01	0.01
Fuel Expenses	0.04	0.00	0.00
Inauguration and Ceremony Expenses	0.04	0.00	0.00
Interest on TDS Payable	0.07	0.03	0.03
Internal Audit Fees	0.01	0.00	0.00
JERC License Fees	1.19	2.09	2.09
Legal Charges	0.12	0.19	0.19
Meeting Expenses	0.03	0.01	0.01
Other Admin Expenses	0.12	0.12	0.12
Postage & Courier Expenses	0.01	0.01	0.01
Prior Period items	0.00	-0.10	-0.10
Professional & Technical Charges	0.40	0.78	0.78
Prompt Payment Rebate	0.74	0.58	0.58
Recruitment Expenses	0.00	0.01	0.01
Reimbursement of Expenses of WRPC Secretariat	0.07	0.10	0.10
Reimbursement of JERC Expenses	0.14	0.00	0.00
Reimbursement to Directors	0.01	0.02	0.02
Security Expenses	0.00	0.09	0.09
Stationery and Printing Expenses	0.12	0.17	0.17
Statutory Audit Fees	0.02	0.00	0.00
Tax Audit Fees	0.01	0.00	0.00
Telephone Expenses	0.19	0.25	0.25
Training Expenses	0.00	0.01	0.01
Vehicle Hire Charges	0.63	0.63	0.63
Transaction Charges	0.00	0.02	0.02
Gross Total	**4.39**	**6.24**	**6.24**

Therefore, the Commission approves actual A&G expenses of Rs 6.24 crore for the True-up of the FY 2015-16.

3.13. Repair and Maintenance (R&M) Expenses

Petitioner's submission:

The actual R&M expenses for the FY 2015-16 are Rs. 4.56 crore, as reflected in the audited accounts.

Commission's analysis:

The Petitioner has submitted the R&M expenses of Rs. 4.56 Crores in its True-up Petition for the FY 2015-16 as compared to the R&M expenses of Rs. 5.79 crore approved by the Commission in its APR Order dated 07th April 2016. The Petitioner in its reply to the data gaps has submitted the detailed breakup of R&M expenses and the Commission has verified the same from the audited accounts for the FY 2015-16 and accordingly approves the R&M expenses in the following Table:

Table 3.11: R&M Expenses approved by the Commission for the True-up of the FY 2015-16 (Rs crore)

Particulars	FY 2015-16		
	Approved in APR Order Dated 07/04/2016	Petitioner's Submission (True-up)	Approved by the Commission (True-up)
Stores and Spares Purchased	0.89	5.61	5.61
Change in Inventory	0.89	-3.09	-3.09
Consultancy Fees	0.42	0.00	0.00
Inspection Charges	0.03	0.01	0.01
Meter Reading Expenses	1.03	0.65	0.65
Prior Period Items	1.80	0.00	0.00
Professional & Technical Charges	0.40	0.00	0.00
Repair & Maintenance	0.14	0.11	0.11
Repair & Maintenance (operation)	0.18	1.19	1.19
Fuel, Electrical and Electricity Charges	0.00	0.08	0.08
Gross Total	**5.79**	**4.56**	**4.56**

Therefore, the Commission approves actual R&M expenses of Rs 4.56 crore for the True-up of the FY 2015-16.

3.14. Gross Fixed Assets (GFA), Capitalisation and Depreciation

Petitioner's submission:

The actual capital expenditure incurred is Rs. 13.21 crore and capitalization achieved during the FY 2015-16 is Rs. 3.71 crore, which is much less than the capitalization of Rs. 15.60 crore approved by the Commission for the FY 2015-16 in its Review Order dated 07th April 2016.

The depreciation has been computed at Rs.13.42 crore as against the depreciation of Rs. 20.13 crore approved by the Commission for the FY 2015-16 in its Review Order dated 07th April 2016. The depreciation has been computed by applying the depreciation rates as given in the depreciation schedule of CERC (Terms and Conditions of Tariff) Regulations, 2009 on the opening Gross Fixed Assets and the subsequent additions to it in the FY 2015-16 as shown in the audited accounts for the FY 2015-16.

Commission's analysis:

Regulation 26 (1) (i) of the JERC Tariff Regulations, 2009 specifies *"the value base for depreciation shall be historical cost of assets, that is actual expenses limited to approved capital cost where such capital cost has been approved by the Commission".*

The Commission had approved Rs 309.25 crore as the closing value of the GFA for the FY 2014-15 in its Tariff Order dated 07th April 2016.

However, the Commission now has reviewed the impact of this approach across all utilities under its jurisdiction. The Commission observes that in all practical circumstances, the information as available in the Fixed Assets Register (FAR) is the same as that available in the audited accounts. The Commission also notes that the Petitioner has made sincere efforts for preparation of the FAR. The Commission is of the view that once the verification of all the assets is complete, the information as available in the audited accounts will tally with the information available in the available FARs.

In view of the efforts undertaken by the Petitioner in this context, the Commission finds it appropriate to henceforth consider the GFA as per the audited accounts and has decided to consider the full GFA as available in the audited accounts.

Accordingly, the Commission has considered Rs 389.77 crore as the opening GFA for the FY 2015-16 along with the net capitalization of Rs 3.71 crore [(Rs 3.76 crore addition in GFA less Rs 0.5 crore (retirement of assets)] as available in the audited accounts. Accordingly the Commission approves depreciation in the True up for the FY 2015-16 as projected by the Petitioner as per the following Table:

Table 3.12: GFA and depreciation approved by the Commission in the True-up of the FY 2015-16 (Rs crore)

Particulars	FY 2015-16		
	Approved in APR Order Dated 07/04/2016	Petitioner's Submission (True-up)	Approved by the Commission (True-up)
Opening Gross Fixed Assets	309.25	389.76	389.77
Addition During the FY	15.60	3.71	3.76
Adjustment/Retirement During the FY			0.05
Closing Gross Fixed Assets	324.85	393.47	393.48
Average Gross Fixed Assets	317.05	391.62	391.62
Rate of Depreciation (%)	6.35%	3.43%	3.43%

Particulars	FY 2015-16		
	Approved in APR Order Dated 07/04/2016	Petitioner's Submission (True-up)	Approved by the Commission (True-up)
Depreciation for the FY	**20.13**	**13.42**	**13.42**

Therefore, the Commission approves actual depreciation of Rs 13.42 crore for True-up of the FY 2015-16.

3.15. Interest and Finance Charges

Petitioner's submission:

The opening balance of loans for the FY 2015-16 is considered at the same level as approved by the Commission in its Review Order dated 07th April 2016. The normative loan addition in the FY 2015-16 has been computed as 70% of the capitalization (i.e. Rs. 3.71 crore) for the FY 2015-16 which works out to Rs. 2.60 crore. In line with the approach adopted by the Commission in its previous Tariff Orders, 10% of the opening loans have been considered as the repayment during the year. Further the rate of interest has been considered as equal to the SBI PLR of 14.45%. The interest and finance charges of Rs. 6.74 crore are requested to be considered for the True-up of the FY 2015-16.

Commission's analysis:

As per Regulation 25 of the Tariff Regulations, 2009:

" 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." (Read SBI Advance Rate)

Further as per Regulation 23 of the said Tariff Regulations 2009:

"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."

The Commission has considered a net addition of Rs 3.71 crore in the gross fixed assets for the FY 2015-16, which are considered funded through normative debt to the tune of 70%. The Commission, for the purpose of funding of the capitalisation has considered the normative debt-equity ratio of 70:30, whereby it has considered the addition in normative loan at Rs 2.60 crore (70% of Rs 3.71 crores) for the FY 2015-16. Further, the Commission has considered the opening normative loan for the FY 2015-16 of Rs. 47.43 crore as approved by the Commission in its Review Order dated 07th April 2016.

The Commission has considered weighted average rate of SBI PLR for the year at 14.29% for the FY 2015-16 and the repayment of the debt has been considered at 10% the opening loan amount.

The calculation of the interest on the normative loan is given in the following Table:

Table 3.13: Normative interest on loan approved by the Commission in the True-up of the FY 2015-16 (Rs crore)

Particulars	FY 2015-16		
	Approved in APR Order Dated 07/04/2016	**Petitioner's Submission (True-up)**	**Approved by the Commission (True-up)**
Opening Normative Loan	47.73	47.74	47.73
Add: Normative Loan during the year	10.92	2.60	2.60
Less: Normative Repayment 10% of Opening Loan	4.77	4.77	4.77
Closing Normative Loan	53.88	45.57	45.56
Average Normative Loan	50.81	46.66	46.65
Rate of Interest (@SBAR rate)	14.29%	14.45%	14.29%
Interest on Normative Loan	**7.26**	**6.74**	**6.66**

Therefore, the Commission approves interest and finance charges of Rs 6.66 crore in the True-up for the FY 2015-16.

3.16. Interest on Security Deposit

Petitioner's submission:

Rs 3.26 crore has been claimed as the interest on security deposit from consumers for the FY 2015-16.

Commission's analysis:

As per Regulation 6.10 (8) of Electricity Supply Code Regulations, 2010

"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."

The Commission has considered the opening and closing security deposit along with interest paid on the security deposit to the consumers for the FY 2015-16 from the audited accounts of the FY 2015-16 and approves the interest on the consumer security deposit for the FY 2015-16 as shown in following Table:

Table 3.14: Interest on Security Deposit approved by the Commission in the True-up of the FY 2015-16 (Rs crore)

Particulars	FY 2015-16		
	Approved in APR Order Dated 07/04/2016	Petitioner's Submission (True-up)	Approved by the Commission (True-up)
Opening Security Deposit	42.86	42.86	42.86
Add: Deposits during the Year	-	-	-
Less: Deposits refunded	-	7.78	7.78
Closing Security Deposit	42.86	35.08	35.08
Average Security Deposit	**42.86**	**38.97**	**38.97**
Bank Rate	8.50%	8.38%	8.38%
Interest on Security Deposit	**3.64**	**3.26**	**3.26**

Therefore, the Commission approves Rs. 3.26 crore as interest on security deposit in the True-up of the ARR for the FY 2015-16.

3.17. Return on Capital Base

Petitioner's submission:

The return has been computed at 3% on net block of approved assets as per the Tariff Regulations of the Commission and Rs. 4.84 crore has been claimed in the True-up of the FY 2015-16.

Commission's analysis:

The Commission has considered the opening GFA for the FY 2015-16 and accumulated depreciation till FY 2014-15 for arriving at the net block for the FY 2015-16. It has computed the return at 3% on the net block of approved assets as shown in the following Table:

Table 3.15: Return on Capital Base approved by the Commission in the True-up of the FY 2015-16 (Rs crore)

Particulars	FY 2015-16		
	Approved in APR Order Dated 07/04/2016	Petitioner's Submission (True-up)	Approved by the Commission (True-up)
Gross block at beginning of the FY	309.25	389.76	389.77
Accumulated depreciation	156.35	228.57	228.57
Net block at beginning of the FY	152.90	161.20	161.20
Accumulated consumer contribution	0.00	0.00	0.00
Net fixed assets at beginning of the FY	152.90	161.20	161.20
Reasonable return @3% of NFA	**4.59**	**4.84**	**4.84**

Therefore, the Commission approves Return on Net Fixed Assets (NFA) of Rs 4.84 crore in the True-up for the FY 2015-16.

3.18. Interest on Working Capital

Petitioner's submission:

Interest on Working Capital has been claimed in accordance with Regulation 29 of the Tariff Regulations 2009. Further, the closing balance of the security deposit has been deducted from the total normative Working Capital requirement for computing the Working Capital requirement as per the methodology followed by the Commission in its previous Tariff Order.

Commission's analysis:

As per Regulation 29 of the Tariff Regulations, 2009:

"*(3) Subject to prudence check, the working capital for integrated utility shall be the sum of one month requirement for meeting:*

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

4) *The rate of interest on working capital shall be equal to the short term Prime Lending Rate of State Bank of India on the 1st April of the relevant financial year. The interest on working capital shall be payable on normative basis notwithstanding that the generating company / licensee has not taken working capital loan from any outside agency or has exceeded the working capital loan amount worked out on the normative figures."*

The Commission has considered the calculation of the different components of the Working Capital on the basis of the above-stipulated norms. The Commission has deducted the average consumer security deposit from the Working Capital requirement considered for the True-up of the ARR for the FY 2015-16. The Commission has considered the SBI PLR as applicable on 01st April 2015. (https://www.sbi.co.in/portal/web/interest-rates/benchmark-prime-lending-rate-historical-data)

The detailed calculations of the interest on the Working Capital are as mentioned in the following Table:

Table 3.16: Interest on Working Capital approved by the Commission in the True-up of the FY 2015-16 (Rs crore)

Particulars	FY 2015-16		
	Approved in APR Order Dated 07/04/2016	**Petitioner's Submission (True-up)**	**Approved by the Commission (True-up)**
Fuel Cost for 2 months	-	-	-
Power Purchase Cost for one month	185.08	169.95	169.95
Employee Cost for one month	0.80	0.85	0.85
A&G Expenses for one month	0.37	0.52	0.52
R&M Expenses for one month	0.48	0.38	0.38
Total Working Capital for one month	**186.73**	**171.70**	**171.70**
Security Deposit	42.86	35.08	35.08
Total Working after deduction of Security Deposit	**143.86**	**136.62**	**136.61**
SBI PLR (%)	14.75%	14.45%	14.75%
Interest on Working Capital	**21.22**	**19.74**	**20.15**

Therefore, the Commission approves Rs 20.15 crore as Interest on Working Capital in the True-up for the FY 2015-16.

3.19. Income Tax

Petitioner's submission:

Rs 23.43 crore has been claimed as income tax for the FY 2015-16.

Commission's analysis:

As specified in Regulation 31 of the JERC Tariff Regulations, 2009, tax on income

"(1) Obligatory taxes, if any, on the income of the generating company or the licensee from its core / licensed business shall be computed as an expense and shall be recovered from the customers/consumers.

Provided that tax on any income other than the core/ licensed business shall not constitute a pass through component in tariff and tax on such other income shall be payable by the generating company or the licensee itself.

(2) Subject to true-up based on the actual, Tax on income, if actually liable to be paid, shall be limited to tax on return on equity allowed, excluding incentives."

In the foregoing paragraphs, the Commission has approved return on capital base of Rs. 4.84 crore. In line with the provisions specified above, the Commission finds it appropriate to limit the income tax corresponding to Return on Capital Base only. Considering the tax rate of 33.99%, the Commission approves the income tax in the True-up for the FY 2015-16 as shown in the following Table:

Table 3.17: Income Tax approved by the Commission in the True-up of the FY 2015-16 (Rs crore)

Particulars	FY 2015-16		
	Approved in APR Order Dated 07/04/2016	**Petitioner's Submission (True-up)**	**Approved by the Commission (True-up)**
Return on Capital base	4.59		4.84
Rate of Income Tax (%)	33.99%	23.43	33.99%
Gross Up Return on Capital base	6.95		7.33
Income Tax	**2.36**	**23.43**	**2.49**

Therefore, the Commission approves Rs 2.49 crore as Income Tax in the True-up for the FY 2015-16.

3.20. Provision for Bad and Doubtful Debts

Petitioner's submission:

Rs 0.84 crore has been claimed as bad and doubtful debts for the FY 2015-16.

Commission's analysis:

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

*"The Commission may, after the generating company/licensee gets the receivables audited, allow a provision for bad debts **<u>up to 1%</u>** of receivables in the revenue requirement of the generating company/licensee."*

It is observed that as per the audited accounts, the licensee has not written off any amount in the FY 2015-16. Therefore, the Commission does not approve any amount under the provision of bad and doubtful debts.

3.21. Non-Tariff Income

Petitioner's submission:

Non-Tariff Income of Rs 74.62 crore has been claimed in the True-up of the FY 2015-16.

Commission's analysis:

The Commission has verified the submission of the Petitioner from the audited accounts and found the same to be correct. Hence, the total Non-Tariff Income is Rs 74.62 crore for the FY 2015-16 as per the audited accounts, which is approved by the Commission as follows:

Table 3.18: Non-Tariff Income approved by the Commission in the True-up of the FY 2015-16 (Rs crore)

Particulars	FY 2015-16		
	Approved in APR Order Dated 07/04/2016	Petitioner's Submission (True-up)	Approved by the Commission (True-up)
Delayed Payment Charges	4.99	10.90	10.90
Reactive Charges Receivables	0.55	0.19	0.19
Capacitor Charges	0.05	0.04	0.04
Interest on FD and Others	34.86	44.25	44.25
Meter Testing Charges	0.04	0.05	0.05
Other Charges (Indirect)	0.50	0.76	0.76
Reconnection Charges	0.02	0.01	0.01
Registration Fees	0.27	0.27	0.27
Service Connection Charges	0.28	0.20	0.20
Supervision Charges	1.34	1.57	1.57
Tender Fees	0.02	0.02	0.02
Penalty Charges	0.04	0.02	0.02
STOA Application Receivables	0.62	13.77	13.77
Recovery of Doubtful Debts	0.00	2.58	2.58
Gross Total	**43.58**	**74.62**	**74.62**

Therefore, the Commission approves the Non-Tariff Income of Rs 74.62 crore in the True-up for the FY 2015-16.

3.22. Revenue from Sale of Surplus Power/ Unscheduled Interchange (UI)

Petitioner's submission:

The actual under drawal is Nil MU under the UI mechanism for the FY 2015-16 but Rs 11.73 crore has been claimed as revenue from sale of the surplus power during the FY 2015-16.

Commission's analysis:

The Commission has verified the weekly summary sheets/bills of UI from the WRPC for the FY 2015-16 and for the purpose of this Order has considered the over drawal and under drawal of UI separately.

For the purpose of the True-up of the FY 2015-16, the Commission has considered the surplus energy sale of 55.61 MU (as verified from the UI bills from the WRPC for the complete year of the FY 2015-16) under the UI mechanism in the True-up for the FY 2015-16 at Rs 11.73 crore as per the audited accounts.

3.23. Aggregate Revenue Requirement (ARR)

Petitioner's submission:

Gross revenue requirement for the FY 2015-16 is Rs. 2,046.28 crore (Total Revenue Requirement – Non-Tariff Income) and excluding income from the sale of surplus power of Rs 11.73 crore.

Commission's analysis:

The Commission on the basis of the detailed analysis of the cost parameters of the ARR has considered and approved the revenue requirement in the True up of the FY 2015-16 as given in the following Table:

Table 3.19: Net ARR approved by the Commission in the True-up of the FY 2015-16 (Rs crore)

Particulars	FY 2015-16		
	Approved in APR Order Dated 07/04/2016	Petitioner's Submission (True-up)	Approved by the Commission (True-up)
Cost of power purchase for full year	2,220.97	2,039.34	2,039.34
Provision for RPO Compliance	54.78	-	18.00
Employee costs	9.57	10.22	10.22
Administration and General Expenses	4.39	6.24	6.24
Repair and Maintenance Expenses	5.79	4.56	4.56
Depreciation	20.13	13.42	13.42
Interest and Finance charges	7.26	6.74	6.66

Particulars	FY 2015-16		
	Approved in APR Order Dated 07/04/2016	Petitioner's Submission (True-up)	Approved by the Commission (True-up)
Interest on Working Capital	21.22	19.74	20.15
Interest on Security Deposit	3.64	3.26	3.26
Return on NFA /Equity	4.59	4.84	4.84
Provision for Bad Debt	-	0.84	-
Income Tax	2.36	23.43	2.49
Incentive on achievement of norm of T&D loss			1.01
Total Revenue Requirement	**2,354.70**	**2,132.63**	**2,130.19**
Less: Non-Tariff Income	43.58	74.62	74.62
Less: Revenue from Surplus Power Sale/UI	3.58	11.73	11.73
Net Revenue Requirement	**2,307.53**	**2,046.28**	**2,043.84**

Therefore, the Commission approves the net ARR of Rs 2,043.84 crore in the True-up for the FY 2015-16.

3.24. Revenue at approved Retail Tariff

Petitioner's submission:

The actual revenue for the FY 2015-16 is Rs. 2071.05 crore (including the amount received on account of FPPCA charges) as against Rs. 2425.19 crore approved by the Commission vide its Tariff Order dated 07th April 2016. The detailed reconciled statement of revenue from the sale of power at existing tariff with reference to the final actual figures of income & expenditure as per the audited accounts of the FY 2015-16 has also been submitted.

Commission's analysis:

The Commission has verified revenue from the sale of power within the State in the FY 2015-16 from the audited accounts.

The category-wise revenue as submitted by the Petitioner and approved by the Commission is shown in the following Table:

Table 3.20: Revenue from Retail Sale power approved by the Commission in the True-up of the FY 2015-16 (Rs crore)

Particulars	FY 2015-16		
	Approved in APR Order Dated 07/04/2016	Petitioner's Submission (True-up)	Approved by the Commission (True-up)
Domestic	**20.00**	**24.47**	**24.47**
0-50 units	*2.12*	*0.02*	*0.02*

Particulars	FY 2015-16		
	Approved in APR Order Dated 07/04/2016	Petitioner's Submission (True-up)	Approved by the Commission (True-up)
51-200 units	*5.59*	*2.43*	*2.43*
201 - 400 units	*6.83*	*2.46*	*2.46*
401 and above	*5.28*	*19.56*	*19.56*
Low Income Group (LIG)	*0.17*	*0.01*	*0.01*
Commercial	**9.32**	**8.72**	**8.72**
1- 100 units	*2.91*	*2.94*	*2.94*
101 and above units	*6.41*	*5.79*	*5.79*
Agriculture	**0.38**	**0.46**	**0.46**
Up to 10 HP	*0.24*	*0.28*	*0.28*
Above 10 HP	*0.15*	*0.18*	*0.18*
LTP Industry	**74.66**	**69.32**	**69.32**
Up to 20 HP	*74.66*	*68.57*	*68.57*
Above 20 HP		*0.76*	*0.76*
Public Lighting	**3.00**	**2.24**	**2.24**
Public Water Works	**1.35**	**1.37**	**1.37**
HT	**2316.47**	**1963.82**	**1963.82**
HT-A - I (Up to 66 kV)	*1677.70*	*1394.83*	*1394.83*
HT-A - II (Above 66 kV)	*430.38*	*400.85*	*400.85*
HT Ferro	*208.39*	*168.14*	*168.14*
Hoardings/ Signboards	**0.00**		
Temporary	**0.00**	**0.65**	**0.65**
Total	**2425.19**	**2071.05**	**2071.05**

Therefore, the Commission approves the revenue from sale of power at Rs. 2071.05 crore in the True-up for the FY 2015-16.

3.25. Revenue Gap/ (Surplus)

Petitioner's submission:

There is standalone revenue surplus of Rs. 24.77 crore and cumulative surplus of Rs 140.67 crore for the True-up of the FY 2015-16.

Commission's analysis:

The Commission has analyzed and approved the Revenue Gap/(Surplus) as follows:

Table 3.21: Revenue Gap/(Surplus) approved by the Commission in the True-up of the FY 2015-16 (Rs crore)

Particulars	FY 2015-16		
	Approved in APR Order Dated 07/04/2016	Petitioner's Submission (True-up)	Approved by the Commission (True-up)
Net Revenue Requirement	**2,307.53**	**2,046.28**	**2,043.84**
Revenue from Retail Sales at Existing Tariff	2,425.19	2,071.05	2,071.05
Revenue from Open Access	7.59		
Net Gap / (Surplus)	**(125.24)**	**(24.77)**	**(27.21)**
Recovery on account of PPC variations/(Refund of Excess)	18.49		
Gap after adjusting PPC variations	**(106.75)**	**(24.77)**	**(27.21)**
Cumulative Gap/(Surplus) for the previous year as on 31st March 2015	(310.83)	(115.90)	(310.83)
Holding Cost	(45.85)		(45.85)
Total Gap/ (Surplus)	**(463.43)**	**(140.67)**	**(383.88)**

The Commission notes that while it had approved a closing surplus of Rs 310.83 crores in the True-up for the FY 2014-15, the Petitioner has considered the closing surplus of Rs 115.90 crore only. Further, the Petitioner has not considered any holding cost for the surplus.

However, for the purpose of the True-up of the FY 2015-16, the Commission approves the cumulative surplus of Rs 383.88 crore (Rs. 27.21 crore as standalone surplus for the FY 2015-16, Rs 310.83 crore as surplus for previous years and Rs 45.85 crore as the holding cost of the surplus of the previous years). This approved surplus is carried over to the next year and has accordingly been considered in the Review of the ARR of the FY 2016-17.

Chapter 4. Annual Performance Review of the FY 2016-17

4.1. Applicable provisions of JERC for the State of Goa and Union Territories (except Delhi) (Multi Year Distribution Tariff) Regulations, 2014

The Annual Performance Review of the FY 2016-17 is to be carried out as per the following provisions of Regulation 8 of the JERC for the State of Goa and Union Territories (except Delhi) (Multi Year Distribution Tariff) Regulations, 2014 herein referred to as the MYT Regulations, 2014:

"(1) The Commission shall undertake a review along with the next Tariff Order of the expenses and revenue approved by the Commission in the Tariff Order. While doing so, the Commission shall consider variations between approvals and revised estimates/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'.

……(3) The revenue gap/surplus, if any, of the ensuing year shall be adjusted as a result of review and truing up exercises.

(4) While approving such expenses/revenue 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/revenue. Carrying costs shall be limited to the interest rate approved for working capital borrowings.

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

(6) 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 additional supply of power and also indicate the manner in which the licensee proposes to meet the cost for such additional supply of power."

4.2. Approach for the Review for the FY 2016-17

The Review of the Aggregate Revenue Requirement requires assessment of the quantum of energy sales, energy loss as well as the various cost elements like Power Purchase Cost, O&M expenses, interest cost and depreciation etc. This has been done based on actual data for 6 months for Power Purchase Cost, and sales, and revised estimates of the FY 2016-17 based on six months actuals. The O&M expenses, interest and depreciation have been computed on the basis of the norms approved in the MYT Order dated 07th April 2016 and applicable provisions of the MYT Regulations 2014.

4.3. Energy sales within the UT

Petitioner's submission:

The revised estimates of sales for the FY 2016-17 is 4140.17 MU by assuming the actual energy sales in the first six months of the FY 2016-17 of 2070.09 MU for the remaining 6 months also. The overall sales is significantly dependent on HT/EHT Consumers with close to 96% of the total sales to this category.

During the period April, 2016 to September, 2016, HT consumers, totaling a combined connected load of 320 MW, have opted for open access to procure energy for the functioning of their industries, resulting in purchase of 841.72 MU by way of open access.

Commission's analysis:

The Commission has noted the actual audited sales figures for the FY 2015-16 and the six months unaudited sales figures for the FY 2016-17. The Commission has considered the half yearly analysis of previous years to arrive at the sales of remaining 6 months of FY 2016-17. The detailed category wise sales to retail consumers for the FY 2016-17 (excluding open access sales) as approved by the Commission are shown below.

Table 4.1: Energy Sales approved by the Commission in the Review of the ARR for the FY 2016-17 (in MU)

S. No.	Category	FY 2016-17				
		Approved in MYT Order Dated 07/04/2016	Petitioner's Submission (APR)	Petitioner's Submission (H1)	Approved by the Commission (H2)	Approved by the Commission (APR)
A	**Domestic**	**117.96**	**111.56**	**55.78**	**48.29**	**104.07**
1	*0-50 units*	*20.22*	*0.19*	*0.10*	*0.08*	*0.18*
2	*51-200 units*	*35.46*	*14.82*	*7.41*	*6.42*	*13.83*
3	*201 - 400 units*	*35.47*	*12.27*	*6.14*	*5.31*	*11.45*
4	*401 and above*	*23.65*	*84.27*	*42.14*	*35.22*	*77.36*
5	*Low Income Group (LIG)*	*3.16*			*1.25*	*1.25*
B	**Commercial**	**34.49**	**33.07**	**16.53**	**16.63**	**33.17**
1	*1- 100 units*	*12.90*	*13.23*	*6.61*	*6.65*	*13.27*
2	*101 and above units*	*21.59*	*19.84*	*9.92*	*9.98*	*19.90*
C	**Agriculture**	**5.49**	**5.09**	**2.55**	**2.52**	**5.06**
1	*Up to 10 HP*	*3.81*	*3.54*	*1.77*	*1.75*	*3.52*
2	*Above 10 HP*	*1.68*	*1.56*	*0.78*	*0.77*	*1.55*
D	**LTP Industry**	**217.49**	**217.31**	**108.65**	**109.05**	**217.70**
1	*Up to 20 HP*	*217.49*	*215.02*	*107.51*	*107.90*	*215.41*
2	*Above 20 HP*		*2.29*	*1.14*	*1.15*	*2.29*
E	**Public Lighting**	**12.93**	**5.90**	**2.95**	**3.61**	**6.56**
F	**Public Water Works**	**3.56**	**4.03**	**2.02**	**2.02**	**4.03**
G	**HT (A)**	**4,987.01**	**3,459.15**	**1,729.57**	**1,768.56**	**3,498.14**
1	*Up to 66 kV*	*3,938.91*	*2,899.70*	*1,449.85*	*1,482.53*	*2,932.38*

S. No.	Category	FY 2016-17				
		Approved in MYT Order Dated 07/04/2016	Petitioner's Submission (APR)	Petitioner's Submission (H1)	Approved by the Commission (H2)	Approved by the Commission (APR)
2	*Above 66 kV*	*1,048.10*	*559.45*	*279.73*	*286.03*	*565.76*
H	**HT (B)**	**433.65**	**300.80**	**150.40**	**153.79**	**304.19**
I	Hoardings/ Signboards					0.00
J	Temporary	0.00	3.27	1.63	1.63	3.27
K	**Gross Total**	**5,812.58**	**4,140.17**	**2,070.09**	**2,106.10**	**4,176.18**

Therefore, the Commission approves the total sales of 4,176.18 MU in the Review of the ARR for the FY 2016-17 as against 4,140.17 MU submitted by the Petitioner.

4.4. Intra-State Distribution losses

Petitioner's submission:

The distribution losses have been considered at 4.70% for the FY 2016-17, as approved by the Commission in its last Tariff Order dated 07th April 2016.

Commission's analysis:

While the Commission observes that the actual losses for the FY 2015-16 were 4.54%, the Commission is of view that the distribution loss level in DNH, currently approved for the FY 2016-17 at 4.70%, is already at a very optimal level. Thus, the Commission finds it appropriate to retain the loss level of 4.70% as approved in its Tariff Order dated 07th April 2016 for the purpose of Review of the FY 2016-17. However, the sharing of gain or loss, if any, on account of over-achievement/under-achievement of target specified by the Commission will be dealt in the True-up of the FY 2016-17 on the basis of actual distribution loss level and audited figures of the quantum of power purchase and sales for the FY 2016-17.

Accordingly, the Commission has considered the distribution loss level of 4.70% for the purpose of Review of ARR for the FY 2016-17.

4.5. Inter-State Transmission losses

Petitioner's submission:

The recent 52-week moving average of regional losses available at the level of 3.66% have been considered for estimating the power availability at the periphery.

Commission's analysis:

The Commission, in its Tariff Order for the FY 2016-17, had considered the recent 52-week moving average of regional losses and approved 3.66% as the inter-state transmission loss for the FY 2016-17.

Since the recent 52 week moving average of regional losses is 3.69% for the week ending January 2017, **the Commission now considers the figures of regional pool losses of 3.69% as the inter-state loss and approves the same for the Review of the ARR of the FY 2016-17 which would be revised based on actuals during the Truing up exercise.**

4.6. Open Access Sales/Purchase and Energy Savings

Petitioner's submission:

Open access sales have been estimated as 2028.27 MU and corresponding open access purchase is 2091.00 MU and energy savings for the FY 2016-17 have been estimated as 5.77 MU.

Commission's analysis:

Keeping in the view the actual open access sales of 1358 MU upto December 2016, the Commission finds it appropriate to approve the open access sales of 2028.27 MU and corresponding open access purchase of 2091.00 MU in the Review for the FY 2016-17 as submitted by the Petitioner. The Commission also approves the energy savings of 5.77 MU as submitted by the Petitioner.

4.7. Surplus Energy sale/UI sales

Petitioner's submission:

The under drawal considered for the Review of the FY 2016-17 is 0.91 MU.

Commission's analysis:

The Commission has verified the weekly summary sheets/bills of UI from the WRPC for the FY 2016-17 (Apr-Sept) and for the purpose of this Order has considered the over drawal and under drawal of UI separately.

For the purpose of the Review of the FY 2016-17, the Commission has considered the surplus energy sale of 52.89 MU (as verified from the UI bills from the WRPC) under UI mechanism for the Review for the FY 2016-17.

4.8. Energy Requirement

Petitioner's submission:

The overall energy requirement at the generator end for the FY 2016-17 is 6633.77 MU including open access.

Commission's analysis:

The Commission has considered the actual under drawal of 52.89 MU as per the weekly UI sheets of WRPC for first six months of the FY 2016-17. The Petitioner has submitted the projections for open access sales and open access purchase for the FY 2016-17. The Commission has gone through the actual open access sales upto December 2016 and observes that the projections considered by the Petitioner are in same range. Thus, for the purpose of revised estimates for the Review of the FY 2016-17, the Commission has considered the open access sales and purchase as submitted by the Petitioner. The energy requirement for the FY 2016-17 is drawn based on the approved inter-state and intra-state transmission & distribution losses and the approved energy sales as discussed in the foregoing paragraphs. The gross energy requirement approved for the FY 2016-17 are shown in the Table below, along with the energy requirement submitted by the Petitioner in the Review of the ARR for the FY 2016-17:

Table 4.2: Energy Requirement approved by the Commission for the Review of the ARR for the FY 2016-17 (MU)

S. No.	Particulars	FY 2016-17			
		Formulae	Approved in MYT Order Dated 07/04/2016	Petitioner's Submission (APR)	Approved by the Commission (APR)
1	**ENERGY REQUIREMENT**				
2	Energy sales within the State/UT	a	5812.58	4140.17	4176.18
3	Open Access Sales	b	1180.32	2028.27	2028.27
4	Less: Energy Savings	c	-5.77	-5.77	-5.77
5	**Total Sales within the State/UT**	**d=a+b-c**	**6987.13**	**6162.67**	**6198.68**
6	**Distribution losses**				
7	*%*	e	*4.70%*	*4.70%*	*4.70%*
8	*MU*	f=g-d	*344.59*	*303.93*	*305.71*
9	**Energy required at State Periphery**	**g=1/(1-e)**	**7331.72**	**6466.60**	**6504.39**
	Energy Transactions at Periphery				
10	Add: Sales in Unscheduled Interchange	h	153.18	0.91	52.89
11	Add: Sales in Power Exchanges	i			
12	Less: Purchase under UI (MU)	j	0.00	0.00	0.00
13	Less: Purchase from Traders (MU)	k	0.00	0.00	0.00
14	Less: Open Access Purchase (MU)	l	1222.77	2091.00	2091.00
14	**Total energy scheduled at State Periphery from Tied-up Sources (MU)**	**m=g+h+i-j-k-l**	**6262.13**	**4376.51**	**4466.28**
15	Transmission losses				
16	%	n	3.66%	3.66%	3.69%
17	MU	o=p-m	237.90	166.27	171.08
18	**Total requirement from Tied-up sources at generator end (MU)**	**p=1/(1-n)**	**6500.03**	**4542.78**	**4637.36**
19	**Total requirement from Tied-up sources at generator end & UI/Traders/Banking/within State (MU)**	**q=p+j+k+l**	**7722.80**	**6633.78**	**6728.36**

Accordingly, the Commission approves the energy requirement of 4637.36 MU from tied-up sources (6728.36 MU – 2091.00 MU) excluding open access purchase of 2091.00 MU at the generator end for the Review of the ARR for the FY 2016-17.

4.9. Power Purchase Quantum and Cost

Petitioner's submission:

The revised estimates for the FY 2016-17 are based on six months actuals and remaining six months projections. For projection of remaining six months of power purchase for the FY 2016-17, firm and infirm allocation from various generating stations has been considered. Also the per unit variable cost, fixed cost and other charges for the remaining period have been considered at the same level as the actuals from April 2016 to September 2016. 200 MW power from EMCO energy is also projected to be purchased during the FY 2016-17.

Further, the Government of India, Ministry of Power has allocated 2% (38 MW) power to the Petitioner on a long-term basis from RGPPL. The state of Maharashtra (which has 95% share allocation from RGPPL) is not scheduling power because of non-availability of natural gas for this project and non-availability of technical minimum schedule to run the plant, presently there is no generation from the plant. Therefore, for the period October 2016 to March 2017, no power purchase has been considered from RGPPL. However, as per the terms of the PPA signed with RGPPL, the capacity charges for the allocated capacity share from the plant are required to be paid. Therefore, the fixed charges have been considered for the period April 2016 to March 2017 as per the fixed charges paid during the first six months of the FY 2016-17. Also, during the first six months of the FY 2016-17, there has been no generation from the Kakrapar atomic power station. Hence, no purchase of energy has been considered from Kakrapar during the period October 2016 to March 2017. The Commission is requested to approve the revised estimates of purchase of 4542.77 MU at Rs. 2040.09 crore.

Commission's analysis:

The power purchase quantum approved by the Commission in its last Tariff Order dated 07th April 2016 for the FY 2016-17 was 6500.03 MU at an approved power purchase cost of Rs. 2,393.52 crore including transmission charges.

The Commission, as part of its prudence check, verified the station-wise power purchase bills as submitted by the Petitioner for the FY 2016-17 for the first six months. The Commission has considered the submissions made by the Petitioner after verification of power purchase bills of the first six months of the FY 2016-17. The Commission noticed errors at some places and therefore has verified the power purchase details as submitted by the Petitioner in its Petition with the publicly available information from the REA maintained by WRPC on their website (http://www.wrpc.gov.in/) for the Central

Generating Stations (CGS).

The verified quantum of power purchase units and cost including transmission charges for the first six months of the FY 2016-17 is mentioned in the following Table:

Table 4.3: Power purchase quantum (in MU) and cost (Rs crore) approved by the Commission for the FY 2016-17 (April to September)

Source	Procured till September 2016-Actuals (units and amount verified from bills excluding rebate)					
	Energy Units(MU)		Fixed Charges (Rs. Crores)	Variable Cost (Rs. Crores)	Other Charges (Rs. Crores)	Total (Rs. Crores)
	Petitioner	Approved				
Power purchase from other sources						
(2.60% for - Non Solar) RPO (IEX)						0.00
(0.40% for Solar)						0.00
NPCIL						
KAPS	0.00	0.00	0.00	0.00	0.00	0.00
TAPS	150.69	150.69	0.00	43.34	0.01	43.34
Unscheduled Interchange	0.00	0.00	0.00	0.00	0.00	0.00
NTPC & Other Stations						
RGPPL	0.03	0.03	0.58	0.01	0.00	0.58
Sipat-I	348.52	348.52	42.78	48.54	3.53	94.85
Sipat-II	123.48	123.48	13.84	17.67	4.68	36.19
KSTPS 3	91.52	91.52	12.00	14.67	1.88	28.55
KSTPP 1&2	203.50	203.50	9.62	32.25	-0.45	41.41
VSTPP-V	105.05	95.05	13.27	18.16	0.91	32.33
VSTPP-II	98.58	98.58	6.73	17.38	0.87	24.98
VSTPP- III	137.44	137.44	13.32	23.86	6.68	43.86
VSTPP- IV	160.11	160.11	24.56	27.75	-0.19	52.12
EMCO-GMR	423.84	423.84	228.06	74.73	1.29	304.08
VSTPP-I	146.91	146.91	9.31	26.69	0.99	36.99
NSPCL - Bhilai	151.61	151.61	62.58	23.92	-12.49	74.02
JGPP	75.96	78.09	19.47	17.38	-0.99	35.86
KAWAS	71.44	71.44	21.53	16.17	-0.72	36.98
KHSTPP-II	11.44	11.44	1.19	2.55	0.14	3.88
MAUDA	44.91	44.91	30.51	11.75	-1.76	40.50
Power Purchase Cost	**2345.05**	**2337.18**	**509.34**	**416.79**	**4.38**	**930.51**

Source	Procured till September 2016-Actuals (units and amount verified from bills excluding rebate)					
	Energy Units(MU)		Fixed Charges (Rs. Crores)	Variable Cost (Rs. Crores)	Other Charges (Rs. Crores)	Total (Rs. Crores)
	Petitioner	Approved				
PGCIL and Other Charges						
PGCIL CHARGES						65.49
POSOCO						0.49
MAHATRANSCO						1.75
Reactive charges						1.44
Others Charges						0.09
Grand Total of Charges						**999.78**

A) Power Purchase Quantum and Cost for the remaining six months of the FY 2016-17

The Petitioner has firm allocation from the following Central Sector Generating Stations of NTPC, NPCIL, NSPCL and others:

- Korba Super Thermal Power Station - I, II and III.
- Vindhyachal Super Thermal Power Station - I, II, III, IV and V
- Kawas Gas Power Station
- Gandhar Gas Power Station
- Sipat Super Thermal Power Station- I &II
- Ratnagiri Gas and Power
- Kahalgaon Super Thermal Power Station - II (Eastern Region)
- Kakrapara Atomic Power Station (KAPS)
- Tarapur Atomic Power Station (TAPS)
- NSPCL-Bhilai
- EMCO-GMR
- Mauda Super Thermal Power Station

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

- **Allocation of Share:** The Commission has considered the firm allocation and allocation from the unallocated quota from the above stations, except Kahalgaon STPS-II and RGPPL, as per the notification of the Western Region Power Committee vide WRPC/Comml-I/6/Alloc/2017/1111 dated 30th January 2017. The allocation for Kahalgaon STPS-II is considered as per the notification of the Eastern Region power Committee. For RGPPL, the Commission has considered Nil allocation for the FY 2016-17.

- **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 five years. The availability from each station has been considered based on merit order dispatch. However, the fixed charges are approved for full allocation. 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 and as approved by the Commission in its Tariff Order dated 07th April 2016. As mentioned in the foregoing paragraphs of this order, the Commission has considered the separate effect of UI over- drawal / under- drawal for the FY 2016-17 (first six months); therefore the UI over- drawal of Nil MU (verified from the weekly UI bills as available with WRPC) under the UI mechanism for the FY 2016-17 is considered for the purpose of Review of the FY 2016-17. Accordingly, the Commission has approved the quantum and cost and the same would be revisited during the True-up of the FY 2016-17.
- **Energy Available to the Petitioner:** The effective share from the stations is applied on the energy sent out to arrive at the energy available for the Petitioner from the respective stations.

The Commission has considered the following assumptions to arrive at the Power purchase cost for the remaining six months of the FY 2016-17:

- **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, 2014. The Annual Fixed Charges for each station have been taken as per the latest Tariff Orders for the respective stations as applicable. However, the fixed charges of EMCO have been taken as per the actual fixed cost applicable as per the PPA.
- **Variable Charges:** The Commission has considered the average variable cost for the period July 2016 to September 2016, as verified from the power purchase bills submitted by the Petitioner, for consideration of the per unit variable charges for the remaining six months of the FY 2016-17.

B) Approved Power Purchase Quantum and Cost for the FY 2016-17

For determining the power purchase cost, merit order dispatch principles have been applied. The must-run stations have been assumed at the top of the merit order and variable cost incurred for meeting the energy requirement within the state has been calculated from the plants at the top of the merit order. The transmission charges for the FY 2016-17 for the first six months have been considered as per bills submitted by the Petitioner based on half yearly actuals and for the remaining six months as per the POC charges applicable for the FY 2016-17 (Order No.L-1/44/2010-CERC Dated 27th January 2017). The other charges (POSOCO, Reactive Energy, WRPC, rebate etc.) have been extrapolated for the full FY based on actual six months of the FY 2016-17. The Commission has considered payment to RGPPL based on the fixed cost only as per the share allocation. Further, the Intra-State transmission charges payable to ED-DNH (Transmission) have been considered at Rs. 29.54 crore as approved in the Order dated 31st March 2016 in the Petition no. 195/2016

Based on the above, the total power purchase quantum and cost from various sources (including over drawal of power under UI mechanism and transmission charges) as approved for the Review of the FY 2016-17 is tabulated below:

Table 4.4: Power purchase quantum (in MU) and cost (Rs crore) approved by the Commission in the Review of the ARR for the FY 2016-17

Source	Merit Order Purchase at Approved Losses				
	Energy Units (in MU)	Charges (In Crores)			
		Fixed	Variable	Other	Gross Total
Power purchase from other sources					
(2.60% for - Non Solar) RPO (IEX)	0.00	0.00	0.00	0.00	0.00
(0.40% for Solar)	0.00	0.00	0.00	0.00	0.00
NPCIL					
KAPS	0.00	0.00	0.00	0.00	0.00
TAPS	288.49	0.00	83.75	0.01	83.75
Unscheduled Interchange	0.00	0.00	0.00	0.00	0.00
NTPC & Other Stations					
RGPPL	0.03	1.15	0.01	0.00	1.16
Sipat-I	652.46	89.18	89.28	3.53	181.99
Sipat-II	230.71	28.70	32.47	4.68	65.86
KSTPS 3	175.74	26.14	27.30	1.88	55.32
KSTPP 1&2	401.41	22.21	62.27	-0.45	84.03
VSTPP-V	189.42	25.84	34.57	0.91	61.32
VSTPP-II	211.54	14.52	37.09	0.87	52.48
VSTPP- III	257.12	26.68	44.81	6.68	78.16
VSTPP- IV	318.16	72.03	55.58	-0.19	127.42
EMCO-GMR	1164.94	454.54	206.12	1.29	661.95
VSTPP-I	292.24	20.97	53.15	0.99	75.11
NSPCL - Bhilai	249.20	121.96	42.36	-12.49	151.84
JGPP	78.09	41.42	17.38	-0.99	57.81

Source	Merit Order Purchase at Approved Losses				
	Energy Units (in MU)	Charges (In Crores)			
		Fixed	Variable	Other	Gross Total
KAWAS	71.44	45.67	16.17	-0.72	61.11
KHSTPP-II	11.44	2.32	2.55	0.14	5.02
MAUDA	44.91	56.78	11.75	-1.76	66.77
Power Purchase Cost	**4637.36**	**1050.12**	**816.62**	**4.38**	**1871.12**
PGCIL and Other Charges					
PGCIL CHARGES					*132.21*
POSOCO					*0.98*
MAHATRANSCO					*3.50*
Reactive charges					*2.89*
Others Charges					*0.19*
ED-DNH (Transmission)					*24.95*
Grand Total of Charges	**4637.36**	**1050.12**	**816.62**	**4.38**	**2035.83**

The total power purchase quantum and cost as submitted by the Petitioner and approved by the Commission is tabulated hereunder:

Table 4.5: Summary of Power Purchase approved by the Commission in the Review of the ARR of the FY 2016-17

Particulars	Approved in Tariff Order Dated 07/04/2016	Petitioner's Submission (APR)	Approved by the Commission (APR)
Power Purchase Quantum (MU)	6500.03	4542.77	4637.36
Power Purchase Cost (Rs crore)	2393.52	2040.09	2035.83*
Average Per Unit Cost (Rs/kWh)	**3.68**	**4.49**	**4.39**

**** Excluding provision for RPO compliance***

Therefore, the Commission approves the overall power purchase quantum of 4637.36 MU at the cost of Rs 2035.83 crore in the Review of the ARR of the FY 2016-17.

4.10. Renewable Purchase Obligations (RPOs)

As per Clause 1, Sub-clause (1) of the JERC for the State of Goa and UTs (Procurement of Renewable Energy) Regulations, 2010

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

The Commission notified the JERC (Procurement of Renewable Energy), (Third Amendment) Regulations, 2016 on 22nd August 2016 and approved the revised RPO targets, as per which the Petitioner has to purchase 4.85% of its total consumption (including 1.65% from Solar) from renewable sources for the FY 2016-17. The Petitioner is also required to clear the backlog of 61.38 MU (Solar - 20.21 MU and Non Solar - 41.17 MU) upto the FY 2013-14 carried forward as per the Order dated 27th July 2016 in the Petition no. 175/2015 in the FY 2016-17.

The Petitioner, in its additional submission, has stated that during the period from April 2016 to December 2016, it has bought RECs corresponding to 210 MU (Solar – 80 MU and Non-Solar-130 MU).

The status of RPO compliance during the FY 2016-17 is tabulated below:

Table 4.6: Summary of RPO Compliance for the FY 2016-17

Description	FY 2016-17
Sales within state	4176.18
RPO obligation (in %)	
- Solar	*1.65%*
-Non-solar	*3.20%*
RPO obligation (in MU)	**202.54**
- Solar	***68.91***
-Non-solar	***133.64***
RPO compliance (actual purchase)	-
- Solar	-
-Non-solar	-
RPO compliance (REC certificate purchase)	210.00
- Solar	*80.00*
-Non-solar	*130.00*
Total RPO compliance	**210.00**
- Solar	***80.00***
-Non-solar	***130.00***
Backlog upto FY 2013-14 carried forward as per the Order dated 27th July 2016 in the Petition no. 175/2015	61.38
- Solar	*20.21*
-Non Solar	*41.17*
Cumulative Requirement till current year	**263.93**
- Solar	***89.12***
-Non Solar	***174.80***
Shortfall in RPO compliance	**53.93**
- Solar	***9.12***
-Non-solar	***44.80***

After adjustment of the estimated REC purchase during the FY 2016-17 by the Petitioner as discussed in the foregoing paragraphs, there is still a shortfall in RPO compliance of 53.93 MU (9.12 MU Solar and 44.80 MU Non-Solar). As the actual purchase of RECs has been done at the floor price approved by the CERC, the Commission has considered the cost of purchase of shortfall in RECs at same rates.

The Commission thus approves a provision of RPO Compliance of Rs. 57.41 crore [actual purchase of Rs 28.00 crore for the Solar RECs and Rs 19.50 for the non-solar RECs and provision for Rs 9.91 crore (Rs 3.19 crore in shortfall of Solar REC and Rs. 6.72 crore for shortfall in Non-Solar RECs)] at the rate of Rs 3500/MWh for Solar REC and Rs 1500/MWh for Non-Solar REC in the Review for the ARR of the FY 2016-17.

4.11. Energy Balance

Petitioner's Submission

The energy balance for the FY 2016-17 is tabulated below:

Table 4.7: Energy Balance for the FY 2016-17 as submitted by the Petitioner (MU)

Particulars	FY 2016-17
Sales	4,140.17
Open Access Sales	2,028.27
Energy Savings	(5.77)
Total Sales	**6,162.67**
Add: Losses (%)	4.70%
T&D Losses	**303.93**
Energy Required at Periphery	**6,466.60**
Add: Sales to common pool consumer	0.91
Total Energy Required at Periphery	**6,467.51**
Transmission loss	166.27
Transmission loss (%)	3.66%
Total Energy to be purchased	**6,633.77**
Power Purchase from other sources	4,542.77
Open Access Purchase	2,091.00

Commission's analysis:

Considering the energy requirement as approved in Section 4.8 and power purchase quantum as approved in Section 4.9, the Energy Balance as considered by the Commission for the Review of the ARR of the FY 2016-17 is shown in the Table below:

Table 4.8: Energy Balance approved by the Commission for Review of the ARR of the FY 2016-17 (MU)

S. No.	Particulars	FY 2016-17			
		Formulae	Approved in MYT Order Dated 07/04/2016	Petitioner's Submission (APR)	Approved by the Commission (APR)
1	**ENERGY REQUIREMENT**				
2	Energy sales within the State/UT	a	5812.58	4140.17	4176.18
3	Open Access Sales	b	1180.32	2028.27	2028.27
4	Less: Energy Savings	c	-5.77	-5.77	-5.77

S. No.	Particulars	FY 2016-17			
		Formulae	Approved in MYT Order Dated 07/04/2016	Petitioner's Submission (APR)	Approved by the Commission (APR)
5	**Total Sales within the State/UT**	**d=a+b-c**	**6987.13**	**6162.67**	**6198.68**
6	**Distribution losses**				
7	*%*	e	*4.70%*	*4.70%*	*4.70%*
8	*MU*	f=g-d	*344.59*	*303.93*	*305.71*
9	**Energy required at State Periphery**	**g=1/(1-e)**	**7331.72**	**6466.60**	**6504.39**
	Energy Transactions at Periphery				
10	Add: Sales in Unscheduled Interchange	h	153.18	0.91	52.89
11	Add: Sales in Power Exchanges	i			
12	Less: Purchase under UI (MU)	j	0.00	0.00	0.00
13	Less: Purchase from Traders (MU)	k	0.00	0.00	0.00
14	Less: Open Access Purchase (MU)	l	1222.77	2091.00	2091.00
14	**Total energy scheduled at State Periphery from Tied-up Sources (MU)**	**m=g+h+i-j-k-l**	**6262.13**	**4376.51**	**4466.28**
15	Transmission losses				
16	%	n	3.66%	3.66%	3.69%
17	MU	o=p-m	237.90	166.27	171.08
18	**Total requirement from Tied-up sources at generator end (MU)**	**p=1/(1-n)**	**6500.03**	**4542.78**	**4637.36**
19	**Total requirement from Tied-up sources at generator end & UI/Traders/Banking/within State (MU)**	**q=p+j+k+l**	**7722.80**	**6633.77**	**6728.36**
20	**Gross Availability**				
21	Power Purchase from Renewable Sources	r	298.00	4542.77	0.00
22	NPCIL	s	367.98		288.49
23	Unscheduled Interchange	t	0.00		0.00
24	Power Purchase from other sources	u	5834.05		4348.86
25	Open Access Purchase	v	1222.77	2091.00	2091.00
26	PXIL (Buy) to match the energy requirement	w	-	-	-
27	**Gross Purchase including PXIL**	**x=r+s+t+u+v+w**	**7722.80**	**6633.77**	**6728.36**

4.12. Employee Expenses

Petitioner's submission:

The employee expenses of Rs. 10.74 crore have been claimed for the Review of the ARR of the FY 2016-17 as compared to the employee expenses of Rs. 10.47 crore approved by the Commission in its Tariff Order dated 07th April 2016.

Commission's analysis:

As per Clause 21 (b) of the MYT Regulations, 2014 the norm for employee expenses shall be defined in terms of the combination of the number of personnel per 1000 consumers and the number of personnel per sub-station along with annual expenses per personnel.

The Commission has already approved the norms for employee expenses (1.95 employees per 1000 consumers and Rs. 665,833 per employee-*base FY 2013-14*) in the Business Plan Order in Petition No 182/2015 dated 15th December 2015 for the MYT Control Period (FY 2016-17 to FY 2018-19).

The average WPI increase as considered by the Commission is tabulated below:

Financial Year	WPI	%age increase	Avg 3 Years increase
FY 2010-11	143.32	-	-
FY 2011-12	156.13	8.94%	-
FY 2012-13	167.62	7.36%	-
FY 2013-14	177.64	5.98%	-
FY 2014-15	181.19	2.00%	7.43%
FY 2015-16	176.67	-2.49%	5.11%
FY 2016-17	-	-	1.83%
FY 2017-18	-	-	1.83%

Keeping in view the above mentioned norms and the WPI inflation rates, along with the number of consumers now considered by the Commission, the Commission has recomputed the employee expenses for the Review of the ARR of the FY 2016-17 as follows:

Sr. No	Particulars	FY 14	FY 15	FY 16	FY 17
1	Employee Expenses Per Employee	0.07	0.07	0.08	0.08
2	No of Employee Per '000 Consumers	1.95	1.95	1.95	1.95
3	No of Consumers '000				69.47
4	No. of Employees as per norms				135
5	**Employee Expenses**				**10.34**

The employee expenses as projected by the Petitioner and approved by the Commission are as follows:

Table 4.9: Employee Expenses approved by the Commission for the Review of the ARR of the FY 2016-17 (Rs crore)

Particulars	FY 2016-17		
	Approved in MYT Order Dated 07/04/2016	Petitioner's Submission (APR)	Approved by the Commission (APR)
Employee Expenses	10.47	10.74	10.34

The Commission approves the employee cost of Rs. 10.34 crore in the Review of the ARR for the FY 2016-17. The treatment of the employee expenses during the True-up would be in accordance with the Provisions of Regulations 9.2, 10 and 11 of the JERC MYT Regulations, 2014.

4.13. Administrative and General (A&G) Expenses

Petitioner's submission:

The A&G expenses of Rs. 6.56 crore have been claimed in the Review of the ARR of the FY 2016-17 as compared to the A&G expenses of Rs. 4.93 crore approved by the Commission in its Tariff Order dated 07th April 2016.

Commission's analysis:

As per Clause 21 (b) of the MYT Regulations, 2014, the norm for A&G Expenses shall be defined in terms of a combination of A&G expenses per personnel and A&G expenses per 1000 consumers.

The Commission has already approved the norms for A&G expenses (Rs. 313,750 per employee and Rs. 609,613.95 per 1000 consumers -*base FY 2013-14*) in the Business Plan Order in Petition No 182/2015 dated 15th December 2015 for the MYT Control Period FY 2016-17 to FY 2018-19.

Keeping in view the above mentioned norms and the WPI inflation rates, along with the number of consumers now considered by the Commission, the Commission has recomputed the A&G expenses for the Review of the ARR of the FY 2016-17 as follows:

Particulars	FY 14	FY 15	FY 16	FY 17
Approved Average A&G Expenses Per Employee	0.03	0.03	0.04	0.04
Approved Average A&G Expenses Per '000 Consumers	0.06	0.07	0.07	0.07
No of Employee				135
No of Consumers '000				69
A&G Expenses Per Employee - 50%				2.44
A&G Expenses Per '000 Consumers - 50%				2.43
A&G Expenses				**4.87**

The A&G Expenses as projected by the Petitioner and approved by the Commission are as follows:

Table 4.10: A&G Expenses approved by the Commission for the Review of the ARR of the FY 2016-17 (Rs crore)

Particulars	FY 2016-17		
	Approved in MYT Order Dated 07/04/2016	Petitioner's Submission (APR)	Approved by the Commission (APR)
Administrative and general expenses	4.93	6.56	4.87

The Commission approves the A&G Expenses of Rs. 4.87 crore in the Review of the ARR for the FY 2016-17. The treatment of the A&G expenses during the True-up would be in accordance with the Provisions of Regulations 9.2, 10 and 11 of the JERC MYT Regulations, 2014.

4.14. Repair and Maintenance (R&M) Expenses

Petitioner's submission:

The R&M expenses of Rs. 7.18 crore have been claimed for the Review of the ARR of the FY 2016-17 as compared to the R&M expenses of Rs. 5.93 crore approved by the Commission in its Tariff Order dated 07th April 2016.

Commission's analysis:

As per Regulation 21 (b) and 21.2 of the MYT Regulations, 2014, the norm for R&M Expenses shall be defined in terms of percentage of opening gross fixed assets for estimation of R&M expenses.

The Commission has already approved the norms for R&M expenses (K-factor of 1.70%) in the Business Plan Order in Petition No 182/2015 dated 15th December 2015 for the MYT Control Period FY 2016-17 to FY 2018-19.

The average weighted average inflation index as considered by the Commission is tabulated below:

Financial Year	CPI	%age Increase	WPI	%age Increase	Wt. avg. %age Increase	Avg 3 Years Increase
FY 2009-10	162.75		130.81			
FY 2010-11	179.75	10.45%	143.32	9.56%	10.09%	
FY 2011-12	194.83	8.39%	156.13	8.94%	8.61%	
FY 2012-13	215.17	10.44%	167.62	7.36%	9.21%	
FY 2013-14	236.00	9.68%	177.64	5.98%	8.20%	9.30%
FY 2014-15	250.83	6.29%	181.19	2.00%	4.57%	8.67%
FY 2015-16	265.00	5.65%	176.67	-2.49%	2.39%	7.33%
FY 2016-17						5.05%
FY 2017-18						5.05%

Keeping in view the above mentioned norms and the inflation index, along with the opening GFA (approved in the foregoing paragraphs) considered by the Commission, the Commission has recomputed the R&M expenses for the Review of the ARR for the FY 2016-17 as follows:

Sr. No	Particulars	FY 17
1	Opening GFA	393.48
2	K Factor Approved by the Commission	1.70%
3	Inflation index (60:40=CPI:WPI)	5.05%
4	**R&M Expenses**	**5.59**

The R&M expenses as projected by the Petitioner and approved by the Commission are as follows:

Table 4.11: R&M Expenses approved by the Commission for the Review of the ARR of the FY 2016-17 (Rs crore)

Particulars	FY 2016-17		
	Approved in MYT Order Dated 07/04/2016	Petitioner's Submission (APR)	Approved by the Commission (APR)
Repair and maintenance expenses	5.93	7.18	7.03

The Commission approves R&M expenses of Rs. 7.03 crore in the Review of the ARR for the FY 2016-17. 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 JERC MYT Regulations, 2014.

4.15. Gross Fixed Assets (GFA), Capitalisation and Depreciation

Petitioner's submission:

The total capital investment for the FY 2016-17 is estimated to be Rs. 181.60 crore along with an estimated capitalization of Rs. 119.36 crore. The Commission had approved a value of Rs. 10.00 crore for the scheme "Underground cabling system with new 66/11 KV GIS substation in SMC area" but the actual value sanctioned against the scheme by the CEA is Rs. 99.21 crore. A copy of the letter received from the CEA regarding the approval is enclosed along with the petition.

Rs 23.01 crore has been computed as depreciation for the FY 2016-17. Based on the actual capitalization of the FY 2015-16 and revised estimate for the FY 2016-17, assets amounting to Rs. 119.36 crore have been envisaged to be added in the GFA.

Depreciation is charged on the basis of straight-line method on the Gross Fixed Assets in use at the beginning of the year and addition in assets during the financial year. The depreciation is based on the original cost of the Gross Fixed Assets.

Commission's analysis:

The Commission observes that the capital expenditure and the capitalization submitted by the Petitioner for the FY 2016-17 are required to maintain the reliable supply of electricity to the consumers of UT of Dadra and Nagar Haveli.

In respect of the "Underground cabling system with new 66/11 KV GIS substation in SMC area" scheme, the Commission has already ordered in the previous Tariff Order that

"The Commission allows scheme as per CEA approval but the cost would be passed on to consumers at the time of true up."

Thus, the Commission has not considered the impact of revision of capital cost (and consequently capitalization) pertaining to underground cabling system with new 66/11 KV GIS substation in SMC area in the Review of the ARR of the FY 2016-17 and would consider same at the time of the True-up of FY 2016-17.

Accordingly, the Commission approves the capital expenditure and capitalization as approved in the Business Plan Order dated 15th December 2015 in the following Table:

Table 4.12: Capital expenditure and capitalization approved for the FY 2016-17 (Rs. crore)

Particulars	FY 2016-17	
	Projected	Approved
Capex	181.60	136.60
Capitalization	119.36	94.36

Regulation 23. Depreciation of the MYT Regulations 2014 specifies that,

"(a) Depreciation shall be calculated for each year of the control period on the original cost of the fixed assets of the corresponding year."

The Commission has considered the closing value of GFA for the FY 2015-16 (as detailed in the previous chapter) as the opening GFA for the FY 2016-17 along with capitalization of Rs. 94.36 crore as detailed above.

Regulation 23 of the MYT Regulations 2014 specifies that depreciation for the assets shall be calculated annually at the rates specified by CERC from time to time. Accordingly, the Commission has applied the following depreciation rates as specified by the Hon'ble CERC in the Tariff Regulations, 2014:

Table 4.13: Depreciation rates specified by Hon'ble CERC

Asset Category	Depreciation Rate %
Plant & Machinery	5.28%
Buildings	3.34%
Vehicles	9.50%
Furniture & Fixtures	6.33%
Computers & Others	15.00%
Land	0.00%

Addition in assets has been fully considered in Plant & Machinery and the same would be Trued-up based on actuals and the audited accounts for the FY 2016-17.

Accordingly, the Gross Fixed Assets and depreciation for the FY 2016-17 as approved by the Commission are as follows:

Table 4.14: GFA and depreciation approved by the Commission in the Review of the ARR for the FY 2016-17 (Rs crore)

Particulars	FY 2016-17		
	Approved in MYT Order Dated 07/04/2016	Petitioner's Submission (APR)	Approved by the Commission (APR)
Opening Gross Fixed Assets	324.85	393.47	393.48
Addition During the FY	94.36	119.36	94.36

Particulars	FY 2016-17		
	Approved in MYT Order Dated 07/04/2016	Petitioner's Submission (APR)	Approved by the Commission (APR)
Adjustment/Retirement During the FY			
Closing Gross Fixed Assets	419.21	512.83	487.84
Average Gross Fixed Assets	372.03	453.15	440.66
Rate of Depreciation (%)	6.19%	5.08%	5.09%
Depreciation for the FY	**23.03**	**23.01**	**22.41**

Therefore, the Commission approves the depreciation of Rs 22.41 crore for the Review of the ARR for the FY 2016-17.

4.16. Interest and Finance Charges

Petitioner's submission:

Assets capitalized during the FY 2016-17 have been considered based on normative debt-equity ratio of 70:30 as per the MYT Regulations, 2014. Interest rate of 14.45% has been considered for computation of interest cost for long-term loans which is similar to the prevailing SBI Prime Lending Rate. The Commission is requested to consider interest on loan amounting to Rs 18.80 crore in the FY 2016-17.

Commission's analysis:

As per Regulation 24 of MYT Regulations 2014, if the equity actually deployed is more than 30% of the capital cost, then equity in excess of 30% would be considered as normative loan. Actual loan or normative loan, if any shall be referred to as gross normative loan. The normative loan outstanding as on 1st April 2016 shall be computed by deducting the cumulative repayment as approved by the Commission till 31st March 2016. Further, the Commission has considered the actual capitalization of assets as approved in the foregoing paragraphs. The Commission for the purpose of funding of the capitalization has considered the normative debt equity ratio of 70:30. Repayment has been considered to be equal to depreciation allowed during the year. The Commission has considered the interest rate (SBI PLR) as for the FY 2016-17 i.e. at the 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 calculation for the interest on the normative loan is given in the following Table:

Table 4.15: Normative interest on loan approved by the Commission in the Review of the ARR for the FY 2016-17 (Rs crore)

Particulars	FY 2016-17		
	Approved in MYT Order Dated 07/04/2016	**Petitioner's Submission (APR)**	**Approved by the Commission (APR)**
Opening Normative Loan	53.88	45.56	45.56
Add: Normative Loan during the year	66.05	83.55	66.05
Less: Depreciation during the year	23.03	23.01	22.41
Closing Normative Loan	96.90	106.10	89.20
Average Normative Loan	75.39	75.83	67.38
Rate of Interest (SBI PLR)	14.05%	14.45%	14.05%
Interest on Normative Loan	**10.59**	**10.96**	**9.47**

Therefore, the Commission approves interest and finance charges of Rs 9.47 crore in the Review of the ARR for the FY 2016-17.

4.17. Interest on Security Deposit

Petitioner's submission:

Rs 3.26 crore has been provisioned as the interest on security deposit from consumers for the FY 2016-17.

Commission's analysis:

As per Regulation 6.10 (8) of the JERC Electricity Supply Code Regulations, 2010

"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."

The Commission has considered the closing balance of security deposit of the FY 2015-16 as determined in the previous chapter as the opening balance of security deposit in the FY 2016-17. No addition in security deposit has been envisaged by the Commission. The Commission has considered the RBI Bank Rate (as on 1st April 2016 i.e. 7.75%) for calculation of the Interest rate and the computation of interest on consumer security deposit is shown in the following Table:

Table 4.16: Interest on Security Deposit approved by the Commission in the Review of the ARR for the FY 2016-17 (Rs crore)

Particulars	FY 2016-17		
	Approved in MYT Order Dated 07/04/2016	**Petitioner's Submission (APR)**	**Approved by the Commission (APR)**
Opening Security Deposit	42.86	35.08	35.08
Add: Deposits during the Year	-	-	-
Less: Deposits refunded	-	-	-
Closing Security Deposit	42.86	35.08	35.08
Average Security Deposit	**42.86**	**35.08**	**35.08**
Bank Rate	7.75%	9.29%	7.75%
Interest on Security Deposit	**3.32**	**3.26**	**2.72**

Therefore, the Commission approves interest on consumer security deposit of Rs 2.72 crores in the Review of the ARR for the FY 2016-17.

4.18. Return on Equity

Petitioner's submission:

Return on Equity has been computed on the actual paid up equity. The rate of return has been taken as 16% as per the MYT Regulations, 2014.

Commission's analysis:

As per Regulation 27 of the MYT Regulations 2014, Return on Equity shall be computed on 30% of the capital base or actual equity whichever is lower. 16% post tax return on equity shall be considered irrespective of whether the distribution licensee has claimed Return on Equity in the ARR Petition. The Commission has considered the equity as per the audited accounts for the FY 2015-16 and has added the equity to the tune of 30% of assets capitalized during the year. The calculation for the Return on Equity is given below:

Table 4.17: Return on Capital Base approved by the Commission in the Review of the ARR for the FY 2016-17 (Rs crore)

Particulars	FY 2016-17		
	Approved in MYT Order Dated 07/04/2016	**Petitioner's Submission (APR)**	**Approved by the Commission (APR)**
Opening Equity	80.00	80.00	80.00
Addition in Equity on Account of New Capitalization	32.99	35.81	28.31
Closing Equity	112.99	115.81	108.31
Average Equity	96.49	97.90	94.15
Return on Equity @ 16%	**18.08**	**18.53**	**15.06**

Therefore, the Commission approves Return on Equity of Rs 15.06 crore in the

Review of the ARR for the FY 2016-17.

4.19. Interest on Working Capital

Petitioner's submission:

Interest on Working Capital has been claimed in accordance with Regulation 29 of the Tariff Regulations 2009. Further, the closing balance of the security deposit has been deducted from the total normative Working Capital requirement for computing the Working Capital requirement as per the methodology followed by the Commission in its previous Tariff Order. The interest on working capital has been computed on normative basis as per the MYT Regulations, 2014 for the FY 2016-17.

The working capital requirement for the FY 2016-17 has been computed considering the following parameters:

- Receivables of two months of billing
- Less power purchase cost of one month
- Less consumer security deposit but excluding Bank Guarantee/Fixed Deposit
- Inventory for two months based on annual requirement for the previous year

A rate of interest of 14.45% has been considered on the working capital requirement, being the SBI Prime Lending Rate as on 1st April of the year. This is in line with the MYT Regulations, 2014 which states that *"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."*

Commission's analysis:

As per Regulation 25 of the MYT Regulations 2014, Working capital shall consist of

- Receivables of two months of billing
- Less power purchase cost of one month
- Less consumer security deposit but excluding Bank Guarantee/Fixed Deposit
- Inventory for two months based on annual requirement for previous year

The Interest rate on working capital has been considered as 9.30% (SBI base rate as on 05th October 2015) as per the Regulations i.e. this is the base rate at the start of the relevant FY (https://www.sbi.co.in/portal/web/interest-rates/base-rate-historical-data) because no further rate has been announced.

The calculation for the interest on the Working Capital is given below:

Table 4.18: Interest on Working Capital approved by the Commission in the Review of the ARR of the FY 2016-17 (Rs crore)

Particulars	FY 2016-17		
	Approved in MYT Order Dated 07/04/2016	Petitioner's Submission (APR)	Approved by the Commission (APR)
Receivables of 2 Months Billing	428.65	334.81	286.91
Power Purchase Cost 1 Month	199.46	170.01	169.65
Consumer Security Deposit Excl. BG/FDR	42.86	35.08	35.08
Inventory Based on Annual Requirement for Previous FY for 2 months	0.28	0.42	0.42
Total Working after deduction of Security Deposit	**186.61**	**130.14**	**82.59**
SBI Base Rate (%)	9.30%	14.45%	9.30%
Interest on Working Capital	**17.35**	**18.80**	**7.68**

Therefore, the Commission approves interest on Working Capital of Rs 7.68 crore in the Review of the ARR for the FY 2016-17.

4.20. Income Tax

Petitioner's submission:

Rs 23.43 crore has been claimed as income tax in the Review of the ARR for the FY 2016-17.

Commission's analysis:

As specified in Regulation 28 of MYT Regulations, 2014, Income Tax

"(a) Income Tax, if any, on the Licenced 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 Licenced 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.

(c) ***Tax on income, if any, liable to be paid shall be limited to tax on return on the equity component of capital employed****. However any tax liability on incentives due to improved performance shall not be considered."*

In the foregoing paragraphs, the Commission has approved Return on Equity of Rs. 15.06 crore. In line with the provisions specified above, the Commission finds it appropriate to limit the income tax corresponding to Return on Equity only. Considering the tax rate of 33.99%, the Commission approves the income tax in the Review of the ARR for the FY 2016-17 as shown in following Table:

Table 4.19: Income Tax approved by the Commission in the Review of the ARR for the FY 2016-17 (Rs crore)

Particulars	FY 2016-17		
	Approved in MYT Order Dated 07/04/2016	Petitioner's Submission (APR)	Approved by the Commission (APR)
Return on Capital base	18.08	23.43	15.06
Rate of Income Tax (%)	33.99%		33.99%
Gross Up Return on Capital base	27.39		22.82
Income Tax	**9.31**	**23.43**	**7.76**

Therefore, the Commission approves Income Tax of Rs 7.76 crore in the Review of the ARR for the FY 2016-17.

4.21. Provision for Bad and Doubtful Debts

Petitioner's submission:

0.10% of the receivables has been claimed as provision for bad and doubtful debts for the FY 2016-17.

Commission's analysis:

As per Regulation 32 of the MYT Regulations, 2014

"Bad and Doubtful Debts shall be limited to 1% of receivables in the true up, subject to the condition that amount of bad and doubtful debts have actually been written off in the licensee books of accounts."

The above-mentioned provision allows bad and doubtful debts up to 1% of receivables in the revenue requirement on the basis of audited accounts only. **As the claim for the FY 2016-17 is not actual and is based on projections, no amount is considered for provision for bad and doubtful debts for the FY 2016-17.**

4.22. Non-Tariff Income

Petitioner's submission:

For estimating the non-tariff income for the FY 2016-17, an increase of 5% has been considered over the actual non-tariff income of the FY 2015-16, apart from the interest on fixed deposits and others.

Commission's analysis:

The Commission has escalated the non–tariff income approved in the True-up of the FY 2015-16 by 5% to arrive at the non-tariff income for the FY 2016-17 as shown in the following Table:

Table 4.20: Non-Tariff Income approved by the Commission in the Review of the ARR for the FY 2016-17 (Rs crore)

Particulars	FY 2016-17		
	Approved in MYT Order Dated 07/04/2016	Petitioner's Submission (APR)	Approved by the Commission (APR)
Delayed Payment Charges	5.23	11.44	11.44
Reactive Charges Receivables	0.58	0.20	0.20
Capacitor Charges	0.06	0.04	0.04
Interest on FD and Others	36.60	46.46	46.46
Meter Testing Charges	0.05	0.06	0.06
Other Charges (Indirect)	0.53	0.80	0.80
Reconnection Charges	0.02	0.01	0.01
Registration Fees	0.29	0.28	0.28
Service Connection Charges	0.29	0.21	0.21
Supervision Charges	1.41	1.65	1.65
Tender Fees	0.02	0.02	0.02
Penalty Charges	0.04	0.03	0.03
STOA Application Receivables	0.65	14.45	14.45
Recovery of Doubtful Debts	0.00	2.71	2.71
Gross Total	**45.76**	**78.35**	**78.35**

Therefore, the Commission approves the Non-Tariff Income of Rs 78.35 crore in the Review of the ARR for the FY 2016-17.

4.23. Revenue from Sale of Surplus Power/ Unscheduled Interchange (UI)

Petitioner's submission:

Rs 0.18 crore has been projected as revenue from sale of surplus power for the FY 2016-17.

Commission's analysis:

The Commission has verified the weekly summary sheets/bills of UI from the WRPC for the half year of the FY 2016-17 and for the purpose of this Order has considered the over drawal and under drawal of UI separately.

For the purpose of the Review of the ARR for the FY 2016-17, the Commission has considered the surplus energy sale of 52.89 MU (as verified from the UI bills from

the WRPC for the half year of the FY 2016-17) under the UI mechanism at Rs 9.32 crore.

4.24. Aggregate Revenue Requirement (ARR)

Petitioner's submission:

Net revenue requirement of Rs. 2,085.70 crore (total revenue requirement less non-tariff income less income from sale of surplus power) has been submitted for the Review of the ARR for the FY 2016-17.

Commission's analysis:

The Commission on the basis of the detailed analysis of the cost parameters of the ARR has considered and approved the revenue requirement for the Review of the ARR for the FY 2016-17 as given in the following Table:

Table 4.21: Net ARR approved by the Commission in the Review of the ARR for the FY 2016-17 (Rs crore)

Particulars	FY 2016-17		
	Approved in MYT Order Dated 07/04/2016	Petitioner's Submission (APR)	Approved by the Commission (APR)
Cost of power purchase for full year	2,393.52	2,040.09	2,035.83
Provision for RPO Compliance	-	-	57.41
Employee costs	10.47	10.74	10.34
Administration and General Expenses	4.93	6.56	4.87
Repair and Maintenance Expenses	5.93	7.18	7.03
Depreciation	23.03	23.01	22.41
Interest and Finance charges	10.59	10.96	9.47
Interest on Working Capital	17.35	18.80	7.68
Interest on Security Deposit	3.32	3.26	2.72
Return on NFA /Equity	18.08	18.53	15.06
Provision for Bad Debt	-	1.67	-
Income Tax	9.31	23.43	7.76
Incentive on achievement of norm of T&D loss	-	-	-
Total Revenue Requirement	**2,496.53**	**2,164.23**	**2,180.57**
Less: Non-Tariff Income	45.76	78.35	78.35
Less: Revenue from Surplus Power Sale/UI	45.95	0.18	9.32
Net Revenue Requirement	**2,404.82**	**2,085.70**	**2,092.90**

Therefore, the Commission approves the net ARR of Rs 2,092.90 crore in the Review of the ARR for the FY 2016-17.

4.25. Revenue at approved Retail Tariff

Petitioner's submission:

Revenue from existing retail tariff has been estimated as Rs 2580.44 crore for the FY 2016-17.

Commission's analysis:

The Commission has estimated open access income based on open access charge (Rs/kWh) as determined for the applicable category in the Tariff Order dated 07th April 2016 and additional surcharge as determined vide order dated 15th September 2016 in the Petition no. 205/2016. The Commission, based on actual revenue for the 1st half of the FY 2016-17 and approved sales, number of consumers and connected load for the 2nd half and existing retail tariff for the FY 2016-17, as discussed in the foregoing paragraphs of the chapter has calculated the revenue from the retail sale of power as follows:

Table 4.22: Revenue from Retail Sale of power approved by the Commission in the Review of the ARR for the FY 2016-17 (Rs crore)

Particulars	FY 2016-17				
	Approved in MYT Order Dated 07/04/2016	Petitioner's Submission (APR)	Petitioner's Submission (H1)	Approved by the Commission (H2)	Approved by the Commission (APR)
Domestic	**22.82**	**26.89**	**10.94**	**11.40**	**22.34**
0-50 units	*2.43*	*0.02*		*0.01*	*10.95*
51-200 units	*6.38*	*2.67*		*1.16*	*1.16*
201 - 400 units	*7.80*	*2.70*	*10.94*	*1.17*	*1.17*
401 and above	*6.03*	*21.49*		*8.98*	*8.98*
Low Income Group (LIG)	*0.17*	*0.01*		*0.09*	*0.09*
Commercial	**10.52**	**10.02**	**5.28**	**5.04**	**10.32**
1- 100 units	*3.29*	*3.37*	*5.28*	*1.70*	*6.97*
101 and above units	*7.23*	*6.65*		*3.34*	*3.34*
Agriculture	**0.43**	**0.40**	**0.21**	**0.20**	**0.41**
Up to 10 HP	*0.27*	*0.25*	*0.21*	*0.12*	*0.33*
Above 10 HP	*0.17*	*0.16*		*0.08*	*0.08*
LTP Industry	**80.28**	**78.48**	**38.50**	**37.67**	**76.17**
Up to 20 HP	*80.28*	*77.66*	*38.50*	*37.23*	*75.73*
Above 20 HP		*0.82*		*0.44*	*0.44*
Public Lighting	**3.88**	**1.77**	**1.03**	**1.08**	**2.11**
Public Water Works	**1.41**	**1.54**	**0.73**	**0.78**	**1.51**
HT	**2254.25**	**1553.47**	**788.54**	**818.74**	**1607.28**
HT-A - I (Up to 66 kV)	*1658.23*	*1202.14*		*638.30*	*1426.84*
HT-A - II (Above 66 kV)	*417.04*	*231.68*	*788.54*	*117.92*	*117.92*
HT Ferro	*178.98*	*119.66*		*62.51*	*62.51*
Hoardings/ Signboards	**0.00**			**0.00**	**0.00**

Particulars	FY 2016-17				
	Approved in MYT Order Dated 07/04/2016	Petitioner's Submission (APR)	Petitioner's Submission (H1)	Approved by the Commission (H2)	Approved by the Commission (APR)
Temporary	**0.00**	**0.65**	**0.67**	**0.62**	**1.29**
Total	**2373.59**	**1673.23**	**845.90**	**875.53**	**1721.43**

Therefore, the Commission approves revenue from the existing Retail Tariff of Rs 1721.43 crore in the Review of the ARR for the FY 2016-17. The Petitioner has also projected the recovery of Rs 336.05 crore from FPPCA. Keeping in view the detailed submissions made by the Petitioner in response to the data gaps, the Commission provisionally considers the submission of the Petitioner and will revisit the same at the time of True-up

4.26. Revenue from Open Access consumers

Petitioner's submission:

A revenue from existing open access charges has been estimated as Rs 68.96 crore for the FY 2016-17.

Commission's analysis:

As detailed in Section 4.6, the Commission has approved the open access sales of 2028.27 MU in the Review of the ARR for the FY 2016-17. Further, the approved open access charges for the FY 2016-17 were Rs 0.12 per unit as wheeling charges, Rs. 0.22 per unit as cross subsidy surcharge and Rs 0.47 per unit as additional surcharge**.**

The income from the open access charges in the Review of the ARR for the FY 2016-17 is shown in the Table below:

Table 4.23: Open Access Charges approved by the Commission in the Review of the ARR for the FY 2016-17 (Rs crore)

Particulars	Open Access Sales (MU)	Open Access Charges (Rs/kWh)	Total Charges (Rs crore)
Wheeling Charges	2028.27	0.12	24.34
Cross Subsidy Surcharge	2028.27	0.22	44.62
Additional Surcharge	2028.27	0.47	47.66
Total			**116.63**

4.27. Revenue Gap/ (Surplus)

Petitioner's submission:

There is a standalone revenue gap of Rs. 7.46 crore and cumulative surplus of Rs 133.21 crore for the Review of the FY 2016-17.

Commission's analysis:

The Commission has analyzed and approved the Revenue Gap/(Surplus) as follows:

Table 4.24: Revenue Gap/(Surplus) approved by the Commission in the Review of the ARR for the FY 2016-17 (Rs crore)

<table>
<tr><th rowspan="2">Particulars</th><th colspan="3">FY 2016-17</th></tr>
<tr><th>Approved in MYT Order Dated 07/04/2016</th><th>Petitioner's Submission (APR)</th><th>Approved by the Commission (APR)</th></tr>
<tr><td>Net Revenue Requirement</td><td>2,404.82</td><td>2,085.70</td><td>2,092.90</td></tr>
<tr><td>Revenue from Retail Sales at Existing Tariff</td><td>2,373.59</td><td>1,673.23</td><td>1,721.43</td></tr>
<tr><td>Revenue from Open Access</td><td></td><td></td><td></td></tr>
<tr><td>Cross-Subsidy Surcharge and wheeling charge</td><td>13.98</td><td rowspan="2">68.96</td><td>68.96</td></tr>
<tr><td>Additional Surcharge</td><td>-</td><td>47.66</td></tr>
<tr><td>Net Gap / (Surplus)</td><td>17.24</td><td>343.51</td><td>254.84</td></tr>
<tr><td>Recovery on account of PPC variations/(Refund of Excess)</td><td></td><td>336.05</td><td>336.05</td></tr>
<tr><td>Gap after adjusting PPC variations</td><td>17.24</td><td>7.46</td><td>(81.21)</td></tr>
<tr><td>Cumulative Gap/(Surplus) for the previous year as on 31st March 2016</td><td>(463.43)</td><td>(140.67)</td><td>(383.88)</td></tr>
<tr><td>Holding Cost</td><td>(43.10)</td><td></td><td>(35.70)</td></tr>
<tr><td>Total Gap/ (Surplus)</td><td>(489.28)</td><td>(133.21)</td><td>(500.79)</td></tr>
</table>

As detailed in the previous chapter, the Commission notes that while it had approved a closing surplus of Rs 310.83 crores for True-up of the FY 2014-15, the Petitioner had considered the closing surplus of Rs 115.90 crore only. Further, the Petitioner has not considered any holding cost for the surplus of the FY 2014-15. The impact of this deviation has been carried over to the FY 2016-17 also.

However, for the purpose of the Review of the ARR for the FY 2016-17, the Commission approves the cumulative surplus of Rs 500.79 crore (Rs. 81.21 crore as standalone surplus for the FY 2016-17, Rs 383.88 crore as surplus for previous year and Rs 35.70 crore as holding cost of the surplus of previous year). This estimated surplus is carried over to the next year and has accordingly been considered in determination of the ARR of the FY 2017-18.

Chapter 5. Approval of the various ARR components for the FY 2017-18

5.1. Approach for the ARR of the FY 2017-18

This chapter analyses the individual elements constituting the Aggregate Revenue Requirement for the FY 2017-18, approved in the MYT Order dated 07th April, 2016 and re-computes the same considering the actual values of various parameters for the FY 2015-16 as per the audited accounts and the H1 figure of the FY 2016-17. The revised ARR for the FY 2017-18 is compared with the revenue at the existing tariff (as determined in the MYT Order dated 07th April 2016) for the FY 2017-18 to arrive at the revised revenue gap/(surplus) for the year.

5.2. Number of Consumers, Connected Load and Energy Sales

Petitioner's submission:

The number of consumers, connected load and energy sales for the FY 2017-18 have been projected on the basis of historical growth till the first half of the FY 2016-17 and the Commission is requested to approve the revised figures.

Commission's analysis:

The Commission has noted that the substantial portion of the HT consumers are moving to open access to procure energy for the functioning of their industries (with a combined connected load of 320 MW from April 2016 to September 2016). Considering the fact that open access sales represent a substantial share of the overall sales in the Petitioner's licensee area, the Commission accordingly considered the half yearly analysis of sales to arrive at the revised estimates for the FY 2016-17. The Commission has now considered the approved revised estimates for the FY 2016-17 and historical growth trend to arrive at the new estimates for the FY 2017-18 for sales, number of consumers and connected load. The Commission has further bifurcated the same category wise on the basis on FY 2015-16 actuals approved in the previous Chapter. The number of Consumers, Connected Load and Sales as submitted by the Petitioner and approved by the Commission are as follows:

Table 5.1: Energy Sales approved by the Commission for the FY 2017-18 (in MU)

Category	FY 2017-18		
	Approved in MYT Order Dated 07/04/2016	Petitioner's Submission (ARR)	Approved by the Commission (ARR)
Domestic	**134.72**	**119.37**	**117.72**
0-50 units	*23.09*	*0.21*	*0.20*
51-200 units	*40.50*	*15.86*	*15.64*

Category	FY 2017-18		
	Approved in MYT Order Dated 07/04/2016	**Petitioner's Submission (ARR)**	**Approved by the Commission (ARR)**
201 - 400 units	*40.51*	*13.13*	*12.95*
401 and above	*27.01*	*90.17*	*86.41*
Low Income Group (LIG)	*3.61*		*2.51*
Commercial	**38.95**	**35.71**	**33.93**
1- 100 units	*14.56*	*14.29*	*13.57*
101 and above units	*24.39*	*21.43*	*20.36*
Agriculture	**6.19**	**5.35**	**5.80**
Up to 10 HP	*4.29*	*3.71*	*4.03*
Above 10 HP	*1.90*	*1.63*	*1.77*
LTP Industry	**234.24**	**222.74**	**234.04**
Up to 20 HP	*234.24*	*220.39*	*231.58*
Above 20 HP		*2.34*	*2.46*
Public Lighting	**16.68**	**6.32**	**7.39**
Public Water Works	**3.74**	**4.03**	**4.44**
HT (A)	**5,277.34**	**3,614.81**	**3,513.48**
Up to 66 kV	*4,168.23*	*3,065.86*	*2,693.26*
Above 66 kV	*1,109.12*	*548.94*	*820.22*
HT (B)	458.90	314.33	307.62
Temporary	**0.00**	**3.30**	**3.74**
Gross Total	**6,170.76**	**4,325.96**	**4,228.16**

Table 5.2: Number of consumers approved by the Commission for the FY 2017-18 (in no.s)

Category	FY 2017-18		
	Approved in MYT Order Dated 07/04/2016	**Petitioner's Submission (ARR)**	**Approved by the Commission (ARR)**
Domestic	44,959	44,959	44,391
Low Income Group (LIG)	14,322	14,322	14,353
Commercial	7,390	7,390	7,373
Agriculture	1,326	1,326	1,323
LTP Industry	2,222	2,222	2,216
Public Lighting	359	357	356
Public Water Works	355	375	395
HT (A)	939	936	917
Up to 66 kV	*937*	*934*	*915*
Above 66 kV	*2*	*2*	*2*
HT (B)	35	38	37
Hoardings/ Signboards	0	0	0
Temporary	0	0	0
Gross Total	**71,907**	**71,925**	**71,361**

Table 5.3: Connected Load approved by the Commission for the FY 2017-18 (in MVA)

Category	FY 2017-18		
	Approved in MYT Order Dated 07/04/2016	**Petitioner's Submission (ARR)**	**Approved by the Commission (ARR)**
Domestic	1,42,882	1,42,882	1,49,689
Commercial	41,146	41,146	45,236
Agriculture	6,040	6,040	6,470
LTP Industry	1,23,113	1,23,113	1,31,719
Up to 20 HP	*1,23,113*	*1,21,817*	*1,30,333*
Above 20 HP		*1,296*	*1,372*
Public Lighting	2,404	2,404	2,846
Public Water Works	2,292	2,292	2,476
HT (A)	12,59,192	12,88,609	12,44,889
Up to 66 kV	*10,29,511*	*10,98,468*	*10,52,267*
Above 66 kV	*2,29,681*	*1,90,141*	*1,92,622*
HT (B)	1,01,767	72,350	71,603
Hoardings/ Signboards	0	0	0
Temporary	0	0	0
Gross Total (in KVA)	**16,78,836**	**16,78,836**	**16,54,928**
Gross Total (in MVA)	**1,679**	**1,679**	**1,655**

Therefore, the Commission approves the total number of consumers at 71,361 with total connected load of 16,54,928 kVA and total sales of 4,228.16 MU for the FY 2017-18.

5.3. Intra-State Distribution losses

Petitioner's submission:

The distribution losses have been considered at 4.70% for the FY 2017-18, as approved by the Commission in its last Tariff Order dated 07th April 2016.

Commission's analysis:

While the Commission observes that the actual losses for the FY 2015-16 were 4.54%, the Commission is of view that the distribution loss level in DNH, currently approved for the FY 2017-18 at 4.70%, is already at a very optimal level. Thus, the Commission finds it appropriate to retain the loss level of 4.70% as approved by the Commission in its Tariff Order dated 07th April 2016 for the FY 2017-18. However, the sharing of gain or loss, if any, on account of over-achievement/under-achievement of target specified by the Commission will be dealt in the True-up of the FY 2017-18 on the basis of actual distribution loss level and audited figures of the quantum of power purchase and sales for the FY 2017-18.

Accordingly, the Commission has considered the distribution loss level of 4.70%

for the purpose of ARR of the FY 2017-18.

5.4. Inter-State Transmission losses

Petitioner's submission:

The recent 52-week moving average of regional losses available at the level of 3.66% has been considered for estimating the power availability at the periphery.

Commission's analysis:

The Commission, in its Tariff Order for the FY 2016-17, had considered the recent 52-weeks moving average of regional losses and approved 3.66% as the inter-state transmission loss for the FY 2017-18.

Since the recent 52 weeks moving average of regional losses is 3.69% for the week ending January 2017**, the Commission now considers the figures of regional pool losses of 3.69% as the inter-state loss and approves the same for the ARR of the FY 2017-18 which would be revised based on actuals during the Truing up exercise.**

5.5. Open Access Sales/Purchase and Energy Savings

Petitioner's submission:

Open access sales have been estimated as 2129.68 MU and the corresponding purchase for Open Access have been estimated as 2195.55 MU. Further, the energy savings for the FY 2017-18 have been estimated as 5.77 MU.

Commission's analysis:

Keeping in the view the actual open access sales of 1358 MU upto December 2016, the Commission has approved the open access sales of 2028.27 MU for the FY 2016-17. Considering the past trends and submissions of the Petitioner, the Commission finds it appropriate to approve the open access sales of 2129.68 MU and the corresponding open access purchase of 2195.55 MU for the FY 2017-18 as submitted by the Petitioner. The Commission also approves the energy savings of 5.77 MU at the same level as submitted by the Petitioner for the FY 2017-18.

5.6. Energy Requirement

Petitioner's submission:

The overall energy requirement at the generator end for the FY 2017-18 is 6,942.45 MU including open access.

Commission's analysis:

For the purpose of the ARR of the FY 2017-18, the Commission has considered the open access sales and purchase as submitted by the Petitioner. The energy requirement for the FY 2017-18 is drawn based on the approved Inter-state transmission losses and Intra-state distribution losses and the approved energy sales as discussed in the foregoing paragraphs. The gross energy requirement approved for the FY 2017-18 is shown in the Table below, along with the energy requirement submitted by the Petitioner for the FY 2017-18:

Table 5.4: Energy Requirement approved by the Commission for the FY 2017-18 (MU)

S. No.	Particulars	FY 2017-18			
		Formulae	Approved in MYT Order Dated 07/04/2016	Petitioner's Submission (ARR)	Approved by the Commission (ARR)
1	**ENERGY REQUIREMENT**				
2	Energy sales within the State/UT	a	6170.76	4325.96	4228.16
3	Open Access Sales	b	1239.33	2129.68	2129.68
4	Less: Energy Savings	c	-5.77	-5.77	-5.77
5	**Total Sales within the State/UT**	**d=a+b-c**	**7404.32**	**6449.87**	**6352.07**
6	**Distribution losses**				
7	*%*	e	*4.70%*	*4.70%*	*4.70%*
8	*MU*	f=g-d	*365.17*	*318.09*	*313.27*
9	**Energy required at State Periphery**	**g=1/(1-e)**	**7769.49**	**6767.96**	**6665.34**
	Energy Transactions at Periphery				
10	Add: Sales in Unscheduled Interchange	h		0.75	
11	Add: Sales in Power Exchanges	i			
12	Less: Purchase under UI (MU)	j	0.00	0.00	0.00
13	Less: Purchase from Traders (MU)	k	32.82	0.00	0.00
14	Less: Open Access Purchase (MU)	l	1283.91	2195.55	2195.55
14	**Total energy scheduled at State Periphery from Tied-up Sources (MU)**	**m=g+h+i-j-k-l**	**6452.76**	**4573.16**	**4469.79**
15	Transmission losses				
16	%	n	3.66%	3.66%	3.69%
17	MU	o=p-m	246.39	173.74	171.21
18	**Total requirement from Tied-up sources at generator end (MU)**	**p=1/(1-n)**	**6699.15**	**4746.90**	**4641.00**
19	**Total requirement from Tied-up sources at generator end & UI/Traders/Banking/within State (MU)**	**q=p+j+k+l**	**8015.88**	**6942.45**	**6836.55**

Accordingly, the Commission approves the energy requirement of 4641.00 MU (6836.55 MU – 2195.55 MU) excluding open access purchase of 2195.55 MU at generator end for the FY 2017-18.

5.7. Power Purchase Quantum and Cost

Petitioner's submission:

There is allocation from the Western as well as the Eastern region from coal, gas and nuclear power stations. However, for meeting the supply-demand gap during the peak hours, reliance is placed on over- drawal from the grid (UI). For projecting of energy availability for the FY 2017-18, firm and infirm allocation from various generating stations has been considered. The power availability for the FY 2017-18 has been estimated based on the revised allocation issued by the WRPC vide no's. WRPC/Comml-I/6/Alloc/2015/8945 dated 27th October 2015.

Since, HT consumers totalling a combined connected load of 320 MW have opted for open access till September 2016, consequently there is less power procurement from EMCO and NTPC Sail stations. Due to the long term PPA signed with both the generators, the fixed charges for the total capacity allocated from both the generators have to be paid. Therefore, the projected procurement of power for the FY 2017-18 for EMCO and NTPC Sail has been made by considering reduced power supply from both the plants but considering the full fixed charges for the whole year. The Commission is requested to approve the estimated cost of power purchase of 4746.90 MU at Rs. 2238.99 crore.

Commission's analysis:

The power purchase quantum approved by the Commission in its last Tariff Order dated 07th April 2016 for the FY 2017-18 was 6731.97 MU at an approved power purchase cost of Rs. 2508.11 crore including transmission charges.

The Petitioner has firm allocation from the following Central Sector Generating Stations of NTPC, NPCIL, NSPCL and others:

- Korba Super Thermal Power Station - I, II and III.
- Vindhyachal Super Thermal Power Station - I, II, III, IV and V
- Kawas Gas Power Station
- Gandhar Gas Power Station
- Sipat Super Thermal Power Station- I &II
- Ratnagiri Gas and Power
- Kahalgaon Super Thermal Power Station - II (Eastern Region)
- Kakrapara Atomic Power Station (KAPS)
- Tarapur Atomic Power Station (TAPS)
- NSPCL-Bhilai
- EMCO-GMR

- Mauda Super Thermal Power Station

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

- **Allocation of Share:** The Commission has considered the firm allocation and allocation from the unallocated quota from the above stations, except Kahalgaon STPS-II and RGPPL, as per the notification of the Western Region Power Committee vide WRPC/Comml-I/6/Alloc/2017/1111 dated 30th January 2017. The allocation for Kahalgaon STPS-II is considered as per the notification of the Eastern Region power Committee. For RGPPL, the Commission has considered Nil allocation for the FY 2017-18.
- **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 five years. The availability from each station has been considered based on merit order dispatch. However, the fixed charges are approved for full allocation. 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 and as approved by the Commission in its Tariff Order dated 07th April 2016. Accordingly, the Commission has projected the power purchase quantum and cost and the same would be revisited in the True-up of the FY 2017-18.
- **Energy Available to the Petitioner:** The effective share from the stations is applied on the energy sent out to arrive at the energy available for the Petitioner from the respective stations.

The Commission has considered the following assumptions to arrive at the Power purchase cost for the FY 2017-18:

- **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, 2014. The Annual Fixed Charges for each station have been taken as per the latest Tariff Orders for the respective stations as applicable. However, the fixed charges of EMCO have been taken as per the actual fixed cost applicable as per the PPA.
- **Variable Charges:** The Commission has considered the average variable cost for the period July 2016 to September 2016, as verified from the power purchase bills submitted by the Petitioner, for consideration of the per unit variable charges for the FY 2017-18.

B) Approved Power Purchase Quantum and Cost for the FY 2017-18

For determining the power purchase cost, merit order dispatch principles have been applied. The must-run stations have been assumed at the top of the merit order and variable cost incurred for meeting the energy requirement within the state has been calculated from the plants at the top of the merit order. The transmission charges for the FY 2017-18 have been considered as per the POC charges applicable for the FY 2017-18 (Order No.L-1/44/2010-CERC Dated 27th January 2017). The other charges (POSOCO, Reactive Energy, WRPC, rebate etc.) have been considered at the same level of the FY 2016-17. The Commission has considered payment to RGPPL based on fixed cost only as per share allocation. Further, the Intra-State transmission charges payable to ED-DNH (Transmission) have been considered at Rs. 29.01 crore as approved in the Order dated 19th April 2017 in the Petition no. 223/2017.

Based on the above, the total power purchase quantum and cost from various sources (including over drawal of power under UI mechanism and transmission charges) as approved for the FY 2017-18 is tabulated below:

Table 5.5: Power purchase quantum (in MU) and cost (Rs crore) approved by the Commission for the FY 2017-18

Source	Merit Order Purchase at Approved Losses				
	Energy Units (in MU)	Charges (In Crores)			
		Fixed	Variable	Other	Gross Total
NPCIL					
KAPS	0.00	0.00	0.00	0.00	0.00
TAPS	275.60	0.00	80.81	0.00	80.81
NTPC & Other Stations					
RGPPL	0.00	1.15	0.00	0.00	1.15
Sipat-I	609.71	93.07	81.72	0.00	174.79
Sipat-II	215.37	29.86	29.74	0.00	59.60
KSTPS 3	168.95	23.76	25.34	0.00	49.10
KSTPP 1&2	397.91	26.44	60.36	0.00	86.81
VSTPP-V	189.25	28.51	32.92	0.00	61.43
VSTPP-II	226.85	16.12	39.59	0.00	55.71
VSTPP- III	240.28	26.81	42.06	0.00	68.86
VSTPP- IV	317.01	95.21	55.84	0.00	151.04
EMCO-GMR	1482.19	458.96	262.79	0.00	721.75
VSTPP-I	291.82	24.90	53.14	0.00	78.04
NSPCL - Bhilai	226.07	118.18	42.72	0.00	160.90
JGPP	0.00	43.89	0.00	0.00	43.89
KAWAS	0.00	48.28	0.00	0.00	48.28
KHSTPP-II	0.00	2.27	0.00	0.00	2.27
MAUDA	0.00	53.12	0.00	0.00	53.12
Power Purchase Cost	**4641.00**	**1090.53**	**807.02**	**0.00**	**1897.55**
PGCIL and Other Charges					
PGCIL CHARGES					133.66
POSOCO					1.03
MAHATRANSCO					3.68

Source	Merit Order Purchase at Approved Losses				
	Energy Units (in MU)	Charges (In Crores)			
		Fixed	Variable	Other	Gross Total
Reactive charges					3.03
ED-DNH (Transmission)					*29.01*
Grand Total of Charges	**4641.00**	**1090.53**	**807.02**	**0.00**	**2067.96**

The total power purchase quantum and cost as submitted by the Petitioner and approved by the Commission is tabulated as follows:

Table 5.6: Summary of Power Purchase approved by the Commission for the FY 2017-18

Particulars	Approved in Tariff Order Dated 07/04/2016	Petitioner's Submission (ARR)	Approved by the Commission (ARR)
Power Purchase Quantum (MU)	6731.97	4746.90	4641.00
Power Purchase Cost (Rs crore)	2508.11	2238.99	2067.96*
Average Per Unit Cost (Rs/kWh)	**3.73**	**4.72**	**4.46**

**** Excluding provision for RPO compliance***

Therefore, the Commission approves the overall power purchase quantum of 4641.00 MU at the cost of Rs 2067.96 crore for the FY 2017-18.

The Petitioner shall compute fuel and power procurement cost variations, and adjustments shall be made in the consumer bills based on the Fuel and Power Purchase Cost Adjustment (FPPCA) formula notified by the Commission. For the purposes of calculation, the approved per unit cost of power purchase ($\mathbf{R}_{\mathbf{approved}}$) shall be taken as Rs 4.49 per unit for the FY 2017-18.

5.8. Renewable Purchase Obligations (RPOs)

As per Clause 1, Sub-clause (1) of the JERC for the State of Goa and UTs (Procurement of Renewable Energy) Regulations, 2010

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

The Commission notified the JERC (Procurement of Renewable Energy), (Third Amendment) Regulations, 2016 on 22nd August 2016 and approved the revised RPO targets, as per which the Petitioner has to purchase 6.70% of its total consumption (including 2.50% from Solar) from renewable sources for the FY 2017-18. The Petitioner is also required to clear the backlog of 61.38 MU (Solar - 20.21 MU and Non Solar - 41.17 MU) upto the FY 2013-14 carried forward as per the Order dated 27th July 2016 in the Petition no. 175/2015 in the FY 2017-18.

The Petitioner has proposed the physical purchase of power of 175.37 MU of solar power at Rs 61.38 crore and 325.30 MU of non-solar power at Rs. 48.80 crore.

Considering the past trend, the Commission finds it appropriate to approve the purchase of RE certificates for compliance of RPO for the FY 2017-18.

The status of RPO compliance during the FY 2017-18 is shown in the following Table:

Table 5.7: Summary of RPO Compliance approved by the Commission for the FY 2017-18

Description	FY 2017-18
Sales within state	4228.16
RPO obligation (in %)	
- Solar	*2.50%*
-Non-solar	*4.20%*
RPO obligation (in MU)	**283.29**
- Solar	*105.70*
-Non-solar	*177.58*
RPO compliance (actual purchase)	**-**
- Solar	-
-Non-solar	-
RPO compliance (REC certificate purchase)	**-**
- Solar	-
-Non-solar	-
Total RPO compliance	**-**
- Solar	-
-Non-solar	-
Backlog upto FY 2013-14 carried forward as per the Order dated 27th July 2016 in the Petition no. 175/2015	61.38
- Solar	*20.21*
-Non Solar	*41.17*
Cumulative Requirement till current year#	**344.67**
- Solar	***125.92***
-Non Solar	***218.75***
Shortfall in RPO compliance	**344.67**
- Solar	***125.92***
-Non-solar	***218.75***

 # includes backlog of shortfall in RPO compliance upto FY 2013-14

CERC, in its order dated 30th March 2017 in the Petition no. 02/SM/2017, has prescribed the floor price of Rs 1000 per MWh for both solar as well as non-solar certificates applicable from 01st April 2017 onwards. The Commission has considered the cost of purchase of RECs at floor price now approved by CERC.

The Commission thus approves a provision of RPO Compliance of Rs. 34.47 crore (Rs 12.59 crore in shortfall of Solar REC and Rs. 21.87 crore for shortfall in Non-Solar RECs) for the FY 2017-18.

5.9. Energy Balance

Petitioner Submission

The energy balance for the FY 2017-18 is tabulated below:

Table 5.8: Energy Balance for the FY 2017-18 as submitted by the Petitioner (MU)

Particulars	FY 2017-18
Sales	4,325.96
Open Access Sales	2,129.68
Energy Balance	(5.77)
Total Sales	**6,449.87**
Add: Losses (%)	4.70%
T&D Losses	**318.09**
Energy Required at Periphery	**6,767.96**
Add: Sales to common pool consumer	0.75
Total Energy Required at Periphery	**6,768.71**
Transmission loss	173.74
Transmission loss (%)	3.66%
Total Energy to be purchased	**6,942.45**
Power Purchase from other sources	4,746.90
Open Access Purchase	2,195.55

Commission's analysis:

Considering the energy requirement as approved in Section 5.8 and the power purchase quantum as approved in Section 5.9, the Energy Balance as considered by the Commission for the Review of the ARR of the FY 2016-17 is shown in the Table below:

Table 5.9: Energy Balance approved by the Commission for Review of ARR of the FY 2016-17 (MU)

S. No.	Particulars	FY 2016-17			
		Formulae	**Approved in MYT Order Dated 07/04/2016**	**Petitioner's Submission (APR)**	**Approved by the Commission (APR)**
1	**ENERGY REQUIREMENT**				
2	Energy sales within the State/UT	a	6170.76	4325.96	4228.16
3	Open Access Sales	b	1239.33	2129.68	2129.68
4	Less: Energy Savings	c	-5.77	-5.77	-5.77
5	**Total Sales within the State/UT**	**d=a+b-c**	**7404.32**	**6449.87**	**6352.07**
6	**Distribution losses**				
7	*%*	e	*4.70%*	*4.70%*	*4.70%*
8	*MU*	f=g-d	*365.17*	*318.09*	*313.27*
9	**Energy required at State Periphery**	**g=1/(1-e)**	**7769.49**	**6767.96**	**6665.34**
	Energy Transactions at Periphery				
10	Add: Sales in Unscheduled Interchange	h		0.75	
11	Add: Sales in Power Exchanges	i			
12	Less: Purchase under UI (MU)	j	0.00	0.00	0.00

S. No.	Particulars	FY 2016-17			
		Formulae	**Approved in MYT Order Dated 07/04/2016**	**Petitioner's Submission (APR)**	**Approved by the Commission (APR)**
13	Less: Purchase from Traders (MU)	k	32.82	0.00	0.00
14	Less: Open Access Purchase (MU)	l	1283.91	2195.55	2195.55
14	**Total energy scheduled at State Periphery from Tied-up Sources (MU)**	**m=g+h+i-j-k-l**	**6452.76**	**4573.16**	**4469.79**
15	Transmission losses				
16	%	n	3.66%	3.66%	3.69%
17	MU	o=p-m	246.39	173.74	171.21
18	**Total requirement from Tied-up sources at generator end (MU)**	**p=1/(1-n)**	**6699.15**	**4746.90**	**4641.00**
19	**Total requirement from Tied-up sources at generator end & UI/Traders/Banking/within State (MU)**	**q=p+j+k+l**	**8015.88**	**6942.45**	**6836.55**
20	**Gross Availability**				
21	Power Purchase from Renewable Sources	r	298.00	4746.90	-
22	NPCIL	s	367.98		275.60
23	Unscheduled Interchange	t	0.00		-
24	Power Purchase from other sources	u	6033.18		4365.40
25	Open Access Purchase	v	1283.91	2195.55	2195.55
26	PXIL (Buy) to match the energy requirement	w	32.82	-	-
27	**Gross Purchase including PXIL**	**x=r+s+t+u+v+w**	**8015.88**	**6942.45**	**6836.55**

5.10. Employee Expenses

Petitioner’s submission:

The employee expenses of Rs. 11.29 crore have been claimed for the FY 2017-18 as compared to the employee expenses of Rs. 11.40 crore approved by the Commission in its Tariff Order dated 07th April 2016.

Commission’s analysis:

As per Clause 21 (b) of the MYT Regulations, 2014 the norm for employee expenses shall be defined in terms of the combination of the number of personnel per 1000 consumers and the number of personnel per sub-station along with annual expenses per personnel.

The Commission has already approved the norms for employee expenses (1.95 employees per 1000 consumers and Rs. 665,833 per employee-*base FY 2013-14*) in the Business Plan Order in Petition No 182/2015 dated 15th December 2015 for the MYT Control Period (FY 2016-17 to FY 2018-19).

The average WPI increase as considered by the Commission is tabulated below:

Financial Year	WPI	%age increase	Avg 3 Years increase
FY 2010-11	143.32	-	-
FY 2011-12	156.13	8.94%	-
FY 2012-13	167.62	7.36%	-
FY 2013-14	177.64	5.98%	-
FY 2014-15	181.19	2.00%	7.43%
FY 2015-16	176.67	-2.49%	5.11%
FY 2016-17	-	-	1.83%
FY 2017-18	-	-	1.83%

Keeping in view the above mentioned norms and the WPI inflation rates, along with the number of consumers now considered by the Commission, the Commission has recomputed the employee expenses for the FY 2017-18 as follows:

Sr. No	Particulars	FY 14	FY 15	FY 16	FY 17	FY 18
1	Employee Expenses Per Employee	0.07	0.07	0.08	0.08	0.08
2	No of Employee Per '000 Consumers	1.95	1.95	1.95	1.95	1.95
3	No of Consumers '000				69.47	71.36
4	No. of Employees as per norms				135	139
5	**Employee Expenses**				**10.34**	**10.84**

Accordingly, the employee expenses as projected by the Petitioner and approved by the Commission are as follows:

Table 5.10: Employee Expenses approved by the Commission for the FY 2017-18 (Rs crore)

Particulars	FY 2017-18		
	Approved in MYT Order Dated 07/04/2016	Petitioner's Submission (ARR)	Approved by the Commission (ARR)
Employee Expenses	11.40	11.29	10.84

The Commission approves the employee cost of Rs. 10.84 crore for the FY 2017-18. The treatment of the employee expenses during the True-up would be in accordance with the Provisions of Regulations 9.2, 10 and 11 of the JERC MYT Regulations, 2014.

5.11. Administrative and General (A&G) Expenses

Petitioner's submission:

The A&G expenses of Rs. 6.89 crore have been claimed in the FY 2017-18 as compared to the A&G expenses of Rs. 5.36 crore approved by the Commission in its Tariff Order dated 07th April 2016.

Commission's analysis:

As per Clause 21 (b) of the MYT Regulations, 2014, the norm for A&G Expenses shall be defined in terms of a combination of A&G expenses per personnel and A&G expenses per 1000 consumers.

The Commission has already approved the norms for A&G expenses (Rs. 313,750 per employee and Rs. 609,613.95 per 1000 consumers -*base FY 2013-14*) in the Business Plan Order in Petition No 182/2015 dated 15th December 2015 for the MYT Control Period FY 2016-17 to FY 2018-19.

Keeping in view the above mentioned norms and the WPI inflation rates, along with the number of consumers now considered by the Commission, the Commission has recomputed the A&G expenses for the FY 2017-18 as follows:

Particulars	FY 14	FY 15	FY 16	FY 17	FY18
Approved Average A&G Expenses Per Employee	0.03	0.03	0.04	0.04	0.04
Approved Average A&G Expenses Per '000 Consumers	0.06	0.07	0.07	0.07	0.07
No of Employee				135	139
No of Consumers '000				69	71
A&G Expenses Per Employee - 50%				2.44	2.55
A&G Expenses Per '000 Consumers - 50%				2.43	2.55
A&G Expenses				**4.87**	**5.10**

Accordingly, the A&G as projected by the Petitioner and approved by the Commission are as follows:

Table 5.11: A&G Expenses approved by the Commission for the FY 2017-18 (Rs crore)

Particulars	FY 2017-18		
	Approved in MYT Order Dated 07/04/2016	Petitioner's Submission (ARR)	Approved by the Commission (ARR)
Administrative and general expenses	5.36	6.89	5.10

The Commission approves the A&G Expenses of Rs. 5.10 crore for the FY 2017-18. The treatment of the A&G expenses during the True-up would be in accordance with the Provisions of Regulations 9.2, 10 and 11 of the JERC MYT Regulations, 2014.

5.12. Repair and Maintenance (R&M) Expenses

Petitioner's submission:

The R&M expenses of Rs. 9.36 crore have been claimed for the FY 2017-18 as compared to the R&M expenses of Rs. 7.35 crore approved by the Commission in its Tariff Order dated 07th April 2016.

Commission's analysis:

As per Regulation 21 (b) and 21.2 of the MYT Regulations, 2014, the norm for R&M Expenses shall be defined in terms of the percentage of opening gross fixed assets for estimation of R&M expenses.

The Commission has already approved the norms for R&M expenses (K-factor of 1.70%) in the Business Plan Order in Petition No 182/2015 dated 15th December 2015 for the MYT Control Period FY 2016-17 to FY 2018-19.

The weighted average inflation index as considered by the Commission is tabulated below:

Financial Year	CPI	%age Increase	WPI	%age Increase	Wt. avg. %age Increase	Avg 3 Years Increase
FY 2009-10	162.75		130.81			
FY 2010-11	179.75	10.45%	143.32	9.56%	10.09%	
FY 2011-12	194.83	8.39%	156.13	8.94%	8.61%	
FY 2012-13	215.17	10.44%	167.62	7.36%	9.21%	
FY 2013-14	236.00	9.68%	177.64	5.98%	8.20%	9.30%
FY 2014-15	250.83	6.29%	181.19	2.00%	4.57%	8.67%
FY 2015-16	265.00	5.65%	176.67	-2.49%	2.39%	7.33%
FY 2016-17						5.05%
FY 2017-18						5.05%

Keeping in view the above mentioned norms and the inflation index, along with the opening GFA (approved in the foregoing paragraphs) considered by the Commission, the Commission has recomputed the R&M expenses for the FY 2017-18 as follows:

Sr. No	Particulars	FY 18
1	Opening GFA	487.84
2	K Factor Approved by the Commission	1.70%
3	Inflation index (60:40=CPI:WPI)	5.05%
4	**R&M Expenses**	**8.71**

The R&M expenses as projected by the Petitioner and approved by the Commission are as follows:

Table 5.12: R&M Expenses approved by the Commission for the FY 2017-18 (Rs crore)

Particulars	FY 2017-18		
	Approved in MYT Order Dated 07/04/2016	Petitioner's Submission (ARR)	Approved by the Commission (ARR)
Repair and maintenance expenses	7.65	9.36	8.71

The Commission approves R&M expenses of Rs. 8.71 crore for the FY 2017-18. 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 JERC MYT Regulations, 2014.

5.13. Gross Fixed Assets (GFA), Capitalisation and Depreciation

Petitioner's submission:

The total capital investment for the FY 2017-18 is estimated to be Rs 134.30 crore along with an estimated capitalization of Rs 153.22 crore. The Commission had approved a value of Rs. 10.00 crore for the scheme "Underground cabling system with new 66/11 KV GIS substation in SMC area" but the actual value sanctioned against the scheme by the CEA is Rs. 99.21 crore. A copy of the letter received from the CEA regarding the approval is enclosed along with the petition.

Rs 29.69 crore has been computed as depreciation for the FY 2017-18. Also, assets amounting to Rs. 153.22 crore have been envisaged to be added in the GFA.

Depreciation is charged on the basis of straight-line method on the Gross Fixed Assets in use at the beginning of the year and addition in assets during the financial year. The depreciation is based on the original cost of the Gross Fixed Assets.

Commission's analysis:

The Commission observes that the capital expenditure and the capitalization submitted by the Petitioner for the FY 2017-18 are required to maintain the reliable supply of electricity to the consumers of UT of Dadra and Nagar Haveli.

In respect of the "Underground cabling system with new 66/11 KV GIS substation in SMC area" scheme, the Commission has already ordered in the previous Tariff Order that

"*The Commission allows scheme as per CEA approval but the cost would be passed on to consumers at the time of true up.*"

Thus, the Commission has not considered the impact of revision of capital cost (and consequently capitalization) pertaining to underground cabling system with new 66/11 KV GIS substation in SMC area for the FY 2017-18 and would consider same at the time of the True-up of FY 2017-18.

The Commission accordingly approves the capital expenditure and capitalization as approved in the Business Plan Order dated 15th December 2015 as below:

Table 5.13: Capital expenditure and capitalization approved for the FY 2017-18 (Rs. crore)

Particulars	FY 2017-18	
	Projected	Approved
Capex	134.30	107.30
Capitalization	153.22	119.02

Regulation 23. Depreciation of the MYT Regulations 2014 specifies that,

"(a) Depreciation shall be calculated for each year of the control period on the original cost of the fixed assets of the corresponding year."

The Commission has approved the closing value of GFA for the FY 2016-17 (as detailed in the previous chapter) as the opening GFA for the FY 2017-18 along with capitalization of Rs. 119.02 crore as detailed above.

Regulation 23 of the MYT Regulations 2014 specifies that depreciation for the assets shall be calculated annually at the rates specified by CERC from time to time. Accordingly, the Commission has applied the following depreciation rates as specified by the Hon'ble CERC in the Tariff Regulations, 2014:

Table 5.14: Depreciation rates specified by Hon'ble CERC

Asset Category	Depreciation Rate %
Plant & Machinery	5.28%
Buildings	3.34%
Vehicles	9.50%
Furniture & Fixtures	6.33%
Computers & Others	15.00%
Land	0.00%

Addition in assets has been fully considered in Plant & Machinery and the same would be Trued-up based on actuals and the audited accounts for the FY 2017-18.

Accordingly, the Gross Fixed Assets and depreciation for the FY 2017-18 as approved by the Commission are as follows:

Table 5.15: GFA and depreciation approved by the Commission for the FY 2017-18 (Rs crore)

Particulars	FY 2017-18		
	Approved in MYT Order Dated 07/04/2016	Petitioner's Submission (ARR)	Approved by the Commission (ARR)
Opening Gross Fixed Assets	419.21	512.83	487.84
Addition During the FY	119.02	153.22	119.02
Adjustment/Retirement During the FY			
Closing Gross Fixed Assets	538.23	666.05	606.86
Average Gross Fixed Assets	478.72	589.44	547.35
Rate of Depreciation (%)	5.99%	5.04%	5.12%
Depreciation for the FY	**28.67**	**29.69**	**28.04**

Therefore, the Commission approves the depreciation of Rs 28.04 crore for the FY 2017-18.

5.14. Interest and Finance Charges

Petitioner's submission:

Assets capitalized during the FY 2017-18 have been considered based on normative debt-equity ratio of 70:30 as per the MYT Regulations, 2014. Interest rate of 14.45% has been considered for computation of interest cost for long-term loans which is similar to the prevailing SBI Prime Lending Rate. The Commission is requested to consider interest on loan amounting to Rs 20.94 crore in the FY 2017-18.

Commission's analysis:

As per Regulation 24 of MYT Regulations 2014, if the equity actually deployed is more than 30% of the capital cost, then equity in excess of 30% would be considered as normative loan. Actual loan or normative loan, if any shall be referred to as gross normative loan. The normative loan outstanding as on 1st April 2017 shall be computed by deducting the cumulative repayment as approved by the Commission till 31st March 2017. Further, the Commission has considered the actual capitalization of assets as approved in the foregoing paragraphs. The Commission for the purpose of funding of the capitalization has considered the normative debt equity ratio of 70:30. Repayment has been considered to be equal to depreciation allowed during the year. The Commission has considered the interest rate (SBI PLR) as for the FY 2017-18 i.e. at the start of the FY 2017-18 i.e. 13.85%. (https://www.sbi.co.in/portal/web/interest-rates/benchmark-prime-lending-rate historical-data). The calculation for the interest on the normative loan is given in the following Table:

Table 5.16: Normative interest on loan approved by the Commission for the FY 2017-18 (Rs crore)

Particulars	FY 2017-18		
	Approved in MYT Order Dated 07/04/2016	**Petitioner's Submission (ARR)**	**Approved by the Commission (ARR)**
Opening Normative Loan	96.90	106.10	89.20
Add: Normative Loan during the year	83.31	107.25	83.31
Less: Depreciation during the year	28.67	29.69	28.04
Closing Normative Loan	151.54	183.66	144.47
Average Normative Loan	**124.22**	**144.88**	**116.83**
Rate of Interest (SBI PLR)	14.04%	14.45%	13.85%
Interest on Normative Loan	**17.44**	**20.94**	**16.18**

Therefore, the Commission approves interest and finance charges of Rs 16.18 crore for the FY 2017-18.

5.15. Interest on Security Deposit

Petitioner's submission:

Rs 3.26 crore has been provisioned as the interest on security deposit from consumers for the FY 2017-18.

Commission's analysis:

As per Regulation 6.10 (8) of the JERC Electricity Supply Code Regulations, 2010

"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."

The Commission has considered the closing balance of security deposit of the FY 2016-17 as determined in the previous chapter as the opening balance of security deposit in the FY 2017-18. No addition in security deposit has been envisaged by the Commission. The Commission has considered the RBI Bank Rate (as on 1st April 2017 i.e. 6.50%) for calculation of the Interest rate and the computation of interest on consumer security deposit is shown in the following Table:

Table 5.17: Interest on Security Deposit approved by the Commission for the FY 2017-18 (Rs crore)

Particulars	FY 2017-18		
	Approved in MYT Order Dated 07/04/2016	**Petitioner's Submission (ARR)**	**Approved by the Commission (ARR)**
Opening Security Deposit	42.86	35.08	35.08
Add: Deposits during the Year	-	-	-
Less: Deposits refunded	-	-	-
Closing Security Deposit	42.86	35.08	35.08
Average Security Deposit	**42.86**	**35.08**	**35.08**
Bank Rate	7.75%	9.29%	6.50%
Interest on Security Deposit	**3.32**	**3.26**	**2.28**

Therefore, the Commission approves interest on consumer security deposit of Rs 2.28 crores for the FY 2017-18.

5.16. Return on Equity

Petitioner's submission:

Return on equity has been computed on the actual paid up equity. The rate of return has been taken as 16% as per the MYT Regulations, 2014.

Commission's analysis:

As per Regulation 27 of the MYT Regulations 2014, Return on Equity shall be computed on 30% of the capital base or actual equity whichever is lower. 16% post tax return on equity shall be considered irrespective of whether the distribution licensee has claimed Return on Equity in the ARR Petition. The Commission has considered the equity as per the audited accounts for the FY 2015-16 and has added the equity to the tune of 30% of assets capitalized during the FY 2016-17 and FY 2017-18. The calculation for the Return on Equity is given below:

Table 5.18: Return on Capital Base approved by the Commission for the FY 2017-18 (Rs crore)

Particulars	FY 2017-18		
	Approved in MYT Order Dated 07/04/2016	Petitioner's Submission (ARR)	Approved by the Commission (ARR)
Opening Equity	112.99	80.00	108.31
Addition in Equity on Account of New Capitalization	35.71	45.97	35.71
Closing Equity	148.69	125.97	144.01
Average Equity	130.84	102.98	126.16
Return on Equity @ 16%	**23.79**	**20.15**	**20.19**

Therefore, the Commission approves Return on Equity of Rs 20.19 crore for the FY 2017-18.

5.17. Interest on Working Capital

Petitioner's submission:

Interest on Working Capital has been claimed in accordance with Regulation 29 of the Tariff Regulations 2009. Further, the closing balance of the security deposit has been deducted from the total normative Working Capital requirement for computing the Working Capital requirement as per the methodology followed by the Commission in its previous Tariff Order. The interest on Working Capital has been computed on normative basis as per the MYT Regulations, 2014 for the FY 2017-18.

The working capital requirement for the FY 2017-18 has been computed considering the following parameters:

- Receivables of two months of billing
- Less power purchase cost of one month
- Less consumer security deposit but excluding Bank Guarantee/Fixed Deposit
- Inventory for two months based on annual requirement for the previous year

A rate of interest of 14.45% has been considered on the working capital requirement, being the SBI Prime Lending Rate as on 1st April of the year. This is in line with the MYT Regulations, 2014 which states that *"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."*

Commission's analysis:

As per Regulation 25 of the MYT Regulations 2014, Working capital shall consist of

- Receivables of two months of billing
- Less power purchase cost of one month
- Less consumer security deposit but excluding Bank Guarantee/Fixed Deposit
- Inventory for two months based on annual requirement for previous year

The Interest rate on working capital has been considered as 9.10% (SBI base rate as on 01st April 2017) as per the Regulations i.e. this is the base rate at the start of the relevant FY(https://www.sbi.co.in/portal/web/interest-rates/base-rate-historical-data)because no further rate has been announced.

The calculation for the interest on the Working Capital is given below:

Table 5.19: Interest on Working Capital approved by the Commission for the FY 2017-18 (Rs crore)

Particulars	FY 2017-18		
	Approved in MYT Order Dated 07/04/2016	**Petitioner's Submission (ARR)**	**Approved by the Commission (ARR)**
Receivables of 2 Months Billing	454.64	298.65	293.67
Power Purchase Cost 1 Month	209.01	186.58	172.33
Consumer Security Deposit Excl. BG/FDR	42.86	35.08	35.08
Inventory Based on Annual Requirement for Previous FY for 2 months	0.28	0.42	0.42
Total Working after deduction of Security Deposit	**203.05**	**77.41**	**86.67**
SBI Base Rate (%)	9.30%	14.44%	9.10%
Interest on Working Capital	**18.88**	**11.18**	**7.89**

Therefore, the Commission approves interest on Working Capital of Rs 7.89 crore for the FY 2017-18.

5.18. Income Tax

Petitioner's submission:

Rs 23.43 crore has been claimed as Income Tax for the FY 2017-18.

Commission's analysis:

As specified in Regulation 28 of MYT Regulations, 2014, income tax

"(a) Income Tax, if any, on the Licenced 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 Licenced 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.

(c) ***Tax on income, if any, liable to be paid shall be limited to tax on return on the equity component of capital employed****. However any tax liability on incentives due to improved performance shall not be considered.”*

In the foregoing paragraphs, the Commission has approved Return on Equity of Rs. 20.19 crore. In line with the provisions specified above, the Commission finds it appropriate to limit the income tax corresponding to Return on Equity only. Considering the tax rate of 33.99%, the Commission approves the income tax for the FY 2017-18 as shown in following Table:

Table 5.20: Income Tax approved by the Commission for the FY 2017-18 (Rs crore)

Particulars	FY 2017-18		
	Approved in MYT Order Dated 07/04/2016	Petitioner's Submission (APR)	Approved by the Commission (APR)
Return on Capital base	23.79	23.43	20.19
Rate of Income Tax (%)	33.99%		33.99%
Gross Up Return on Capital base	36.04		30.58
Income Tax	**12.25**	**23.43**	**10.39**

Therefore, the Commission approves Income Tax of Rs 10.39 crore for the FY 2017-18.

5.19. Provision for Bad and Doubtful Debts

Petitioner’s submission:

0.10% of the receivables has been claimed as provision for bad and doubtful debts for the FY 2017-18.

Commission’s analysis:

As per Regulation 32 of the MYT Regulations, 2014

“Bad and Doubtful Debts shall be limited to 1% of receivables in the true up, subject to the condition that amount of bad and doubtful debts have actually been written off in the licensee books of accounts.”

The above-mentioned provision allows bad and doubtful debts up to 1% of receivables in the revenue requirement on the basis of audited accounts only. **As the claim for the FY 2017-18 is not actual and is based on projections, no amount is considered for provision for bad and doubtful debts for the FY 2017-18.**

5.20. Non-Tariff Income

Petitioner's submission:

For estimating the non-tariff income for the FY 2017-18, an increase of 5% has been considered over the actual non-tariff income of the FY 2016-17, apart from the interest on fixed deposits and others.

Commission's analysis:

The Commission has escalated the Non–tariff income approved in the Review of the ARR for the FY 2017-17 by 5% to arrive at the Non-tariff income for the FY 2017-18 as shown below:

Table 5.21: Non-Tariff Income approved by the Commission for the FY 2017-18 (Rs crore)

Particulars	FY 2016-17		
	Approved in MYT Order Dated 07/04/2016	Petitioner's Submission (ARR)	Approved by the Commission (ARR)
Delayed Payment Charges	5.50	12.01	12.01
Reactive Charges Receivables	0.61	0.21	0.21
Capacitor Charges	0.06	0.04	0.04
Interest on FD and Others	38.43	48.79	48.79
Meter Testing Charges	0.05	0.06	0.06
Other Charges (Indirect)	0.55	0.84	0.84
Reconnection Charges	0.02	0.01	0.01
Registration Fees	0.30	0.29	0.29
Service Connection Charges	0.30	0.22	0.22
Supervision Charges	1.48	1.73	1.73
Tender Fees	0.02	0.02	0.02
Penalty Charges	0.04	0.03	0.03
STOA Application Receivables	0.69	15.18	15.18
Recovery of Doubtful Debts	0.00	2.85	2.85
Gross Total	**48.05**	**82.27**	**82.27**

Therefore, the Commission approves the Non-Tariff Income of Rs 82.27 crore for the FY 2017-18.

5.21. Revenue from Sale of Surplus Power/ Unscheduled Interchange (UI)

Petitioner's submission:

Rs 0.15 crore has been projected as revenue from sale of surplus power for the FY 2017-18.

Commission's analysis:

The Commission, as discussed earlier, has applied merit order dispatch principles in estimating the power procurement requirement of the utility and has not estimated any surplus power. **Accordingly, the Commission has not considered any revenue on this account for the FY 2017-18.**

5.22. Aggregate Revenue Requirement (ARR)

Petitioner's submission:

Net revenue requirement of Rs. 2,294.56 crore (total revenue requirement less non-tariff income less income from sale of surplus power) has been submitted for the FY 2017-18.

Commission's analysis:

The Commission on the basis of the detailed analysis of the cost parameters of the ARR has considered and approved the revenue requirement for the FY 2017-18 as given in the following Table:

Table 5.22: Net ARR approved by the Commission for the FY 2017-18 (Rs crore)

Particulars	FY 2017-18		
	Approved in MYT Order Dated 07/04/2016	**Petitioner's Submission (ARR)**	**Approved by the Commission (ARR)**
Cost of power purchase for full year	2,508.11	2,238.99	2,067.96
Provision for RPO Compliance	-	-	34.47
Employee costs	11.40	11.29	10.84
Administration and General Expenses	5.36	6.89	5.10
Repair and Maintenance Expenses	7.65	9.36	8.71
Depreciation	28.67	29.69	28.04
Interest and Finance charges	17.44	20.94	16.18
Interest on Working Capital	18.88	11.18	7.89
Interest on Security Deposit	3.32	3.26	2.28
Return on NFA /Equity	23.79	20.15	20.19
Provision for Bad Debt	-	1.79	-
Income Tax	12.25	23.43	10.39
Incentive on achievement of norm of T&D loss	-	-	-
Total Revenue Requirement	**2,636.87**	**2,376.98**	**2,212.04**
Less: Non-Tariff Income	48.05	82.27	82.27
Less: Revenue from Surplus Power Sale/UI	-	0.15	-
Net Revenue Requirement	**2,588.82**	**2,294.56**	**2,129.77**

Therefore, the Commission approves the net ARR of Rs 2,129.77 crore for the FY 2017-18.

5.23. Revenue at existing Retail Tariff

Petitioner's submission:

Revenue from existing retail tariff has been estimated as Rs 1791.89 crore for the FY 2017-18.

Commission's analysis:

The Commission has estimated open access income based on open access charges i.e. wheeling charge, cross-subsidy surcharge and additional surcharge (Rs/kWh) for the applicable category in the Chapter 7 of this Order. The Commission, based on approved sales, number of consumers and connected load (as discussed in the foregoing sections of the Chapter) and existing Retail Tariff for the FY 2017-18 has calculated the revenue as follows:

Table 5.23: Computation of revenue from retail sale of power for the FY 2017-18 at existing tariff (Rs crore)

Particulars	Demand Charges (Rs. crore)	Energy Charge (Rs. crore)	Total Billed Revenue (Rs. crore)
Domestic	**0.17**	**27.72**	**27.90**
0-50 units		*0.02*	*0.02*
51-200 units		*2.82*	*2.82*
201 - 400 units		*2.85*	*2.85*
401 and above		*22.04*	*22.04*
Low Income Group (LIG)	*0.17*		*0.17*
Commercial	**0.00**	**10.28**	**10.28**
1- 100 units		*3.46*	*3.46*
101 and above units		*6.82*	*6.82*
Agriculture	**0.00**	**0.46**	**0.46**
Up to 10 HP		*0.28*	*0.28*
Above 10 HP		*0.18*	*0.18*
LTP Industry	**0.04**	**80.81**	**80.85**
Up to 20 HP		*79.89*	*79.89*
Above 20 HP	*0.04*	*0.91*	*0.95*
Public Lighting		**2.22**	**2.22**
Public Water Works	**0.07**	**1.64**	**1.72**
HT	**346.17**	**1290.97**	**1637.14**
HT-A - I (Up to 66 kV)	*277.65*	*915.71*	*1193.36*
HT-A - II (Above 66 kV)	*47.67*	*270.67*	*318.35*
HT Ferro	*20.85*	*104.59*	*125.44*
Temporary		**1.43**	**1.43**
Total	**346.46**	**1415.53**	**1761.99**

Table 5.24: Revenue from Retail Sale of power at existing tariff approved by the Commission for the FY 2017-18 (Rs crore)

Particulars	FY 2017-18		
	Approved in MYT Order Dated 07/04/2016	Petitioner's Submission (ARR)	Approved by the Commission (ARR)
Domestic	**26.03**	**28.77**	**27.90**
0-50 units	*2.77*	*0.02*	*0.02*
51-200 units	*7.29*	*2.86*	*2.82*
201 - 400 units	*8.91*	*2.89*	*2.85*
401 and above	*6.89*	*22.99*	*22.04*
Low Income Group (LIG)	*0.17*	*0.01*	*0.17*
Commercial	**11.88**	**10.82**	**10.28**
1- 100 units	*3.71*	*3.64*	*3.46*
101 and above units	*8.17*	*7.18*	*6.82*
Agriculture	**0.49**	**0.42**	**0.46**
Up to 10 HP	*0.30*	*0.26*	*0.28*
Above 10 HP	*0.19*	*0.16*	*0.18*
LTP Industry	**86.32**	**80.53**	**80.85**
Up to 20 HP	*86.32*	*79.69*	*79.89*
Above 20 HP		*0.84*	*0.95*
Public Lighting	**5.00**	**1.90**	**2.22**
Public Water Works	**1.49**	**1.54**	**1.72**
HT	**2388.35**	**1667.26**	**1637.14**
HT-A - I (Up to 66 kV)	*1756.94*	*1314.26*	*1193.36*
HT-A - II (Above 66 kV)	*441.80*	*228.21*	*318.35*
HT Ferro	*189.61*	*124.78*	*125.44*
Temporary	**0.00**	**0.65**	**1.43**
Total	**2519.56**	**1791.89**	**1761.99**

Therefore, the Commission approves revenue from existing Retail Tariff of Rs 1761.99 crore for the FY 2017-18.

5.24. Revenue from Open Access consumers

Petitioner's submission:

A revenue from existing open access charges has been estimated as Rs 72.41 crore from open access charges (wheeling and cross subsidy) and Rs 277.91 crore from the Additional Surcharge for the FY 2017-17.

Commission's analysis:

As detailed in Section 5.5, the Commission has approved the open access sales of 2129.68 MU for the FY 2017-18. Further, the Commission has approved open access charges for the FY 2017-18 as Rs 0.19 per unit (wheeling charges) and Rs. 0.00 per unit (cross subsidy surcharge) as detailed in Chapter 8 of this Order.

The income from the open access charges (wheeling and CSS) for the FY 2017-18 is shown in the Table below:

Table 5.25: Income from Open Access Charges (Wheeling and CSS) approved by the Commission for the FY 2017-18 (Rs crore)

Particulars	Open Access Sales (MU)	Open Access Charges (Rs/kWh)	Total Charges (Rs crore)
Wheeling Charges	2129.68	0.19	40.46
Cross Subsidy Surcharge	2129.68	0.00	0.00
Total Income from Wheeling and CSS			**40.46**

Further, the Commission has also approved Additional Surcharges applicable for different slabs of HT Consumers for the FY 2017-18 as detailed in Chapter 8 of this Order**.**

The income from the Additional Surcharge for the FY 2017-18 is shown in the Table below:

Table 5.26: Income from Open Access Charges (Additional Surcharge) approved by the Commission for the FY 2017-18 (Rs crore)

Particulars	Open Access Sales (MU)	Open Access Charges (Rs/kWh)	Total Charges (Rs crore)
11kV - 1MW and above	15.12	0.66	0.99
66 kV	1337.41	0.63	83.78
220 kV	777.15	0.54	41.78
Total	**2129.68**		**126.55**

The Commission approves the net revenue from wheeling charges as Rs 40.46 crore and net revenue of Rs 126.55 crore from additional surcharge for the FY 2017-18.

5.25. Revenue Gap/ (Surplus)

Petitioner's submission:

There is a net gap of Rs 19.14 crore for the FY 2017-18 after considering the recovery of Rs. 277.91 crore through the levy of additional surcharge to the open access consumers.

Commission's analysis:

The Commission has analyzed and approved the Revenue Gap/(Surplus) as follows:

Table 5.27: Revenue Gap/(Surplus) at existing Tariff approved by the Commission for the FY 2017-18 (Rs crore)

Particulars	FY 2017-18		
	Approved in MYT Order Dated 07/04/2016	**Petitioner's Submission (ARR**	**Approved by the Commission (ARR)**
Net Revenue Requirement	**2,588.82**	**2,294.56**	**2,129.77**
Revenue from Retail Sales at Existing Tariff	2,519.56	1,791.89	1,761.99
Revenue from Open Access			
Cross-Subsidy Surcharge and wheeling charge	14.68	72.41	40.46
Additional Surcharge		277.91	126.55
Net Gap / (Surplus)	**54.57**	**152.35**	**200.77**
Recovery on account of PPC variations/(Refund of Excess)			
Gap after adjusting PPC variations	**54.57**	**152.35**	**200.77**
Cumulative Gap/(Surplus) for the previous year as on 31st March 2017	(489.28)	(133.21)	(500.79)
Holding Cost	(45.50)		(45.57)
Total Gap/ (Surplus)	**(480.21)**	**(5.36)**	**(345.60)**

As detailed in the previous chapter, the Commission notes that while it had approved the closing surplus of Rs 310.83 crores for True-up of the FY 2014-15, the Petitioner had considered the closing surplus of Rs 115.90 crore only. Further, the Petitioner has not considered any holding cost for the surplus of the FY 2014-15. The impact of this deviation has been carried over to the FY 2017-18 also.

However, for the FY 2017-18, the Commission approves the cumulative surplus of Rs 345.60 crore (Rs. 200.77 crore as standalone gap for the FY 2017-18, Rs 500.79 crore as cumulative surplus for previous year and Rs. 45.57 crore as the holding cost of cumulative surplus). The treatment of this surplus is dealt in Chapter 6 "Tariff Principles and Design".

Chapter 6. Tariff Principles and Design

6.1. Preamble

The Commission in determining the ARR and Retail supply tariff for the FY 2017-18, has been guided by the provisions of the Electricity Act, 2003, the Tariff Policy, Regulations on Terms and Conditions of Tariff issued by the Central Electricity Regulatory Commission (CERC), and the MYT Regulations, 2014 notified by JERC under Section 64 of the Act which lay down the broad principles and guide the determination of retail Tariff.

6.2. Principles of Tariff Design

As per Regulation 36 of MYT Regulations, 2014, "Cross Subsidy, Allocation of Cost to Serve and Tariff Design"-

"a. The Commission shall gradually move towards reduction of cross subsidy in accordance with Electricity Act, Tariff Policy and such other guidelines of the government as applicable.

b. The Distribution Licensee shall compute the consumer category-wise cost of supply as per the methodology elaborated below.

c. Allocation of Cost: The Cost to serve shall be allocated to the consumer categories in the following manner:

Step 1: Functional Demarcation of Cost – Total cost shall be divided on the basis of functions performed such as power purchase, distribution etc.

Step 2: Classification of Cost –Each of the functionalized costs shall be further classified, based on its intrinsic nature into Demand related cost, Energy related cost and Customer related cost. Demand related costs shall generally be of fixed nature, related to capacity creation and shall include interest on capital borrowing, depreciation etc. Energy cost shall be related to quantum of electricity consumption of consumer, such as fuel cost, interest on working capital, etc. Consumer related cost shall include operating expenses associated with meter reading, billing and accounting.

Step 3: Allocation of Cost

5) Allocation of Demand Costs: Demand costs of all three functions shall be allocated among consumer categories on the basis of average coincident peak demand of the tariff categories (average of past 12 months). To facilitate determination of average coincident peak demand for the various tariff categories, load research shall be made an integral part of the operations of the DISCOMs and systematic load research exercises shall be initiated.

2) Allocation of Energy Costs: Energy related costs of Distribution functions shall be allocated to consumer categories on the basis of ratio of electricity consumption of each consumer category to the total electricity consumption under the purview of the

Distribution Licensee. Energy related costs of Power purchase shall be allocated to various tariff categories on the basis of block approach on merit order dispatch and incremental principle, where each tariff category shall be allocated the incremental (energy related) power purchase cost on the basis of their respective share in the incremental power purchase. For the purpose of operationalizing the block approach and incremental principle, the Commission shall identify and notify a suitable year as the "base year".

3) Allocation of Customer Costs: Customer related costs shall be allocated to consumer categories on the basis of the ratio of number of consumers in each category to total number of consumers under the purview of the Distribution Licensee.

d. Summation of allocated Demand cost, Energy cost and Customer cost across functions shall be total Cost to serve for respective consumer categories. Cost to serve reduced by revenue from a consumer category shall give total subsidy for that category. Total subsidy for a consumer category reduced by Government subsidy, if any, shall be cross-subsidy for that consumer category.

e. The consumers below poverty line who consume power below a specified level, say 30 units per month, shall receive a special support through cross subsidy.

f. Cross-subsidy surcharge and additional surcharge in Open Access

1. The amount received or to be received by the licensee on account of cross-subsidy surcharge and additional surcharge, as approved by the Commission from time to time in accordance with the Regulations specified by the Commission, shall be shown separately against the consumer category that is permitted open access as per the phasing plan.

2. Cross-subsidy surcharge and additional surcharge shall be shown as revenue from the tariff from the consumer categories who have been permitted open access and such amount shall be utilized to meet the cross-subsidy requirements of subsidized categories and fixed costs of the Distribution Licensee arising out of his obligation to supply. Provided that the licensee shall provide such details in its annual filings.

g. Tariff Design

1) The Commission shall be guided by the objective that the tariff progressively reflects the efficient and prudent cost of supply of electricity.

2) After the costs have been allocated based on the method specified in clauses I and (d) above, tariffs for different consumer categories shall be designed with due regard to factors provided under section 62(3) of the Act.

3) The time of day tariff would be structured across three time slabs to denote normal, peak and off-peak periods. The time-periods would vary according to different seasons of the year i.e. summer, winter and the monsoon season. The peak tariff would be 10%-20% higher than the normal tariff and the off-peak tariff would be priced 5%-10% lower than the normal tariff.

4) Time of Day tariff may be introduced in a phased manner, wherein in phase 1 it would be for HT Consumers, in phase 2 – for LT consumers consuming more than 25 KW and in phase 3 for LT consumers consuming more than 10 KW."

In view of the above, the tariff needs to be designed in such a manner that cross subsidy among different categories of consumers is progressively brought within ±20% of the average cost of supply, and that even for BPL category consumers, tariff rates are close to 50% of the average cost of supply. The Commission has taken a considerate view in this regard balancing the interest of the utility and the consumers.

Accordingly, the Commission has designed the tariff for different categories of consumers as brought out in the subsequent sections.

6.3. Tariff Proposal

Petitioner's submission:

The Petitioner has proposed increase in demand charges in HT category from Rs. 275/kVA/month to Rs. 295/kVA/month and increase of energy charges of HT (A)-II from Rs 3.30 per unit to Rs 3.40 per unit. The Petitioner has also proposed to increase the charges of Low income group households (LIGH) from Rs. 10/connection/month to Rs. 20/connection /month. Accordingly, the Petitioner has estimated an additional recovery of Rs 24.30 crore from the proposed Tariff hike.

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

Table 6.1: Existing and Proposed Tariff for the FY 2017-18 proposed by the Petitioner

Category/Consumption Slab	Existing FY 2016-17		Proposed FY 2017-18	
	Energy Charges (Rs/Kwh)	Fixed Charges	Energy Charges (Rs/Kwh)	Fixed Charges
LT-D/Domestic				
1st 50 Units	1.20		1.20	
51 to 200 Units	1.80		1.80	
201 to 400 Units	2.20		2.20	
Beyond 401 Units	2.55		2.55	
LIGH		Rs. 10/Conn/month		Rs. 20/Conn/month
LT-C/Commercial				
1st 100 Units	2.55		2.55	
Beyond 100 Units	3.35		3.35	
LT- Ag/ Agriculture				
Upto 10 HP per unit	0.70		0.70	
Beyond 10 HP per unit	1.00		1.00	
LTP Industrial				
For the category	3.45	Rs. 25/HP/month	3.45	Rs. 25/HP/month
LT-PL/Public Lighting				
Public Lighting	3.00		3.00	
LT Public Water Works				

Category/Consumption Slab	Existing FY 2016-17		Proposed FY 2017-18	
	Energy Charges (Rs/Kwh)	Fixed Charges	Energy Charges (Rs/Kwh)	Fixed Charges
For the category	3.70	Rs. 25/HP/month	3.70	Rs. 25/HP/month
HT				
HTC General Industrial /Motive Power 11 KV or 66 KV having CMD above 100 KVA				
Upto 66 kV - HT (A) I	3.40	Rs. 275/kVA/month	3.40	Rs. 295/kVA/month
above 66 kV - HT (A) II	3.30	Rs. 275/kVA/month	3.40	Rs. 295/kVA/month
HT Industrial (Ferro Metallurgical/Steel Melting /Steel Rolling Power Intensive)				
For all units	3.40	Rs. 275/kVA/month	3.40	Rs. 295/kVA/month
Hoardings/Advertisements				
For all units	7.00	Rs. 100/kVA/month	7.00	Rs. 100/kVA/month

It is proposed to keep only a single category for HT(A) General for supply at 11 kV/66 kV/220 kV

Commission's analysis:

The Commission has determined the retail tariff for the FY 2017-18 in view of the guiding principles as stated in the Electricity Act, 2003 and the Tariff Policy, 2016, and the suggestions/objections of the stakeholders in this regard and the Petitioner's submission as discussed in the previous Chapters.

Further, while finalizing the Tariff Design for the FY 2017-18, the Commission has taken into consideration the Tariff Policy, 2016 and the relevant directions given by the Hon'ble APTEL in the judgment in O.P. no. 1 of 2011 as mentioned below:

The relevant abstract from the Tariff Policy, 2016 is as under:

"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."

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.

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

"1) ....

2) ....

3) ....

4) In determination of ARR/tariff, the revenue gaps ought not to be left and Regulatory Asset should not be created as a matter of course except where it is justifiable, in accordance with the Tariff Policy and the Regulations. The recovery of the Regulatory Asset should be time bound and within a period not exceeding seven 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."

While determining the Tariff for the FY 2017-18, the Commission understands that there are certain areas of concern arising from the submissions of the stakeholders as well as the detailed analysis undertaken in the previous chapters, which are required to be addressed in the larger interest of the consumers.

The key concern area is that with the increase in quantum of short term Open Access being resorted to by the HT Consumers (1 MW and above), the Fuel and Power Purchase Cost Adjustment (FPPCA) charges are increasing. Since FPPCA charges are to be paid by the retail consumers of the licensee, these consumers are unfairly being loaded with an incremental cost on account of increasing Open Access.

The Commission observed that in the present tariff design, there is a huge gap in the fixed cost incurred by the Petitioner (towards fixed of the generators, PGCIL charges and other fixed operational costs like O&M expenses, interest and finance charges, RoE etc which are fixed in nature) and the corresponding recovery of the fixed cost from the consumers through the approved fixed/demand charges.

The total fixed cost liability of the Petitioner for the FY 2017-18 is as follows:

Table 6.2: Total Fixed Cost liability of the Petitioner for the FY 2017-18

Computation of Fixed Cost (Rs crore)	
Fixed Cost of Power Purchase Stations	1090.53
PGCIL Charges	133.66
Other Fixed Cost	109.62
Less NTI	82.27
Total Fixed Cost	**1,251.54**

However, as seen from Table 5.23 of the previous Chapter, the recovery from existing demand charges is Rs. 346.46 crore only. Thus, in the existing Tariff Structure the Petitioner is able to recover only 27.68% of the fixed cost from the approved demand charges. This means that the remaining fixed cost is effectively recovered through the energy charges only. Since the open access consumers do not pay the energy charges to the Petitioner, this results in under recovery of the fixed charges, which in turn should have ideally been completely recovered through open access charges. However, the open access charges (including additional surcharge) presently determined are not adequate enough to recover the fixed cost completely and the unrecovered fixed cost in turn reflects in the FPPCA.

The Commission observes the licensee has a cumulative surplus of Rs 500.79 crore, even though on a standalone basis for the FY 2017-18, it has a deficit of Rs. 200.77 crore. With a view to accord equitable benefit of this surplus to all the consumers in a uniform manner, the Tariff for the FY 2017-18 should not be increased. However, the concern of under-recovery of the fixed charges needs to be addressed.

Therefore the Commission decides as under:

- **No change in the tariff of the LT categories namely Domestic, Low Income Group Households, Commercial, Agriculture, Industrial, Public Lighting and Public Water Works.**
- **The structure of the tariff for the HT Consumers needs to be altered by increasing the demand charges with a corresponding reduction in the energy charges so that there is no additional payout by the consumers from the existing level.**

Accordingly, the Commission is revisiting the entire Tariff Design of the HT Consumers so as to ensure complete recovery of the fixed charges payable by the licensee through retail tariff as well as open access charges, by gradually increasing the recovery of the fixed costs through the demand charges, over the next few years.

In view of the above, the Commission has

A. Revised the description of HT consumer categories.

B. Rationalized the corresponding demand and energy charges of HT consumer categories.

A. <u>Change in description of HT consumer category</u>.

The Commission notes that

1) The Petitioner is now power surplus with almost a flat load curve.
2) The share of HT Ferro is only 5.44% of the total industrial load and it contributes only 8.05% of the total HT sales.

Since the present tariff (both demand and energy charges) of HT Industrial (Ferro Metallurgical / Steel Melting / Steel Rerolling Power Intensive) is the same as the HT A-I (General Industrial / Motive Power 11 KV or 66 KV having CMD above

100KVA) in the existing tariff structure, the Commission finds it appropriate to merge HT Ferro with HT general category.

Also, as per Section 62 (3) of the Electricity Act 2003

*"The Appropriate Commission shall not, while determining the tariff under this Act, show undue preference to any consumer of electricity but may differentiate according to the consumer's load factor, power factor, **voltage**, total consumption of electricity during any specified period or the time at which the supply is required or the geographical position of any area, the nature of supply and the purpose for which the supply is required"*

Since the pattern of consumption in the UT of Dadra and Nagar Haveli is primarily industrial, the Commission finds its appropriate to differentiate between the different HT consumers on the basis of voltage levels. In the existing Tariff structure, the HT (A) category was bifurcated into to sub-categories upto 66 kV and above 66 kV. **With the merging of HT Ferro with HT general category, the Commission finds it appropriate to introduce a separate tariff for 11 kV consumers to bring in more rationality in the Tariff Structure.**

Keeping in view the increase in open access transactions, the Commission has decided to further bifurcate the proposed 11 kV slab into 2 parts (upto 1 MW and 1 MW and above).

Accordingly, the Commission now approves the tariff for HT category with introduction of new voltage wise slabs as follows:

1) ***11 kV – with connected load upto 1 MW***
2) ***11 kV – with connected load 1 MW and above***
3) ***66 kV***
4) ***220 kV***

B. <u>Review of Existing Tariffs of newly created slabs in HT category</u>.

As detailed above, the Commission has decided that there is requirement of revisiting the complete Tariff Design by gradually increasing the recovery of fixed costs through demand charges so as to ensure optimal recovery through the retail tariff.

As evident from the Table 7.7 in the following Chapter, for complete recovery of the fixed costs related only to power purchase of Rs. 1224.19 crore (Rs 1090.53 crore towards approved fixed cost of power procurement and Rs 133.66 crore towards PGCIL charges), the actual demand charges should be about Rs 775 per kVA against the present level of Rs 275 per kVA.

While the Commission observes that there is a requirement of increase of almost 200% in the existing demand charges to bridge the under-recovery in the fixed costs in the present tariff structure, the Commission is of the view that such an increase will lead to tariff shock especially to small non-continuous industries. Therefore, the Commission considers it prudent to increase demand charges in each slab of HT category in a phased manner with an ultimate objective of full recovery of demand charges over the next few years, depending on the voltage level. In order to determine the demand charges for different slabs for subsequent years, the Commission will revisit the %age recovery of the fixed cost in this revised tariff design on an annual basis.

Thus, the Commission finds it appropriate to increase the recovery through the demand charges across various slabs in the modified HT category as follows:

1) *11 kV – with connected load upto 1 MW* ***– Increased to Rs 300/KVA from existing Rs 275 per KVA***
2) *11 kV – with connected load 1 MW and above* ***– Increased to Rs 350/KVA from existing Rs 275 per KVA***
3) *66 kV –* ***Increased to Rs 400/KVA from existing Rs 275 per KVA***
4) *220 kV –* ***Increased to Rs 450/KVA from existing Rs 275 per KVA***

The Commission also notes that while there is a standalone revenue gap of Rs. 200.77 crore for the FY 2017-18 with the existing Tariff, the Petitioner has a cumulative surplus of Rs. 500.79 crore till the end of the FY 2016-17 available for adjustment in future years. The Commission has decided to utilize the surplus available to bridge the projected standalone revenue gap of the FY 2017-18. Further, the Commission finds merit in not changing the overall recovery from the present level as any further reduction in tariffs would require a corresponding tariff hike next year to bridge the gap.

Keeping in view the increase in demand charges, the Commission has decided to reduce the corresponding energy charges for various slabs so that the overall recovery from the consumers from the new tariff remains more or less at the same level as compared to the overall recovery from the old tariff.

The reduced energy charges as approved the Commission for different slabs of HT are as follows:

1) *11 kV – with connected load upto 1 MW* ***– Decreased energy charges to Rs 3.25/unit from existing Rs. 3.40 per unit***
2) *11 kV – with connected load 1 MW and above* ***– Decreased energy charges to Rs 3.15/unit from existing Rs. 3.40 per unit***
3) *66 kV –* ***Decreased energy charges to Rs 3.10/unit from existing Rs 3.40 per unit***
4) *220 kV –* ***Decreased energy charges to Rs 3.05/unit from existing Rs 3.30 per unit***

Table 6.3: Tariff Approved by the Commission for the FY 2017-18

Category/Consumption Slab	Existing FY 2016-17		Approved FY 2017-18	
	Energy Charges (Rs/Kwh)	Fixed Charges	Energy Charges (Rs/Kwh)	Fixed Charges
LT-D/Domestic				
1st 50 Units	1.20		1.20	
51 to 200 Units	1.80		1.80	
201 to 400 Units	2.20		2.20	
Beyond 401 Units	2.55		2.55	
LIGH		Rs. 10/Conn/month		Rs. 10/Conn/month
LT-C/Commercial				
1st 100 Units	2.55		2.55	
Beyond 100 Units	3.35		3.35	
LT- Ag/ Agriculture				
Upto 10 HP per unit	0.70		0.70	
Beyond 10 HP per unit	1.00		1.00	
LTP Industrial				
For the category	3.45	Rs. 25/HP/month	3.45	Rs. 25/HP/month
LT-PL/Public Lighting				
Public Lighting	3.00		3.00	
LT Public Water Works				
For the category	3.70	Rs. 25/HP/month	3.70	Rs. 25/HP/month
HT				
HT General Industrial /Motive Power 11 KV or 66 KV having CMD above 100 KVA				
Upto 66 kV - HT (A) I	3.40	Rs. 275/kVA/month	Merged and bifurcated into voltage wise slabs	
above 66 kV - HT (A) II	3.30	Rs. 275/kVA/month		
HT Industrial (Ferro Metallurgical/Steel Melting /Steel Rolling Power Intensive)				
For all units	3.40	Rs. 275/kVA/month	Merged and bifurcated into voltage wise slabs	
HT Category				
11 kV – with connected load upto 1 MW	Newly created		3.25	Rs. 300/kVA/month
11 kV – with connected load 1 MW and above			3.15	Rs. 350/kVA/month
66 kV			3.10	Rs. 400/kVA/month
220 kV			3.05	Rs. 450/kVA/month
Hoardings/Advertisements				
For all units	7.00	Rs. 100/kVA/month	7.00	Rs. 100/kVA/month

6.4. Revenue from Approved Retail Tariff for the FY 2017-18

The Commission, based on the retail tariff for the FY 2017-18 in the preceding Section and approved sales, number of consumers and connected load as discussed in the previous Chapter has calculated the revenue as follows:

Table 6.4: Revenue from Retail Tariff for the FY 2017-18 approved by the Commission (Rs crore)

Particulars	Demand Charges (Rs. crore)	Energy Charge (Rs. crore)	Total Billed Revenue (Rs. crore)	Average Billing Rate (Rs/kWh)	"K" factor for FPPCA formula for the FY 2017-18
Domestic	**0.17**	**27.72**	**27.90**	**2.37**	
0-50 units	-	*0.02*	*0.02*	*1.20*	0.29
51-200 units	-	*2.82*	*2.82*	*1.80*	0.43
201 - 400 units	-	*2.85*	*2.85*	*2.20*	0.52
401 and above	-	*22.04*	*22.04*	*2.55*	0.61
Low Income Group (LIG)	*0.17*		*0.17*	*0.68*	
Commercial	**0.00**	**10.28**	**10.28**	**3.03**	
1- 100 units	-	*3.46*	*3.46*	*2.55*	0.61
101 and above units	-	*6.82*	*6.82*	*3.35*	0.80
Agriculture	**0.00**	**0.46**	**0.46**	**0.79**	
Up to 10 HP	-	*0.28*	*0.28*	*0.70*	
Above 10 HP	-	*0.18*	*0.18*	*1.00*	
LTP Industry	**0.04**	**80.81**	**80.85**	**3.45**	
Up to 20 HP	-	*79.89*	*79.89*	*3.45*	0.82
Above 20 HP	*0.04*	*0.91*	*0.95*	*3.87*	0.92
Public Lighting	**-**	**2.22**	**2.22**	**3.00**	0.71
Public Water Works	**0.07**	**1.64**	**1.72**	**3.87**	0.92
HT	**452.98**	**1198.87**	**1651.84**	**4.32**	
11kV - Upto 1 MW	*114.95*	*254.21*	*369.16*	*4.72*	1.12
11kV - 1MW and above	*148.48*	*421.78*	*570.26*	*4.26*	1.01
66 kV	*111.53*	*272.72*	*384.25*	*4.37*	1.04
220 kV	*78.01*	*250.17*	*328.18*	*4.00*	0.95
Hoardings/ Signboards	**-**	**0.00**	**0.00**	**-**	0.00
Temporary	**-**	**1.43**	**1.43**	**3.83**	0.91
Total	**453.26**	**1323.43**	**1776.69**	**4.20**	

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

Therefore, the Commission approves revenue from approved Retail Tariff of Rs 1776.69 crore for the FY 2017-18.

The Commission has worked out the Average Cost of Supply (ACoS) as Rs. 5.04 per unit. The average revenue realization as a percentage of the ACOS for the FY 2017-18 (approved Tariff) and percentage increase/decrease of revenue in each category at the approved Tariff structure as compared to the existing Tariff structure is shown in the following Table:

Table 6.5: ABR Vs. ACOS and %age increase in realization at approved Tariff

S. No.	Particulars	ABR (Rs/kWh) (Existing Tariff)	ABR (Rs/kWh) (Approved Tariff)	%age increase	Average revenue realization as a percentage of ACOS
A	**Domestic**	**2.37**	**2.37**	**0.00%**	**47.04%**
1	*0-50 units*	*1.20*	*1.20*	*0.00%*	23.82%
2	*51-200 units*	*1.80*	*1.80*	*0.00%*	35.73%
3	*201 - 400 units*	*2.20*	*2.20*	*0.00%*	43.68%
4	*401 and above*	*2.55*	*2.55*	*0.00%*	50.62%
5	*Low Income Group (LIG)*	*0.68*	*0.68*	*0.00%*	13.60%
B	**Commercial**	**3.03**	**3.03**	**0.00%**	**60.15%**
1	*1- 100 units*	*2.55*	*2.55*	*0.00%*	50.62%
2	*101 and above units*	*3.35*	*3.35*	*0.00%*	66.51%
C	**Agriculture**	**0.79**	**0.79**	**0.00%**	**15.72%**
1	*Up to 10 HP*	*0.70*	*0.70*	*0.00%*	13.90%
2	*Above 10 HP*	*1.00*	*1.00*	*0.00%*	19.85%
D	**LTP Industry**	**3.45**	**3.45**	**0.00%**	**68.58%**
1	*Up to 20 HP*	*3.45*	*3.45*	*0.00%*	68.49%
2	*Above 20 HP*	*3.87*	*3.87*	*0.00%*	76.77%
E	**Public Lighting**	**3.00**	**3.00**	**0.00%**	**59.56%**
F	**Public Water Works**	**3.87**	**3.87**	**0.00%**	**76.78%**
G	**HT**	**4.29**	**4.32**	**0.88%**	**85.82%**
1	*11kV - Upto 1 MW*	*4.75*	*4.72*	*-0.58%*	93.70%
2	*11kV - 1MW and above*	*4.27*	*4.26*	*-0.29%*	84.55%
3	*66 kV*	*4.27*	*4.37*	*2.25%*	86.71%
4	*220 kV*	*3.88*	*4.00*	*3.09%*	79.43%

6.5. Revised Revenue Gap/ (Surplus) for the FY 2017-18

The Commission in the foregoing paragraphs has estimated Rs 1,761.99 crore as revenue from the existing retail tariff. The Commission has analyzed and approved the Revenue Gap/(Surplus) at the revised Tariff as follows:

Table 6.6: Revenue Gap/(Surplus) at Revised Tariff approved by the Commission for the FY 2017-18 (Rs crore)

Particulars	FY 2017-18		
	Approved in MYT Order Dated 07/04/2016	Petitioner's Submission (ARR	Approved by the Commission (ARR)
Net Revenue Requirement	**2,588.82**	**2,294.56**	**2,129.77**
Revenue from Retail Sales at approved Tariff	2,519.56	1,791.89	1,776.69
Revenue from Open Access			
Cross-Subsidy Surcharge and wheeling charge	14.68	72.41	40.46
Additional Surcharge		277.91	126.55
Net Gap / (Surplus)	**54.57**	**152.35**	**186.07**
Cumulative Gap/(Surplus) for the previous year as on 31st March 2017	(489.28)	(133.21)	(500.79)

Particulars	FY 2017-18		
	Approved in MYT Order Dated 07/04/2016	**Petitioner's Submission (ARR**	**Approved by the Commission (ARR)**
Holding Cost	(45.50)		(45.57)
Total Gap/ (Surplus)	**(480.21)**	**19.14**	**(360.29)**

After the Commission has revised the tariff, the revenue from the revised retail tariff has marginally increased to Rs 1776.69 crore and the standalone gap for the FY 2017-18 has reduced to Rs 186.07 crore. **The Commission hereby approves revised revenue surplus of Rs. 360.29 crore due to marginal increase in the revenue from the revised tariff for the FY 2017-18.**

The Commission, in the Tariff Order dated 07th April 2016, has inadvertently incorrectly computed the cross-subsidy surcharge as Rs 0.22 per unit. It has been correctly recomputed by the Commission in the Order dated 09th May 2017 in the Petition no. 232/2017 as shown in the following Table:

Cross Subsidy Surcharge	UoM	HT & EHT Industry
T	Rs. per kWh	4.16
C	Rs. per kWh	3.82
D	Rs. per kWh	0.12
L	%	2.86
R	Rs. per kWh	0
Surcharge	**Rs. per kWh**	**0.11**

Therefore, the Commission orders the refund of Rs. 0.11 per unit inadvertently charged from the open access consumers in the FY 2016-17 in 3 subsequent month's bills from the date of the Order in the Petition no. 223/2017 i.e. 09th May 2017. The Petitioner is directed to refund all such open access consumers and adjust the balance refund against the surplus approved in this Order.

The Commission would also like to emphasize that CERC has already issued the Tariff Orders for the Central Generating Stations (CGS) for the period FY 2014-19 earlier this year.

The arrears arising out of these Orders will be billed by the CGS to the Petitioner within the FY 2017-18 only. Also, there will be an impact of the judgement dated 01st February 2017 issued by CERC in Petition No. 8/MP/2014 "*Petition under Section 79 of the Electricity Act, 2003 read with statutory framework governing procurement of power through competitive bidding and Articles 10 of the Power Purchase Agreements dated 17.03.2010 and 21.03.2013 executed between EMCO Energy Limited and the distribution Companies in the States of Maharashtra and Dadra Nagar Haveli respectively for evolving mechanism for grant of an appropriate adjustment/ compensation to offset financial/commercial impact of Force Majeure and Change in Law events during Operation Period and Construction Period*".

While the impact of arrears arising on account of these Orders is usually recovered through FPPCA, the Commission directs the Petitioner to adjust the payments of these arrears directly against the approved surplus of Rs 360.29 crore under intimation to the Commission and not to consider the same in the FPPCA computations.

Further, in the Order dated 22nd February 2017 in the Petition No. 230/2017, the Commission had ordered the following:

"The Commission is of the view that this is an issue which requires detailed analysis of all the relevant data and supporting information/document which would involve an intensive & focused effort and would require some time.

The Commission understands that a lot of financial burden has been imposed on the Non-Open Access Industries by the increased FPPCA, specially the small industries, forcing them to even close their operations and hence hampering the growth of industrial activity in the UT of DNH. This rising trend could continue if not examined at his stage and have a further adverse effect. The Commission also understands that without going into the details of this issue, which is interlinked with other related issues, the matter cannot be addressed in its entirety. Accordingly as an interim measure, the Commission directs the Respondent to restrict the recovery of the FPPCA charges to 67 paise per unit immediately from February 2017 onwards till further Orders of the Commission. Any deficit in recovery in this regard shall be appropriately addressed in the true up exercise along with carrying cost, wherever applicable.

The Respondent is further directed to submit the detailed calculations of FPPCA along with the supporting documents well before the levy of the same for consideration of the Commission."

The Commission is in the process of reviewing the detailed calculations of FPPCA. However, in case the outcome of this exercise requires any change in the approach or the methodology of computation of FPPCA, the Commission is of the view that the impact of any such change has to be seen across all the utilities as the methodology of computation for FPPCA has to be uniform across all the territories under its jurisdiction, which will require considerable time. Accordingly, the Commission finds it appropriate to direct the Petitioner to compute and levy the FPPCA as per the existing approved methodology. In case the recovery of FPPCA works out to be less than 67 paise per unit in any case, the same should be charged as per actuals to the consumers. However, in case the recovery of FPPCA works out to be more than 67 paise per unit in any case, the Petitioner is directed to levy only 67 paise per unit to the consumers and adjust the remaining FPPCA against the approved surplus of Rs 360.29 crore under intimation to the Commission.

The Commission also directs the petitioner to pass on the benefits of negative FPPCA directly to the consumers. The Petitioner is also directed to ensure that all

the above adjustments are effective from 01st April 2017 only and the Petitioner must submit quarterly returns of FPPCA computations along with details of the recovery as well as adjustment for the review of the Commission.

6.6. Additional Proposal: Promotion of Solar Photovoltaic (SPV) pump-sets with Micro-Irrigation systems

Petitioner's submission:

The Ministry of Agriculture & Farmers Welfare, GOI has come up with the centrally sponsored scheme for "Promotion of Solar Photovoltaic (SPV) pump-sets with Micro-Irrigation systems". In this connection, the GoI has proposed to install 10 lakh pump-sets over the next five years as it is becoming increasingly difficult to meet the exponential growth in demand for electricity especially in the agriculture sector. So the scheme has been formulated with a major objective of supporting the small and marginal farmer by providing a reliable, eco-friendly, cost effective and sustainable power source for irrigation and simultaneously reducing the dependence on conventional energy sources. The scheme will promote the solar PV pump sets by replacing the existing diesel and electric pump sets for irrigation in a time bound frame work.

The scheme is to be implemented through the Department of Agriculture in association with the State Electricity Board in which the Central Government would provide the financial assistance to the extent of 30% of the bench mark cost of the solar PV pumping system, the beneficiaries are to meet 5% of the cost and remaining 65% would be met by the State Govt. through loan from Nationalized Banks and Rural Infrastructure Development Fund (RIFD) of NABARD. The amount of loan and interest thereon will be paid by the State Governments from the additional Cess fund which will be collected by the State Electricity Board by levying 10 paisa per kWh over and above the existing unit rate on the electricity consumed in Industrial and Commercial sectors.

Hence, the Commission is requested to approve the levy of 10 paise per kWh as additional cess over and above the existing unit rate on the electricity consumed in the Industrial and Commercial sectors in the UT of Dadra and Nagar Haveli.

Commission's analysis:

The Commission is of the view that the said scheme is not the part of approved Capital Expenditure plan of the Petitioner. Further, the Commission also observes that the Department of Agriculture is the actual implementing agency for this scheme. Further the amount of loan and interest thereon will be paid by the State Government. Since, the expenditure and its recovery does not pertain to the Petitioner, the Commission does not find it appropriate to approve recovery through the notified Retail Tariff/surcharges.

However, the Government may recover the same though tax/duties as the same is the prerogative of the Government only and the Commission has no control over the same.

Chapter 7. Open Access Charges for the FY 2017-18

7.1. Allocation Matrix - Allocation of ARR into Wheeling and Retail Supply of Electricity

Petitioner's submission:

The Petitioner has submitted the allocation of ARR into wheeling and retail supply of electricity as approved in the ARR of the FY 2016-17 in the Tariff Order 07th April 2016.

Commission's analysis:

The Commission feels that there has to be proper bifurcation of all expenses between the functions of the wheeling business (wire business) and the retail supply business. The Commission has considered it prudent to consider the allocation matrix for bifurcation of wheeling and retail ARR as proposed by the Petitioner and approved by the Commission in the Tariff Order for the FY 2016-17 dated 07th April 2016. The allocation between wheeling and retail supply business for the FY 2017-18 as per the ARR approved in this Order is provided in the Table below:

Table 7.1: Allocation of ARR between Wheeling and Retail Supply as approved by the Commission (Rs crore)

Sr. No.	Particulars	Allocation (%)		FY 2017-18		
		Wheeling	Supply	Wheeling	Supply	Total
1	Cost of power purchase for full year	*0%*	*100%*	-	2,067.96	2,067.96
2	Provision for RPO Compliance	*0%*	*100%*	-	34.47	34.47
3	Employee costs	*70%*	*30%*	7.59	3.25	10.84
4	Administration and General Expenses	*90%*	*10%*	4.59	0.51	5.10
5	Repair and Maintenance Expenses	*50%*	*50%*	4.36	4.36	8.71
6	Depreciation	*90%*	*10%*	25.24	2.80	28.04
7	Interest and Finance charges	*90%*	*10%*	14.56	1.62	16.18
8	Interest on Security Deposit & Interest on Working Capital	*22%*	*78%*	2.24	7.93	10.17
9	Return on NFA /Equity	*90%*	*10%*	18.17	2.02	20.19
10	Income Tax	*90%*	*10%*	9.35	1.04	10.39
11	**Total Revenue Requirement**			**86.09**	**2,125.95**	**2,212.04**
12	Less: Non-Tariff Income	*0%*	*100%*	-	82.27	82.27
13	Less: Revenue from Surplus Power Sale/UI/Exchange	*0%*	*100%*	-	-	-
14	**Net Revenue Requirement**			**86.09**	**2,043.68**	**2,129.77**

7.2. Voltage Wise Wheeling Charges

Petitioner's submission:

The voltage wise losses for the FY 2017-18 have been considered at the same level as considered by the Commission in its Tariff Order for the FY 2015-16 dated 01st April 2015 and wheeling charge of Rs 0.23/kWh has accordingly been computed for the FY 2017-18.

Commission's analysis:

The Commission opines that in the absence of the details of bifurcation of assets and expenses, it has decided to continue the determination of wheeling charges for HT/EHT and LT level. Accordingly, the total approved wheeling ARR is bifurcated between HT/EHT level and LT level based on the sales and losses. The Commission has considered the losses at the HT and EHT level at 3.22% for the FY 2017-18 as per the Energy Audit Report for the FY 2015-16.

To arrive at the network usage, the input energy at each level has been arrived as shown in the Table below.

Table 7.2: Determination of input energy for network usage percentage

Sr. No	Particulars	UoM	Amount
1	Sales at 11 kV and above	MU	3,821.10
2	Losses for HT and EHT	%	3.22%
3	Input for HT and EHT (1+2)	MU	3,948.23
4	Total Input	MU	4,430.63
5	Projection of HT/EHT network usage	%	89.11%
6	Balance Proportion of LT network usage	%	10.89%

Table 7.3: Wheeling Charges approved by the Commission for the FY 2017-18

Particulars	UoM	Formulae	Amount
Wheeling Cost	Rs crore	A	86.09
Wheeling Cost at EHT and HT	Rs crore	B=A*89.11%	76.72
Energy Input for HT and EHT	MU	C	3,948.23
Wheeling Charge at EHT and HT level	**Rs per Unit**	**D=B/C*10**	**0.19**

Accordingly, the Commission approves wheeling charge for HT/EHT category as Rs 0.19/kWh.

7.3. Cross-Subsidy Surcharge

Petitioner's submission:

The Commission is requested to approve the cross subsidy surcharge of Rs. 0.28/kWh for HT and EHT consumers in the FY 2017-18.

Commission's 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 as below:

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 Obligations;

C is the per unit weighted average cost of power purchase by the Licensee, including meeting the Renewable Purchase Obligations;

D is the aggregate of transmission, distribution and wheeling charges 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 works out to be negative.

The Commission has considered Large Industrial Supply for calculation of the cross-subsidy surcharge. The computation of the cross subsidy surcharge for EHT/HT consumers getting supply above 11 KV voltage level is given in the Table below:

Table 7.4: Calculation of "T"(Tariff payable) approved by the Commission for the FY 2017-18

Particular	Sale (Mus)	Revenue from approved tariff (Rs crore)	Average Tariff (Rs/kWh)
T by HT/EHT Categories	3,821.10	1,651.84	4.32

Table 7.5: Calculation of "C" (W. Avg Cost of Power Purchase) approved by the Commission for the FY 2017-18

Particular	Energy Procured (MU)	Average Rate (Rs./kwh)	Total Power Purchase Cost (Rs. Crore)
Power Purchase at generator end excluding open access purchase	4,641.00	2,067.96	4.46
Less: Interstate Loss	171.21		
C (W. Avg Cost of Power Purchase)	4,469.79	2,067.96	4.63

Table 7.6: Cross-Subsidy Surcharge approved by the Commission for the FY 2017-18

Cross Subsidy Surcharge	UoM	HT & EHT Industry
T (Tariff payable by the relevant category of consumers, including reflecting the Renewable Purchase Obligation)	Rs. Per kwh	4.32
C (per unit weighted average cost of power purchase by the Licensee,	Rs. Per kwh	4.63

Cross Subsidy Surcharge	UoM	HT & EHT Industry
including meeting the Renewable Purchase Obligations)		
D (aggregate of transmission, distribution and wheeling charge applicable to the relevant voltage level)	Rs. Per kwh	0.19
L (aggregate of transmission, distribution and commercial losses, expressed as a percentage applicable to the relevant voltage level)	%	3.22
R (per unit cost of carrying regulatory assets)	Rs. Per kwh	0
Surcharge	**Rs. Per kwh**	**0.00**

Accordingly, the Commission approves Nil cross subsidy surcharge for the FY 2017-18.

7.4. Additional Surcharge

Petitioner's submission:

As per the JERC (Open Access in Transmission and Distribution) Regulations, 2009, *"A consumer availing open access and receiving supply of electricity from a person other than the distribution licensee of his area of supply shall pay to the distribution licensee an additional surcharge, in addition to wheeling charges and cross-subsidy surcharge, to meet the fixed cost of such distribution licensee arising out of his obligation to supply as provided under sub-section (4) of section 42 of the Act".*

The Petitioner has proposed additional surcharge at Rs.1.27/- per unit from the open access consumers on the energy purchased by them through open access.

Commission's analysis:

The Commission in the Order dated 15th September 2016 in Petition No. 205/2016 has already specified that

"The Commission is however not inclined to accept the request of the Petitioner that recovery of fixed cost liability from consumers should be based on their energy consumption. The Commission is of the view that the fixed cost liability is related to capacity allocated or capacity contracted by the Petitioner."

The Commission has already specified the methodology for determination of additional surcharge in the said Order.

While the Commission has considered allocating the fixed cost liability of the Distribution Licensee to different categories of consumers based on their contracted or connected load in the Order dated 15th September 2016, the Commission now is of the view that the optimum allocation for the recovery of the fixed cost liability of power purchase is on the basis of share of actual recovery of demand charges.

As seen from Table 6.3, the total recovery of demand charges from HT consumers is Rs.

452.98 crore against Rs. 453.26 crore recovered from all consumers. As HT consumers are responsible for the recovery of 99.94% of the total demand charges, the Commission finds it appropriate to consider this ratio in the recovery of the demand charges for computation of the additional surcharge.

The Commission has also decided to consider the actual load factor for the open access consumers which works out differently to different slabs on the basis of the actual open access data furnished by the Petitioner for the FY 2016-17 (upto December 2016).

Accordingly, the additional surcharge payable by HT consumers is shown below:

Table 7.7: Additional surcharge approved for the FY 2017-18

Sr. No.	Description	Formulae	Unit	Value
A	Approved Fixed Cost for Power Procurement		Rs. crore	1,090.53
B	Approved PGCIL related charges		Rs. crore	133.66
C	**Total Fixed Cost liability**	**A + A1+B**	**Rs. crore**	**1,224.19**
D	% Share of Recovery of Demand Charges		%	99.94%
E	Contracted Load of HT/EHT category		MVA	1,316.49
F	**Allocated fixed cost liability to HT/EHT Cons**	**C x D**	**Rs. crore**	**1,223.41**
G	Fixed cost liability for HT/EHT cons	Fx10000000/ Ex1000	Rs./kVA	9,292.98
11kV - 1MW and above				
H1	Retail Tariff- Demand Charge		Rs./kVA	4,200.00
I1	Short Recovery of Fixed Cost liability	G-H1	Rs./kVA	5,092.98
J1	Load Factor		%	95.63%
K1	Energy usage for 1 kVA load in year @ 92.5% PF	1 kVA x 0.925 x 8760 hrs. X J1	kWh	7,749.30
L1	**Short Recovery of Fixed Cost liability**	**I1/K1**	**Rs./kWh**	**0.66**
66 kV				
H2	Retail Tariff- Demand Charge		Rs./kVA	4,800.00
I2	Short Recovery of Fixed Cost liability	G-H2	Rs./kVA	4,492.98
J2	Load Factor		%	88.51%
K2	Energy usage for 1 kVA load in year @ 92.5% PF	1 kVA x 0.925 x 8760 hrs. X J2	kWh	7,172.36
L2	**Short Recovery of Fixed Cost liability**	**I2/K2**	**Rs./kWh**	**0.63**
220 kV				
H3	Retail Tariff- Demand Charge		Rs./kVA	5,400.00
I3	Short Recovery of Fixed Cost liability	G-H3	Rs./kVA	3,892.98
J3	Load Factor		%	89.38%
K3	Energy usage for 1 kVA load in year @ 92.5% PF	1 kVA x 0.925 x 8760 hrs. X J3	kWh	7,242.09
L3	**Short Recovery of Fixed Cost liability**	**I3/K3**	**Rs./kWh**	**0.54**

Accordingly, the Commission hereby approves additional surcharge of Rs 0.79/kWH for 11kV - Upto 1 MW, Rs 0.66/kWH for 11kV - 1MW and above, Rs 0.63/kWH for 66kV and Rs 0.54/kWH for 220kV consumers for the FY 2017-18.

Chapter 8. Tariff Schedule

8.1. Tariff Schedule

S. No.	CATEGORY	FIXED CHARGES PER CONNECTED LOAD OR PART THEREOF PER MONTH	ENERGY CHARGES (Rs./kWh)
1.	**DOMESTIC**		
i	0-50 units	-	1.20
ii	51-200 units		1.80
iii	201-400 units		2.20
iv	401 and above		2.55
v	Low Income Group (Up to 2x40 W bulbs only)	Power supply to low income group connections will be charged at Rs.10 per service connection per month. For any unauthorized increase in the load beyond 2*40 watts, penal charges at the rate of Rs.20 per month per point will be levied and the installation will be liable for disconnection.	
2.	**COMMERCIAL**		
i	1-100 units	-	2.55
ii	101 units and above		3.35
3.	**LT INDUSTRIAL**		
i	LTP Motive Power (for all units)	Up to 20 HP - NIL For loads above 20 HP - Rs.25.00/- per HP or part thereof	3.45
ii	LT Public Water Works (For all units)		3.70
Power Factor Charges Any motive power connection above 3 HP running without proper capacitors installed so as to maintain Power Factor 0.90 as per the Commission's Regulation 11/2010 shall be charged extra 2.5 % of units consumed as additional power factor charges. Payment of the power factor charge won't exempt the consumer from his responsibility to maintain the power factor. In case of abnormal power factor decrease, the department will give the consumer 15 days' time to install appropriate capacitors and maintain the standard power factor. If the consumer is not able to rectify the problem within the notice time, the connection will be liable for disconnection. DNHPDCL reserves the right to install a suitable capacitor at its own cost and recover the cost thereof as arrears of energy charges. In case the monthly average power factor is less than 0.70 lagging, the installation is liable for disconnection after due notice.			
4.	**HT/EHT**		
i	11 kV supply – with connected load upto 1 MW	Up to Contract Demand - Rs.300/kVA/month or part thereof In Excess of Contract Demand – Rs.600/kVA/month or part thereof	3.25
ii	11 kV supply – with connected load 1 MW and above	Up to Contract Demand - Rs.350/kVA/month or part thereof In Excess of Contract Demand – Rs.700/kVA/month or part thereof	3.15
iii	66 kV supply	Up to Contract Demand - Rs.400/kVA/month or part thereof In Excess of Contract Demand – Rs.800/kVA/month or part thereof	3.10

S. No.	CATEGORY	FIXED CHARGES PER CONNECTED LOAD OR PART THEREOF PER MONTH	ENERGY CHARGES (Rs./kWh)
iv	220 kV supply	Up to Contract Demand - Rs.450/kVA/month or part thereof In Excess of Contract Demand – Rs. 900/kVA/month or part thereof	3.05

1. **Penalty Charges:** Twice the applicable charges.
   a) Penalty charges will be levied on those units which are drawn beyond the contract demand. These units will be worked out on pro-rata basis co-relating the total consumption of the month with billing demand.
   b) If Industries are overdrawing power by more than 20% of the Contract Demand, their electricity connection will be disconnected immediately.
2. **Power Factor Charges**
   a) The monthly average power factor of the supply shall be maintained by the consumer not less than 0.90 (lagging). If the monthly average power factor of a consumer falls below 90% (0.9 lagging), such consumer shall pay a surcharge in addition to his normal tariff @ 1% on billed demand and energy charges for each fall of 0.01 in power factor up to 0.7 (lagging).
   b) In case the monthly average power factor of the consumer is more than 95% (0.95 lagging), a power factor incentive @ 1.00% on demand and energy charges shall be given for each increase of 0.01 in power factor above 0.95 (lagging).
   c) If the average power factor falls below 0.70 (lagging) consecutively for 3 months, the licensee reserves the right to disconnect the consumer's service connection without prejudice for the levy of the surcharge.
   d) The power factor shall be rounded off to two decimal places. For example, 0.944 shall be treated as 0.94 and 0.946 shall be treated as 0.95
3. **Billing Demand**

Billing demand will be the highest among the following:
   a) 100 kVA
   b) 85% of the Contract demand
   c) Actual Demand Established

5.	**AGRICULTURE AND POULTRY**		
i	For sanctioned load up to 10 HP	-	0.70
ii	Beyond 10 HP and up to 99 HP sanctioned load	-	1.00
6.	**PUBLIC LIGHTING**		
i	For all units	-	3.00
7.	**HOARDINGS/SIGNBOARDS**		
i	Hoarding/Signboards	Rs.100 per kVA per Month or part thereof	7.00
8.	**Temporary Supply**		
	Tariff for Temporary Connection shall be Fixed/ Demand charges (if any) plus energy charges (for relevant slab, if any) under corresponding permanent supply category plus 50% of both. For multi activity pursuit, applicable tariff for temporary connection shall be with reference to that of non-domestic category for permanent supply. The Temporary Tariff are applicable for temporary period of supply up to 1 (one) month, which can be extended for another period of supply up to a maximum period of 2 years.		

8.2. Applicability

Category	Applicability	Point of Supply/Notes
1. Domestic	This schedule shall apply to private houses, hostels, hospitals run on Non-commercial lines, Charitable, Educational and Religious Institutions for Light, Fans, Radios, Domestic Heating and other household appliances including water pumps up to 2 HP.	
2. Commercial	This schedule shall apply to Shops, Offices, Restaurants, Bus Stations, Photo Studios, Laundries, Cinema Theatres, Industrial Lighting, clubs and other Commercial installations.	This includes all categories which are not covered by other tariff categories including Domestic Category, Low Income Group, Industrial LT, HT/EHT Category (A&B), Agriculture and Poultry, Public Lighting.
3. LT Industrial	This schedule shall apply to all Low Tension Industrial Motive Power Connections including water works/pumps with sanctioned load up to 99 HP.	
4. HT 11 kV supply – with connected load upto 1 MW	This schedule shall apply to all Industrial/Motive power/ Ferro Metallurgical / Steel Melting / Steel Rerolling / Power Intensive consumers drawing through 11 kV systems having connected load upto 1 MW	
5. HT 11 kV supply – with connected load 1 MW and above	This schedule shall apply to all Industrial/Motive power/ Ferro Metallurgical / Steel Melting / Steel Rerolling / Power Intensive consumers drawing through 11 kV systems having connected load of 1 MW and above	
6. HT 66 kV supply	This schedule shall apply to all Industrial/Motive power/ Ferro Metallurgical / Steel Melting / Steel Rerolling / Power Intensive consumers drawing through 66 kV systems	
7. HT 220 kV supply	This schedule shall apply to all Industrial/Motive power/ Ferro Metallurgical / Steel Melting / Steel Rerolling / Power Intensive consumers drawing through 220 kV systems	
8. Agriculture	This schedule shall apply to Agriculture or poultry loads up to 99 HP sanctioned load will be considered in this category.	

Category	Applicability	Point of Supply/Notes
9. Public Lighting		
10. Hoardings / Signboards	This schedule shall apply to 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.	
11. Temporary Supply	The Temporary Tariff is applicable for a temporary period of supply up to 1 (one) month, which can be extended for another period of supply up to a maximum period of 2 years.	

8.3. General Conditions of HT and LT Supply

1. The tariffs are exclusive of electricity duty, taxes and other charges levied by the Government or other competent authority from time to time which are payable by the consumers in addition to the charges levied as per the tariffs.

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

3. Supply to consumers having contracted load between 100 KVA to 4000 KVA (including licensee common feeders and express feeders/dedicated feeders) shall generally be at 11 KV and for more than 4000 KVA up to 25000 KVA at 66 KV. For the consumer who requires load more than 25000 KVA, the supply voltage shall be at 220 KV level.

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

5. If connected load of a domestic category is found to be at variance with the sanctioned/contracted load as a result of replacement of appliances such as lamps,

fans, fuses, switches, low voltage domestic appliances, fittings, it shall not fall under Section 126 and Section 135 of the EA 2003.

6. If the consumer fails to pay the energy bill presented to him by the due date, the Department shall have the right to disconnect the supply after giving 15 days' notice as per the provisions of the Act and the Supply Code Regulations.

7. Fixed charges, wherever applicable, will be charged on pro-rata basis from the date of release of connection. Fixed charges, wherever applicable, will be double as and when bi-monthly billing is carried out. Similarly, slabs of energy consumption will also be considered accordingly in case of bi-monthly billing.

8. The billing in case of HT/EHT shall be on the maximum demand recorded during the month or 75% of contracted demand, whichever is higher. If in any month, the recorded maximum demand of the consumer exceeds its contracted demand, that portion of the demand in excess of the contracted demand shall be billed at double the normal rate. Similarly, energy consumption corresponding to excess demand shall also be billed at double the normal rate. The definition of the maximum demand would be in accordance with the provisions of the Supply Code Regulation. If such over-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.

9. Unless specifically stated to the contrary, the figures of energy charges relate to paisa per unit (kWh) charge for the energy consumed during the month.

10. Delayed payment surcharge shall be applicable to all categories of consumers. Delayed payment surcharge of 2% per month or part thereof shall be levied on all arrears of bills. Such surcharge shall be rounded off to the nearest multiple of one rupee. Amount less than 50 paisa shall be ignored and amount of 50 paisa or more shall be rounded off to the next rupee. In case of permanent disconnection, delayed payment surcharge shall be charged only up to the month of permanent disconnection.

11. **Advance Payment Rebate:** If payment is made in advance well before commencement of the consumption period for which the bill is prepared, a rebate @ 1% per month shall be given on the amount (excluding security deposit) which

remains with the licensee at the end of the month. Such rebate, after adjusting any amount payable to the licensee, shall be credited to the account of the consumer.

12. **Prompt Payment Rebate:** If payment is made at least 7 days in advance of the due date of payment, a rebate for prompt payment @ 0.25 % of the bill amount shall be given. Those consumers having arrears shall not be entitled for such rebate.

13. The adjustment on account of Fuel and Power Purchase Cost variation shall be calculated in accordance with the FPPCA formula separately notified by the Commission under the Regulation. Such charges shall be recovered/refunded in accordance with the terms and conditions specified in the FPPCA formula.

14. 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 the FY 2017-18.

8.4. Schedule of Miscellaneous Charges

Description	Approved Charges
Monthly Meter Rental Charges(as per provisions of Regulation 7.3 (1) of JERC (Electricity Supply Code) Regulations 2010)	
Single Phase LT meter	Rs.10 per month or part thereof
Three Phase LT meter	Rs.25 per month or part thereof
LT Meter with MD indicator	Rs.200 per month or part thereof
Tri-vector Meter	Rs.500 per month or part thereof
Note: a. The type of meters to be installed in consumer premises will be decided by the department. Generally the consumers having connected load above 50 HP will be provided with L.T.M.D meters	
Reconnection Charges(as per provisions of Regulation 9.3 (c) of JERC (Electricity Supply Code) Regulations 2010	
LT Services	
• Single Phase LT	Rs. 50/-
• Three Phase LT	Rs. 100/-
HT Services	Rs. 1000/-
Note: If the same consumer seeks reconnection within 12 months from the date of reconnection or disconnection, 50% will be added to above charges	
Testing Fee for Various Metering Equipments(as per provisions of Regulation 7.4 of JERC (Electricity Supply Code) Regulations 2010	
Single Phase	Rs. 100/-
Three Phase	Rs. 300/-
Three Phase Tri-vector Meter (0.5 Class) Industrial LT Consumer	Rs. 500/-
Three Phase Tri-vector Meter (0.5 Class) 11 kV HT Consumer	Rs. 500/-
Three Phase Tri-vector Meter (0.2 Class) 66 KV EHT Consumers	Rs. 1000/-

Description	Approved Charges
Combined CT/PT Unit for 11 KV Consumer	Rs. 500/-
66 KV CT/ PT Unit	Rs. 500/-
Three Phase CT Block	Rs. 300/-
CT Coil	Rs. 100/-
Service Connection Charges(as per provisions of Regulation 3.3 (3) of JERC (Electricity Supply Code) Regulations 2010	
Single Phase LT	Rs.250/-
Three Phase LT	Rs.1,000/-
HT (First 500 KVA)	Rs.10,000/-
HT (Beyond 500 KVA)	Rs.1,000/- per 100 KVA or part thereof
Extra Length - Single Phase	Rs.25/- per meter
Extra Length - Three Phase	Rs.50/- per meter
Extra length chargeable will be beyond the permissible 30 meters free length from existing network for new connections for all categories except agriculture. Free length in respect of new agriculture consumer is 300 meters.	
Entire Cost of setting up HT connection would be borne by the consumer and the agreement period would be two years for the category. 15% supervision charges shall be recovered by DNHPDCL.	
Fees (Non-refundable) for submission of Test Report of wiring Completion	
Single Phase Lighting / Domestic	Rs. 10/- Per Test Report
Three Phase Lighting / Domestic	Rs. 25/- Per Test Report
Single Phase Lighting / Non Domestic	Rs. 50/- Per Test Report
Three Phase Lighting / Non Domestic	Rs. 100/- Per Test Report
Three Phase LT Industries	Rs. 250/- Per Test Report
Single Phase / Three phase Agriculture / Streetlight / Public Lighting & others	Rs. 50/- Per Test Report
HT Industries upto 500 KVA	Rs. 1,000/- Per Test Report
HT Industries upto 2500 KVA	Rs. 5,000/- Per Test Report
HT Industries above 2500 KVA	Rs. 10,000/- Per Test Report

Chapter 9. Directives

Over the years, the Commission has issued various directives to the Petitioner for necessary action at its end. It has been observed that the Petitioner is not fully complying with many of the directives issued by the Commission. In order to strengthen the effective monitoring and ensure timely implementation of all the directives in true spirit, the Commission hereby directs that the Petitioner shall now compulsorily submit:

- ***The detailed action plan for compliance of all the directives <u>within 1 month of the issuance of this Order</u>.***
- ***The quarterly progress report as per the detailed action plan for all the directives issued in the subsequent sections <u>within 10 days of the end of each quarter of the calendar year</u>.***

9.1. Directives continued in this Order

While examining the compliance note and supporting documents submitted by the Petitioner in the present Petition, it is observed that some of the directives issued in the previous Tariff Orders have not been fully complied with by the Petitioner.

The Commission is of the view that substantial time has already been given to the utility for compliance with these directions. Thus, the Commission hereby directs the utility to comply with the directions mentioned below in the given timeframe, failing which the Commission shall be constrained to take appropriate action under Section 142 of the Electricity Act 2003 and various other provisions of the Act, and Regulations framed by JERC.

9.1.1. Data on the consumption and load profile of Advertisement Hoardings, Signboards, Signage etc

Originally Issued in Tariff Order dated 31st July 2012
Commission's Latest Directive in Tariff Order Dated 07th April 2016 *The Petitioner is directed to submit the details regarding the consumption and the load profile of the users of advertisement hoardings, signboards, signage etc by 30th September 2016 failing which the Commission will be constrained to take appropriate action under various provisions of Electricity Act 2003 and Regulations framed by JERC.*
Petitioner's Response in the Present Tariff Petition *There are very few such connections in the UT of Dadra and Nagar Haveli. The department is in the process of segregating the data related to the consumption and load profile of the users of advertisement, hoardings, signboards, signage etc. The same shall be submitted to the Hon'ble Commission shortly.*
Commission's Response *The Commission has noted with concern that Petitioner is yet to submit the details as sought by the Commission. The Commission now directs the Petitioner to ensure compliance of this directive*

within 2 months of issuance of this Order failing which the Commission will be constrained to take appropriate action against the Petitioner.

9.1.2. Assets verification

Originally Issued in Tariff Order dated 31st July 2012
Commission's Latest Directive in Tariff Order Dated 07th April 2016 *The Petitioner is directed to submit the present status of asset verification and the date when the verification will be completed by 30th September 2016 failing which the Commission will be constrained to take appropriate action under various provisions of Electricity Act 2003 and Regulations framed by JERC.*
Petitioner's Response in the Present Tariff Petition *The third party physical verification is being done and the report shall be submitted soon to the Hon'ble Commission.*
Commission's Response *The Commission has noted with concern that Petitioner is yet to submit the details as sought by the Commission. The Commission now directs the Petitioner to ensure compliance of this directive within 2 months of issuance of this Order failing which the Commission will be constrained to take appropriate action against the Petitioner.*

9.1.3. Enforcement Cell

Originally Issued in Tariff Order dated 31st July 2012
Commission's Latest Directive in Tariff Order Dated 07th April 2016 *The Petitioner has failed to submit the quarterly reports as envisaged by the Commission. The Petitioner is again directed to submit the quarterly reports on the cases detailed by enforcement cell and revenue recovered from FY 2015-16 to FY 2016-17 (till June) by 31st August 2016.*
Petitioner's Response in the Present Tariff Petition *The DNHPDCL has noted the directive of the Hon'ble Commission and shall comply accordingly.*
Commission's Response *The Commission has noted with concern that the Petitioner is yet to submit the details as sought by the Commission. The Commission now directs the Petitioner to ensure compliance of this directive within 2 months of issuance of this Order and submit the desired details for the FY 2015-16 and FY 2016-17, failing which the Commission will be constrained to take appropriate action against the Petitioner.*

9.1.4. Standards of Performance

Originally Issued in Tariff Order dated 31st July 2012
Commission's Latest Directive in Tariff Order Dated 07th April 2016 *Action taken on the implementation of the directive is noted. The Petitioner is directed to ensure quarterly report in accordance with SOP Regulations, 2015*
Petitioner's Response in the Present Tariff Petition *The DNHPDCL shall submit the quarterly report on SOP as directed by the Hon'ble Commission.*

Commission's Response *Action taken on the implementation of the directive is noted. The Petitioner is directed to ensure submission of quarterly reports in accordance with SOP Regulations, 2015.*

9.1.5. Capital Expenditure

Originally Issued in Tariff Order dated 31st July 2012
Commission's Latest Directive in Tariff Order Dated 07th April 2016 *The quarterly reports on capital expenditure and capitalization shall be reported quarterly..*
Petitioner's Response in the Present Tariff Petition *The DNHPDCL shall submit the quarterly report on capital expenditure as directed by the Commission.*
Commission's Response *The Commission has noted with concern that Petitioner is yet to submit the details as sought by the Commission. The Commission now directs the Petitioner to ensure compliance of this directive and submit the desired reports on quarterly basis, failing which the Commission will be constrained to take appropriate action against the Petitioner.*

9.1.6. 100% Metering

Originally Issued in Tariff Order dated 15th December 2015
Commission's Latest Directive in Tariff Order Dated 07th April 2016 *The Petitioner is directed to meter all consumers at the earliest but not later than 31st March 2017.*
Petitioner's Response in the Present Tariff Petition *All the consumers of UT shall be metered by March, 2017.*
Commission's Response *The Commission directs the Petitioner to report the compliance of this directive within 1 month of issuance of this Order.*

9.1.7. Safety Measures undertaken

Originally Issued in Tariff Order dated 15th December 2015
Commission's Latest Directive in Tariff Order Dated 07th April 2016 *Action taken is noted, but the Petitioner should submit quarterly report on departmental/ non-departmental, fatal/ non-fatal accidents which have occurred and steps taken to prevent recurrence of the same by 30th June 2016*
Petitioner's Response in the Present Tariff Petition *The DNHPDCL shall submit the quarterly report on safety measures as directed by the Hon'ble Commission.*
Commission's Response *The Commission has noted with concern that Petitioner is yet to submit the details as sought by the Commission. The Commission now directs the Petitioner to ensure compliance of this directive within 1 month of issuance of this Order and submit the desired reports on quarterly basis, failing which the Commission will be constrained to take appropriate action against the Petitioner.*

9.1.8. Implementation of Smart Grid

Originally Issued in Tariff Order dated 07th April 2016
Commission's Latest Directive in Tariff Order Dated 07th April 2016 *The Petitioner is directed to submit a detailed action plan by 30th September 2016 for roll out of smart grid in DNH within this MYT Control Period.*
Petitioner's Response in the Present Tariff Petition *The work of preparation of the project report has been given to PGCIL. The PGCIL shall submit the report by March, 2017.*
Commission's Response *The Commission notes the submission of the Petitioner and directs it to submit the monthly status report on the implementation of smart grid.*

9.1.9. Promotion of Solar Generation

Originally Issued in Tariff Order dated 07th April 2016
Commission's Latest Directive in Tariff Order Dated 07th April 2016 *The Petitioner is directed to take-up with the Government for formulation of a comprehensive policy for promotion of solar energy in its licensee area especially among the industrial consumers.*
Petitioner's Response in the Present Tariff Petition *The work of construction of 3 MW solar plant at Velugam has been given to BHEL. Further, a 10 MW plant at Juhari has been approved by CEA and shall be developed by SECI. 615 kW of rooftop solar plants have been installed in the UT of Dadra and Nagar Haveli and installation of more rooftop plants is in pipeline.*
Commission's Response *The Commission appreciates the efforts undertaken by the Petitioner and directs it to submit the quarterly progress report on installation of the solar plants.*

9.1.10. Information for determination of Voltage-wise Wheeling Charges

Originally Issued in Tariff Order dated 07th April 2016
Commission's Latest Directive in Tariff Order Dated 07th April 2016 *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.*
Petitioner's Response in the Present Tariff Petition *The details of voltage wise assets and expenses along with the allocation methodology shall be submitted to the Commission shortly.*
Commission's Response *The Commission observes that the Petitioner is yet to submit the requisite details. The Commission now directs the Petitioner to submit the desired information before 31st August 2017..*

9.2. Directives dropped in this Order

While examining the compliance note and supporting documents submitted by the Petitioner in the present Petition, it has been observed that some of the directives issued in previous Tariff Orders are no longer required.

The Commission is of the view that since these directions have been complied with satisfactorily, these directions are no longer required in the present context and are required to be dropped or replaced with new directions. No further compliance/status is required to be submitted by the Petitioner for the following directives:

9.2.1. Continuous & Non-Continuous Industries

Originally Issued in Tariff Order dated 31st July 2012
Commission's Latest Directive in Tariff Order Dated 07th April 2016 *The Petitioner is directed to submit the scheme to meet industry demand for uninterrupted supply & commercial mechanism by 30th September 2016 failing which the Commission will be constrained to take appropriate action under various provisions of Electricity Act 2003 and Regulations framed by JERC.*
Petitioner's Response in the Present Tariff Petition *At present the DNHPDCL is supplying power supply to all the consumers without any load shedding. There is no segregation between continuous and non-continuous consumers. Looking into this there is no requirement to segregate between continuous and non-continuous consumers.*
Commission's Response *The Commission observes that since the Petitioner is having surplus power at its disposal, the directive is no longer required in the present context and hence the Commission drops this directive.*

9.2.2. Renewable Purchase Obligation

Originally Issued in Tariff Order dated 31st July 2012
Commission's Latest Directive in Tariff Order Dated 07th April 2016 *The Petitioner has submitted nothing in this regard. It should be ensured that the renewable energy will be available as projected for MYT period. The Petitioner is directed to submit the compliance report of RPO up to FY 2015-16 by 30th Sept 2016.*
Petitioner's Response in the Present Tariff Petition *At the end of the FY 2015-16, the total backlog of solar RPOs was 63.30 MUs and the total backlog for the non-solar RPO was 198.39 MU. The DNHPDCL intends to clear the backlog during the MYT Control Period equally during all the three years. The following is the RPO to be met by DNHPDCL during the MYT period including the backlog:*

TOTAL RPO TO BE MET INCLUDING BACK LOG					
Sr. No.	Particulars	Unit	FY 2016-17	FY 2017-18	FY 2018-19
1	Solar RPO in Mus	MUs	117.01	175.37	257.00
2	Non-Solar RPO in Mus	MUs	255.04	325.30	419.98

Commission's Response
The Commission has noted the submission of the Petitioner. The Commission has separately considered the penalty for non-compliance of RPO in Section 3.7 of this Order. Thus, the Commission drops this directive with an advisory to ensure 100% compliance of RPO in future years so as to avoid any penalty in this regard.

9.2.3. Roadmap for reduction in cross-subsidy

Originally Issued in Tariff Order dated 31st July 2012
Commission's Latest Directive in Tariff Order Dated 07th April 2016 *The Petitioner is directed to submit the road map for reduction of cross subsidy by 30th September 2016 failing which the Commission will be constrained to take appropriate action under various provisions of Electricity Act 2003 and Regulations framed by JERC.*
Petitioner's Response in the Present Tariff Petition *Almost 95% of the sales in the UT of Dadra and Nagar Haveli are HT and EHT sales. In such a scenario it would not be feasible to reduce the cross subsidy and bring the tariff of the domestic consumers at par with the HT consumers.*
Commission's Response *The Commission accepts the submission of the Petitioner and hence drops this directive.*

9.2.4. Energy Audit Expenses

Originally Issued in Tariff Order dated 31st July 2012
Commission's Latest Directive in Tariff Order Dated 07th April 2016 *The Petitioner in its annexure to petition had submitted the energy audit report for the FY 2014-15 which is not tallying with the submission of the Petitioner in respect to sales, energy availability and losses. The Petitioner is directed to submit the revised energy audit report along with revised figures for the FY 2014-15 to validate the same by 30th September 2016.*
Petitioner's Response in the Present Tariff Petition *The revised summary of the report on Energy Audit for the FY 2014-15 is being enclosed along with this petition as* ***Annexure IV****.*
Commission's Response *The Commission has noted the submission of the Petitioner and decides to drop this directive*

9.3. New Directives issued in this Order

9.3.1. Adjustment of approved surplus

Originally Issued in Tariff Order in this Order
Commission's Latest Directive in this Order *The Commission orders the refund of Rs. 0.11 per unit inadvertently charged from open access consumers in the FY 2016-17 in 3 subsequent month's bill from the date of the Order in the Petition no. 223/2017 i.e. 09th May 2017. The Petitioner is directed to refund all such open access consumers and adjust the refund against the surplus approved in this Order.* *While the impact of arrears arising on account of Orders issued by CERC is usually recovered through FPPCA, the Commission directs the Petitioner to adjust the payments of these arrears directly against the approved surplus of Rs 360.29 crore under intimation to the Commission and not to consider same in the FPPCA computations.* *The Commission is in the process of review of detailed calculations of FPPCA. However, in case the outcome of this exercise requires any change in approach or methodology computation of FPPCA, the Commission is of the view that the impact of any such change has to be seen across all the utilities as the methodology of computation for FPPCA has to be uniform across all the territories under its jurisdiction, which will require considerable time. Accordingly, the Commission finds it appropriate to direct the Petitioner to compute and levy the FPPCA as per the existing approved methodology. In case the recovery of FPPCA works out to be less than 67 paise per unit in any case, the same should be charged as per actuals to the consumers. However, in case the recovery of FPPCA works out to be more than 67 paise per unit in any case, the Petitioner is directed to levy only 67 paise per unit to the consumers and adjust the remaining FPPCA against the approved surplus of Rs 360.29 crore under intimation to the Commission.* *The Commission also directs the petitioner to pass on the benefits of negative FPPCA directly to the consumers. The Petitioner is also directed to ensure that all the above adjustments are effective from 01st April 2017 only and the Petitioner must submit quarterly returns of FPPCA computations along with details of the recovery as well as adjustment for the review of the Commission.*

Annexure 1: Public Notices published by the Petitioner

THE FREE PRESS JOURNAL
MUMBAI | SATURDAY | MAY 6, 2017

TENDER NOTICE

Invited from qualified and reputed Builders/Developers for the Redevelopment of Sweety House Building No.3 Co-operative Housing Society Ltd., Office address - Plot No.18, Mahesh Park, Tulinj Road, Nallasopara (E), Tal. Vasai, Dist. Palghar - 401209. Tender Document to be available from our Society Office from 07/05/2017 to 31/05/2017 at 4.00 PM. to 6.00 PM. Submitting dates for tender from 01/06/2017 to 10/06/2017 at 4.00 PM. TO 6.00PM at Society Office, cost of the Tender Document Rs.1,000/- (Non

PUBLIC NOTICE

TAKE NOTICE THAT MR. SHAILESH DHAIRYAWAN AND MRS. MEGHNA DHAIRYAWAN, (the Owners) have Agreed to grant to our Clients the Tenancy Rights in respect of the under mentioned Premises (the said Premises) which is more particularly described in the Schedule hereunder written, free from all encumbrances. Any person or persons having any claim in respect of the said Premises by way of sale, exchange, mortgage, charge, gift, trust, muniments, inheritance, possession, lease, lien, maintenance, easement, devise, encumbrances or otherwise howsoever are hereby requested to make their claim known in writing along with

PUBLIC NOTICE

Share Certificate No. 31 issued by Tilak Vrundavan Co-op.Hsg. Soc.Ltd, to member Mrs Chinnubai G. Meka of tenement No. L-4/31 has been reported lost. If anybody having any claim, please write within 15 days to the Hon. Secretary, Tilak Vrundravan Co-op.Hsg. Soc. Ltd., L-14/1, Tilak Nagar, Chembur, Mumbai - 400089. Else Duplicate copy of the Share Certificate will be issued to the member.

Lost & Found

It is noted for the information that my original qualifying examination certificate of main secondary examination of the year March 2016 and Roll No. 4111071 issued by CBSE has been actually lost. Name of the candidate **ATIPHA MOHANTY** Full Address: 14/903, NRI Complex, Seawood Estate, Sector 54/56 Nerul, Navi Mumbai - 400706 **Tel.: 022-27526639**

Administration of
Dadra & Nagar Haveli, (U.T),
Electricity Department,
Transmission Division, Vidhyut Bhavan, Near Secretariat,
Silvassa.

PUBLIC NOTICE

ARR and Tariff Order for Electricity Department, Transmission Division, for FY 2017-18.

1. Tariff approved by the Commission.

1.1 Net revenue requirement for FY 2017-18 is ₹ 29.01 Crore.

1.2 Having considered the Petition No. 233/2017 of Electricity Department, Transmission Division for Determination of Aggregate Revenue Requirement (ARR) for the FY 2017-18 and Determination of Transmission Tariff for FY 2017-18, the Commission approves the Aggregate Revenue Requirement (ARR) and the Transmission Tariff for Electricity Department, Transmission Division for FY 2017-18 as below.

1.3 The breakup of the Aggregate Revenue Requirement (ARR) approved for Electricity Department, Transmission Division for FY 2017-18 is given below :

Table 1 : Approved ARR for FY 2017-18

(₹ Crore)

S. No.	Item of expense	FY2017-18 (Approved)
1	Employee Cost	1.2
2	R&M Cost	1.57
3	A&G Expenditure	0.19
4	Depreciation	12.44
5	Interest on Long-term Loans	7.56
6	Interest on Working Capital	0.43
7	Return on NFA/Equity	5.67
8	Total	29.06
9	Less : Non-Tariff Income	0.05
10	Net Revenue Requirement	29.01

1.4 The approved Transmission Tariff for the power that the transmission system can carry for the FY 2017-18 is given below:

Table 2 : Approved Transmission Tariff for FY 2017-18

Sr. No.	Particulars	UoM	FY 2017-18
1	Aggregate revenue requirement	₹ Crore	29.01
2	Transmission Capacity availability	MW	970.95
3	Long/Medium Term Transmission charges	₹ MW/Day	818.59
4	Short Term Open Access Charges	₹ MW/Day	204.65

1.5 The approved Transmission Charges shall come into force with effect from 1st April 2017 and shall remain valid till further order.

Sd/-
Executive Engineer (Trans)
Electricity Department, Transmission Division,
Dadra and Nagar Haveli
Silvassa.

No. DNH/ELE/TRANS/2016/19/129
Dated 04/05/2017.
No. IP/DNH/149/2017

Annexure 2: Public Notices published by the Commission for intimation of Public Hearing

था। बी-टेक की डिग्री लेने के बाद उसने बहुत छोटे स्तर पर सॉफ्टवेयर डिवलपमेंट का काम प्रारंभ किया था। सन 2012 से 2015 के बीच वह सिर्फ 3 से 4 लाख रुपये ही प्रति साल कमा पाया। बाद में उसने कोई बड़ा काम करने का फैसला किया और अगस्त, 2015 में Socialtrade.biz के नाम अब वो घर बैठे रोज हजारों रुपये कमा लेंगे, पर लोगों के लाइक्स के बहाने किए गए डिपॉजिट पर तिजोरी अनुभव मित्तल व उसके साथियों की भर रही थी।

इन साथियों में एक श्रीधर प्रसाद भी था। वरिष्ठ अधीक्षक अमित पाठक व उपाधीक्षक राजकुमार मिश्र द्वारा की पूछताछ में पता चला कि वह भी इस रैकेट का हिस्सा बन गया। बाद में अनुभव ने श्रीधर को अपनी कंपनी में सीईओ की पोस्ट दे दी।

Socialtrade.biz नामक पोर्टल से जुड़ने वाले लोगों को ऑफर किया गया था कि इस प्लैटफॉर्म से जुड़ने पर आपको एक यूजर आईडी व पासवर्ड दिया जाएगा। पर यह तभी दिया जाता इसलिए भी इतना बढ़ा, क्योंकि जो भी अनुभव मित्तल की Socialtrade.biz पोर्टल का मेंबर बनता था, उसे 21 दिन के अंदर दो और मेंबर बनाने पर हर लाइक पर बोनस रकम भी देने का वादा किया गया था।

Sunil.Mehrotra
@timesgroup.com

संयुक्त विद्युत विनियामक आयोग

(गोवा तथा संघ शासित क्षेत्रों के लिए)
दूसरी मंजिल, एचएसआईआईडीसी ऑफिस काम्प्लेक्स,
वाणिज्य निकुंज काम्प्लेक्स,
उद्योग विहार, फेज-V, गुड़गांव (गुरुग्राम) (हरियाणा)
दूरभाष: 0124-2342851, 2342852, फैक्स: 0124-2342853
ई मेल:secy-jerc@nic.in, वेबसाइट:www.jercuts.gov.in

सार्वजनिक सूचना

13.01.2017 को प्रकाशित सार्वजनिक सूचना के अनुसरण में संघ शासित क्षेत्र दादरा तथा नगर हवेली के हितधारकों (स्टेकहोल्डर्स) को एतद्द्वारा सूचित किया जाता है कि (1) विद्युत अधिनियम, 2003 की धारा 61, 62 तथा 64 के अधीन डिस्ट्रीब्यूशन, डीएनएच पावर डिस्ट्रीब्यूशन कॉरपोरेशन लि. डिस्ट्रीब्यूशन के लिए वित्त वर्ष 2017-18 हेतु एआरआर तथा टैरिफ प्रस्ताव की स्वीकृति के लिए याचिका तथा (2) विद्युत अधिनियम, 2003 की धारा 61, 62 तथा 64 के अधीन वित्त वर्ष 2017-18 के लिए ट्रान्समिशन, विद्युत विभाग (ट्रांसमिशन डिवीजन), संघशासित क्षेत्र दादरा तथा नगर हवेली के एआरआर तथा टैरिफ प्रस्ताव की स्वीकृति हेतु याचिका की सुनवाई 08.02.2017 को निर्धारित है। दोनों याचिकाएं क्रमशः याचिका क्र. 226/2017 तथा 223/2017 के रूप में प्रविष्ट की गई हैं तथा आयोग की वेबसाइट **www.jercuts.gov.in** पर उपलब्ध है।

आयोग द्वारा उपरोक्त याचिकाओं पर सार्वजनिक सुनवाई का आयोजन अधोलिखित कार्यक्रमानुसार किया जाएगा:

तिथि/वार	समय	स्थान
08 फरवरी, 201 (बुधवार)	पूर्वा 10.00 बजे से	प्रेजीडेन्ट हॉल, यात्री निवास, सिलवासा

हस्ता/-
(कीर्ति तिवारी)
सचिव

डीएवीपी 34124/11/0019/1617

एनर्जी एफिशिएंसी सर्विसेज लिमिटेड

EESL

आवेदन हेतु आमंत्रण

ईईएसएल, भारत सरकार, विद्युत मंत्रालय के चार सार्वजनिक क्षेत्र के उपक्रम की संयुक्त उद्यम कम्पनी, सलाहकार/सेक्टर एक्सपर्ट (अल्प कालीन/पूर्ण कालीन) पदों पर ईईएसएल में भविष्य की आवश्यकताओं हेतु निश्चित अवधि आधार पर आवेदन आमंत्रित करता है। यह एक रोलिंग विज्ञापन है एवं अनुबंध भविष्य की आवश्यकताओं के अनुसार होगा।

योग्यता विवरण, ऑनलाइन आवेदन इत्यादि के लिए कृपया वेबसाइट **www.eeslindia.org** पर लॉगऑन करें।

एक ऊर्जा दक्ष भारत का निर्माण......

भारतीय कृषि अनुसंधान संस्थान

नई दिल्ली-110012
(यूजीसी एक्ट, 1956 की धारा 3 के अधीन डीम्ड विश्वविद्यालय)

दीक्षान्त-समारोह 2017

भारतीय कृषि अनुसंधान संस्थान (भा.कृ.अनु.सं.) के 55वें दीक्षान्त-समारोह की तिथि बदलकर 09 फरवरी, 2017 को पूर्वा. 11.00 बजे कर दी गई है, जिसका आयोजन संस्थान के डॉ. बी.पी. पाल ऑडिटोरियम के लॉन्स में किया जाएगा। माननीय कृषि एवं किसान कल्याण केन्द्रीय मंत्री श्री राधा मोहन सिंह जी दीक्षान्त-समारोह के मुख्य अतिथि होंगे।

समस्त डिग्री प्राप्त करने वाले, पूर्व छात्र, एक्स-फैकल्टी सदस्य तथा आमंत्रितगण कृपया संशोधित तिथि नोट कर लें। विस्तृत विवरण के लिए देखें : **www.iari.res.in**

रजिस्ट्रार
ईमेल: razdan57@iari.res.in

Annexure 3: List of Stakeholders

The following is the list of the stakeholders who have submitted objections/ suggestions:

Sl. No.	Name of Stakeholder	Representation (in Writing)	Representation (In Person)
1.	Mr Pawan Kishore Aggarwal Association of Continuous Polymer Industries	√	√
2.	Pramod K Jedia Federation of Industrial Association	√	√
3.	Pawan Kishore RPM		√
4.	Hanumanji Sharma – Perfect Insulation		√
5.	Parinay Deep Shah – Advocate IEX	√	√
6.	Shri Virender Raj, Bhumi Yarn Private Limited		√
7.	Rajesh Duggar		√
8.	R. B Shelke		√
9.	Chanderkant Khatilwal, SIMA Association		√
10.	Virat Bhai Shah - Dadra		√